

Environmental Review Record

for the

Bevins Street Senior Apartments Project

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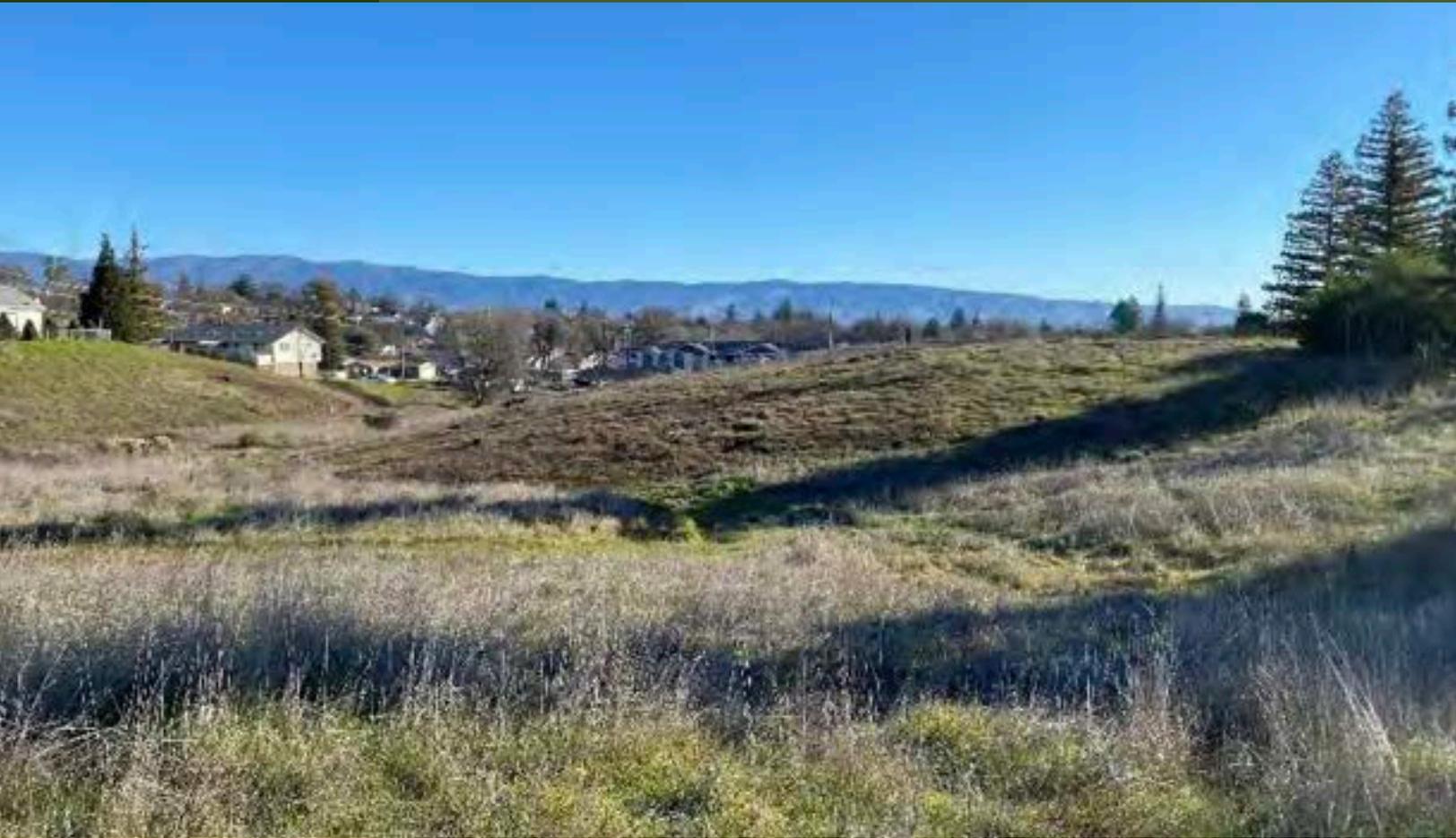
APPENDIX A

**BIOLOGICAL AND WETLANDS RESOURCES
ASSESSMENT**



Wetland & Biological Resources Assessment

Proposed Bevins Street Senior Apartments Property
APN 025-431-137
447 Bevins Street
Lakeport, CA 95453



Prepared For:
Raney Planning & Management
1501 Sports Drive
Sacramento, CA 95834

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1.0 INTRODUCTION

Barnett Environmental has prepared this *Wetlands and Biological Resources Assessment* (W/BRA) of a 3.1-acre property located off of Bevins Street, Lakeport, CA (APN: 025-431-137). The Study Area is located in Section 25, Township 14 North, Range 10 West of the Lakeport Quad, California 7.5-minute USGS quadrangle map (Figure 1). It lies in the Upper Cache watershed (Hydrologic Unit Code 18020116) at approximately 1,357 to 1,388 feet in elevation above mean sea level (msl) and at approximately 39°2'23.49" latitude north and 122°55'28.83" longitude west. The property is bordered by a multi-family development to the west and south and a church compound to the north. The property to the east is split between an apartment complex and a large vacant field.

Beyond a delineation of wetlands and “other waters of the U.S.” and “waters of the State” within the Study Area according to U.S. Army Corps of Engineers (1987) and California Regional Water Quality Control Board (2020) protocol, this report also:

- Identifies and describes extant vegetation communities;
- Records all plant and animal species observed during the field survey(s);
- Evaluates and identifies sensitive habitats and special status plant and animal species that may occur in the Study Area and could be affected by project activities; and
- Provides conclusions and recommendations for mitigating potential adverse impacts to identified resources.

2.0 REGULATORY SETTING

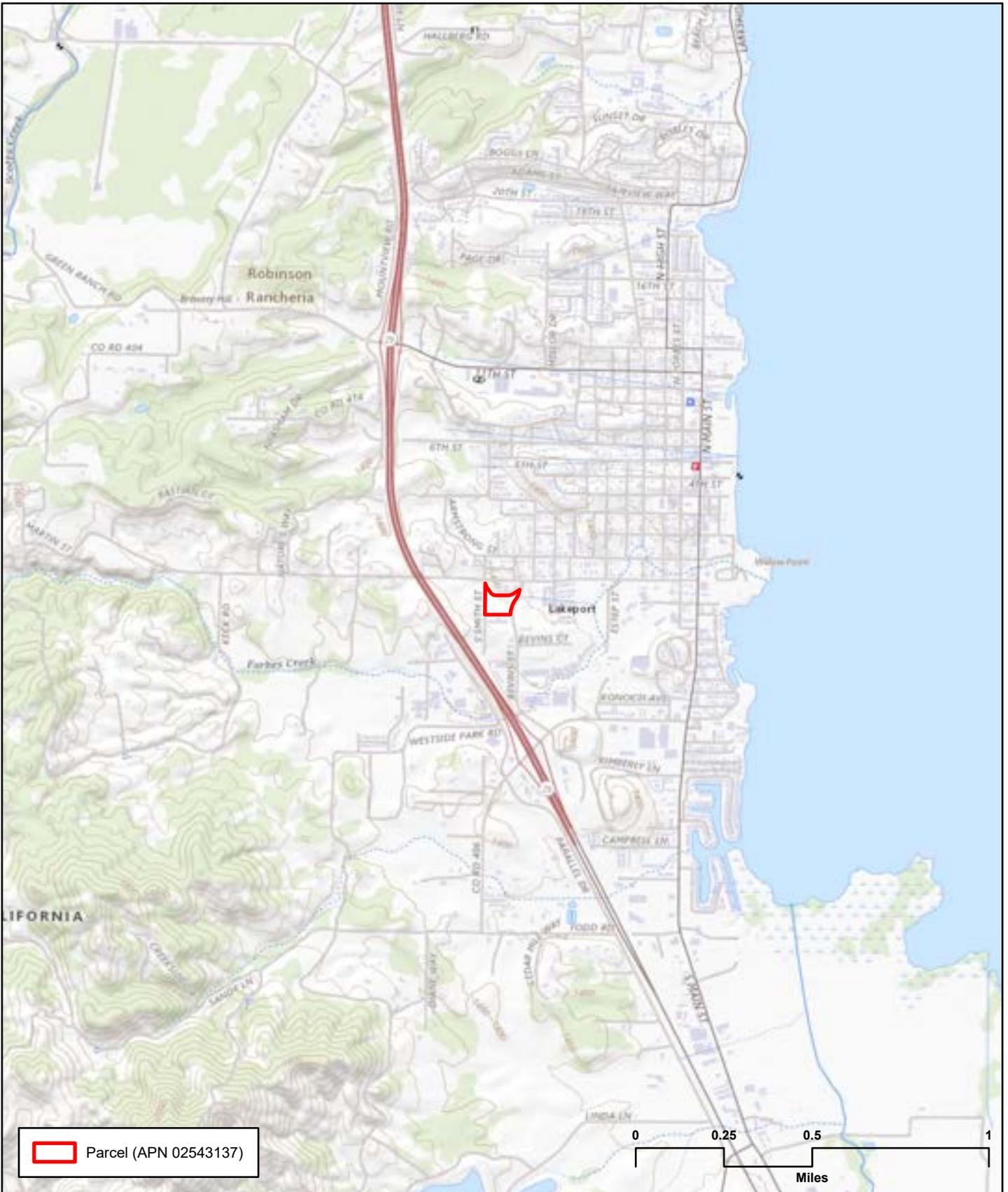
The following federal laws, regulations and/or policies provide the legal framework guiding the protection of biological resources. We have included those laws most relevant to biological and wetland resources in and around the Study Area.

2.1 FEDERAL LAWS & REGULATIONS

FEDERAL ENDANGERED SPECIES ACT (FESA)

The FESA, enacted in 1973, prohibits the taking, possession, sale, or transport of endangered species. Under the FESA, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered. Both the National Marine Fisheries Service (NMFS) and the U.S. Fish & Wildlife Service (USFWS) administer FESA. NMFS is accountable for animals that are threatened or endangered (16 United States Code [USC] 1533[c]) and spend most of their lives in marine waters, including marine fish, most marine mammals, and anadromous fish such as Pacific salmon. The USFWS is accountable for all other federally listed plants and animals.

Pursuant to the requirements of FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species could be present in the Study Area and whether the project will have a potentially significant impact on such species. In addition, federal agencies are required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed



Source: USGS 7.5-Minute Topographic Quad Lakeport, Lake County, CA

FIGURE 1 - VICINITY MAP

Date: January 25, 2022



BEVINS STREET SENIOR APARTMENTS • LAKE COUNTY, CA

under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).

Projects that would result in a “take” of any federally listed threatened or endangered species are required to obtain authorization from NMFS and/or USFWS through either Section 7 (interagency consultation) or section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The Section 7 authorization process is used to determine if a project with a federal nexus would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species. The Section 10(a) process allows take of endangered species or their habitat in non-federal activities.

MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations (CFR) Section 10.13. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the USFWS. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

BALD AND GOLDEN EAGLE PROTECTION ACT

The federal Bald and Golden Eagle Protection Act regulates or prohibits taking, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). “Take” includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb (16 U.S.C. 668c; 50 CFR 22.3).

FEDERAL CLEAN WATER ACT (CWA)

Section 404

Section 404 of the CWA identifies the U.S. Army Corps of Engineers (USACE) as the principal authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or Waters of the U.S. (WOUS). The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or function. U.S. Congress has authorized the Environmental Protection Agency (EPA) to have a specific oversight role over USACE’s authority.

Section 401

The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy.

The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain a certificate from the appropriate state agency stating that the fill is consistent with

the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. The Central Valley Regional Water Quality Control Board (CVRWQCB) is the appointed authority for Section 401 compliance in the project site. The SWRCB additionally requires additional Waste Discharge Requirements under Porter-Cologne to protect aquatic resources that are outside federal jurisdiction.

A request for certification or waiver is submitted to the Regional Board at the same time an application is filed with the USACE. The regional board has 60 days to review the application and act on it. Because no USACE permit is valid under the CWA unless "certified" by the state, these boards may effectively veto or add conditions to any USACE permit.

2.2 STATE LAWS & REGULATIONS

CALIFORNIA ENDANGERED SPECIES ACT (CESA)

The CESA was enacted in 1984. Under the CESA, the California Fish and Wildlife Commission (CFWC) has the responsibility for maintaining a list of threatened and endangered species, while The California Department of Fish & Wildlife (CDFW) is responsible for enforcement. CDFW also maintains lists of species of special concern. A Species of Special Concern (CSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered;
- meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (nonyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

CESA prohibits the take of California listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions. Pursuant to the requirements of CESA, a state agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the project site and determine whether the project would have a potentially significant impact on such species. In addition, CDFW encourages consultation on any project that could affect a listed or candidate species.

FISH AND GAME CODE – SECTIONS 1600-1616

Under Sections 1600-1616 of the California Fish and Game Code, the CDFW regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFW's jurisdiction are defined in the code as the "... *bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit ...*" (Section 1601). In practice, the CDFW usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

The CDFW also derives its authority to oversee activities that affect wetlands from state legislation. This authority includes Sections 1600-1616 of the Fish and Game Code (lake and streambed alteration agreements), Section 30411 of the California Coastal Act (CDFW becomes the lead agency for the study and identification of degraded wetlands within the Coastal Zone), CESA (protection of state listed species and their habitats - which could include wetlands), and the Keene-Nejedly California Wetlands Preservation Act of 1976 (states a need for an affirmative and sustained public policy program directed at wetlands preservation, restoration, and enhancement). In general, the CDFW asserts authority over wetlands within the state either through review and comment on USACE Section 404 permits, review and comment on CEQA documents, preservation of state listed species, or through stream and lakebed alteration agreements.

FISH AND GAME CODE – SECTIONS 1900-1913

These Sections embody the Native Plant Protection Act, which is intended to preserve, protect, and enhance endangered or rare native plants in the state. The act directs CDFW to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Under the act, CDFW may adopt regulations governing the taking, possessing, propagation or sale of any endangered or rare native plant.

Section 1913 of that Act allows landowners in conducting certain activities to take actions that will destroy rare or endangered plants, provided that, where the Department of Fish and Game (DFG) has previously notified the owner “that rare or endangered plants are growing” on his or her land, the owner notifies CDFW “at least 10 days in advance of changing the land” to allow the state agency to come and “salvage” the plants. Subject to this requirement, section 1913 states that “the presence of rare or endangered plants” on a property shall not restrict (1) timber operations conducted pursuant to an approved timber harvest plan, (2) “required mining assessment work pursuant to federal or state mining laws,” (3) “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, other right-of-way by the owner of the land or his agent,” or (4) “the performance by a public agency or publicly or privately owned public utility of its obligation to provide service to the public.”

FISH AND GAME CODE – SECTIONS 3503, 3503.5, 3513

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act.

FISH AND GAME CODE – SECTIONS 3511, 4700, 5050, AND 5515

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as “fully protected.” Fully protected species, or parts thereof, may not be taken or possessed at any time, and no provision of the CFWC or any other law may be construed to authorize

the issuance of permits or licenses to take any fully protected species. No such permits or licenses heretofore issued may have any force or effect for any such purpose, except that the CFGC may authorize the collecting of such species for necessary scientific research. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFW.

CALIFORNIA PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act established the SWRCB and each Regional Water Quality Control Board (RWQCB) as the principal state agencies for coordinating and controlling water quality in California. Responsibility for the protection of water quality in California rests with the SWRCB and nine RWQCBs. The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and state water quality statutes and regulations. Pursuant to the Act, each of California's nine regional boards must prepare and periodically update basin plans that set forth water quality standards for surface and groundwater, as well as actions to control point and non-point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to achieve wetlands protection through enforcement of water quality standards.

The Porter-Cologne Water Quality Control Act provides that "All discharges of waste into the waters of the State are privileges, not rights." Waters of the State are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as "...any surface water or groundwater, including saline waters, within the boundaries of the state." All dischargers are subject to regulation under the Porter-Cologne Water Quality Control Act, including both point and nonpoint source dischargers. The RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction, which would include the project site. As noted above, the RWQCB is the appointed authority for Section 401 compliance in the project site. If the USACE determines that they have no regulatory authority on the project site and they also determine that a CWA Section 404 permit is not required, the project proponent could still be responsible for obtaining the appropriate CWA Section 401 permit or waiver from RWQCB for impacts to Waters of the State.

In 2019, the State Water Resource Control Board extended their water quality certification to include waste discharge requirements as adopted in the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State," which include elements of the Clean Water Act. These procedures also lay out the steps for the submission, review, and approval of applications for activities related to these activities.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Although specific federal and state statutes protect threatened and endangered species, California Environmental Quality Act (CEQA) Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals and allows a public agency to undertake a review to determine if a significant effect on a species that has not yet been listed by either the USFWS or CDFW (i.e., species of concern) would occur. Whether a species is rare, threatened, or endangered can be legally significant because, under CEQA

Guidelines Section 15065, an agency must find an impact to be significant if a project would “substantially reduce the number or restrict the range of an endangered, rare, or threatened species.” Thus, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

2.3 LOCAL LAWS AND REGULATIONS

Lakeport General Plan

The City of Lakeport has included the following policies in its general plan to manage new developments with the municipality.

OBJECTIVE C 1: CONSERVE AND ENHANCE LAKEPORT’S UNIQUE NATURAL BEAUTY AND IRREPLACEABLE NATURAL RESOURCES.

Policy C 1.1: Biological Preservation. Preserve biological resources such as plant and animal species and special habitat areas.

Program C 1.1-b: Require a revegetation plan prepared by a professional botanist, or similar professional, for projects which result in vegetation removal.

Program C 1.1-d: Require subdivisions in rural areas greater than 10 acres with a slope topography of less than five percent to carry out a biological survey for vernal pools, riparian areas, serpentine outcroppings, and sensitive plant species (by a qualified biologist). Require mitigating measures to be prepared and implemented prior to project construction.

Vegetation Protection. Minimize removal of all vegetation in new developments to preserve wildlife habitat, scenic beauty and to prevent soil erosion. In particular, the removal of heritage trees, street trees, and mature trees should be minimized.

Program C 1.2-b: Enforce the Zoning Ordinance (Chapter 17.21), which requires a detailed site inventory of mature trees for all developments located on properties where there are existing native trees on the site.

Policy C 1.3: Native and Drought Resistant Trees. Encourage the planting of native and drought resistant trees in new developments and in City-owned parks, trails and recreational facilities.

OBJECTIVE C 8: TO PROTECT AND ENHANCE WATER QUALITY IN WATERCOURSES, CLEAR LAKE AND IN GROUNDWATER.

Policy C 8.1: Stream and Creek Protection. Preserve and protect streams and creeks in their natural state to the maximum extent feasible. [Streams, creeks and other riparian corridors are considered to be in a natural state when they support their own environment of vegetation, wildlife and have not been concretized or channelized.]

Program C 8.1-b: Revegetate watercourses with native plant species that are compatible with the watercourse maintenance program and which do not adversely impact flow.

Lakeport Municipal Code

The following Lakeport municipal codes apply to new developments within the City:

17.21.030 Preservation of native trees.

Existing native trees on proposed development sites with a diameter of six inches or more including, but not limited to, oak, willow, cottonwood, and redwood shall not be cut down, removed, or otherwise destroyed except as provided herein.

17.20.010 Erosion control required.

Soil stability and erosion control measures shall be required in areas where it is determined that exposed soils or other conditions have the potential to create water quality impacts, damage to Clear Lake and tributary streams, damage to public or private property, damage to fish and wildlife areas, create flooding hazards, decrease productivity of agricultural lands, or lead to unwanted soil deposits. (Ord. 796 Att. A(part), 1999)

3.0 METHODOLOGY

Prior to our field surveys, we queried the U.S. Fish & Wildlife Service's *National Wetland Inventory* (NWI; Figure 3); EcoAtlas' *California Aquatic Resources Inventory* (CARI; Figure 3); *NRCS Web Soil Survey* (Appendix A; Figure 4); and *Hydric Soil Map Units* for Lake County, California to determine whether any wetlands or "other waters of the U.S.," "waters of the State," or soils compatible with wetland resources had been historically recorded on or around, or are likely to occur on the site, as defined by the 1987 U.S. Army Corps of Engineers (USACE, 1987) *Wetlands Delineation Manual* and its 2008 *Arid West Regional Supplement*. We also assessed potentially federal and/or state jurisdictional wetlands and "other waters of the U.S." in the Study Area in accordance with the 2014 *Corps Field Guide to the Identification of the Ordinary High Water Mark (OHWM) for Non-perennial Streams in the Arid West Region of the Western United States*.

To provide a vision of what potential biological resources may be present on the property, we queried the following online sources for information on the Study Area's potential plant and wildlife communities.

1. California Department of Fish & Wildlife's Natural Diversity Database (RareFind 5) for observations of special status plant and animal species within five miles of the Study Area (Figure 6; Appendix D),
2. U.S. Fish and Wildlife Service's iPac Database of federally-listed special status species in Lake County (Appendix E),
3. The California Native Plant Society's Inventory of Rare & Endangered Plants in California

A Barnett Environmental biologist surveyed the Study Area on February 2, 2022, for special status plant and wildlife species and their habitats that could be supported onsite. The survey included recorded observations of: (1) dominant plant communities, (2) plant and animal species (with emphasis on rare and endangered species) observed or their sign (nests, burrows, tracks, scat) and (3) the suitability of onsite habitats and those immediately

adjoining the Study Area to support special status plant or animal species. We used generalized plant community classification schemes to classify onsite habitat types (Sawyer, Keeler-Wolf, and Evens, 2009).

4.0 EXISTING CONDITIONS

4.1 SOILS

According to Natural Resource Conservation Service (NRCS), the Study Area is comprised of one soil type (Figure 2; Appendix A): Henneke-Montara-Rock outcrop complex 10 to 50 percent slopes, MLRA 15.

Henneke soils are found primarily on hillslopes, are very well drained, and have a very high runoff class. They are comprised of gravelly loam, gravelly clay loam, very gravelly clay, and then a layer of bedrock from 19 to 29 inches. Its parent material is residuum weathered from serpentinite. It has no frequency of flooding or ponding. The capacity of its most limiting layer to transmit water is moderately low to moderately high, 0.06 to 0.20 inches/hr.

Montara soils are also found on hillslopes and are also very well drained and have a very high runoff class. A typical profile consists of two layers of clay loam underlain by bedrock. It has moderately low to moderately high permeability (0.14 to 1.42 inches/hour).

The soil complex is a serpentinite soil, and ultramafic soils are also found approximately 200 feet to the south.

4.2 HYDROLOGY

The Study Area lies at approximately 1,357 to 1,388 feet in elevation above mean sea level (msl) within the Upper Cache watershed (Hydrologic Unit Code 18020116). Hydrologic inputs onto the Study Area include direct precipitation, sheetflow runoff from surrounding uplands and hardscape surfaces associated with adjacent commercial developments, and the ephemeral drainage that runs along the northern border of the property.

4.3 WETLANDS AND “OTHER WATERS OF THE U.S.” AND “WATERS OF THE STATE”

While neither the National Wetlands Inventory (Figure 3) nor the California Aquatic Resources Inventory (Figure 4) identified any wetland features in the Study Area, Barnett delineated a total of 0.024 acres of “other waters of the U.S.” and “waters of the State” within the Study Area.

4.4 VEGETATION COMMUNITIES

Most of the apparent, non-woody vegetation onsite at the time of this late winter survey was either dormant or just beginning to send up new growth, with a few species beginning to flower. Most of the site’s annual grasses and herbs presented only residual dry matter (RDM) for field identification. However, we were able to discern three primary habitat types in the Study Area – annual grassland, rock outcrop, and riparian.



 Parcel (APN 02543137)

 142, Henneke-Montara-Rock outcrop complex, 10 to 50 percent slopes, MLRA 15

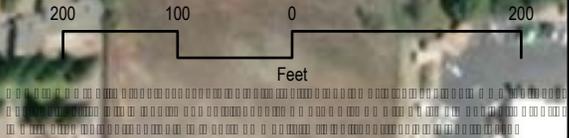


FIGURE 2a - NRCS MAPPED SOILS

Date: January 25, 2022



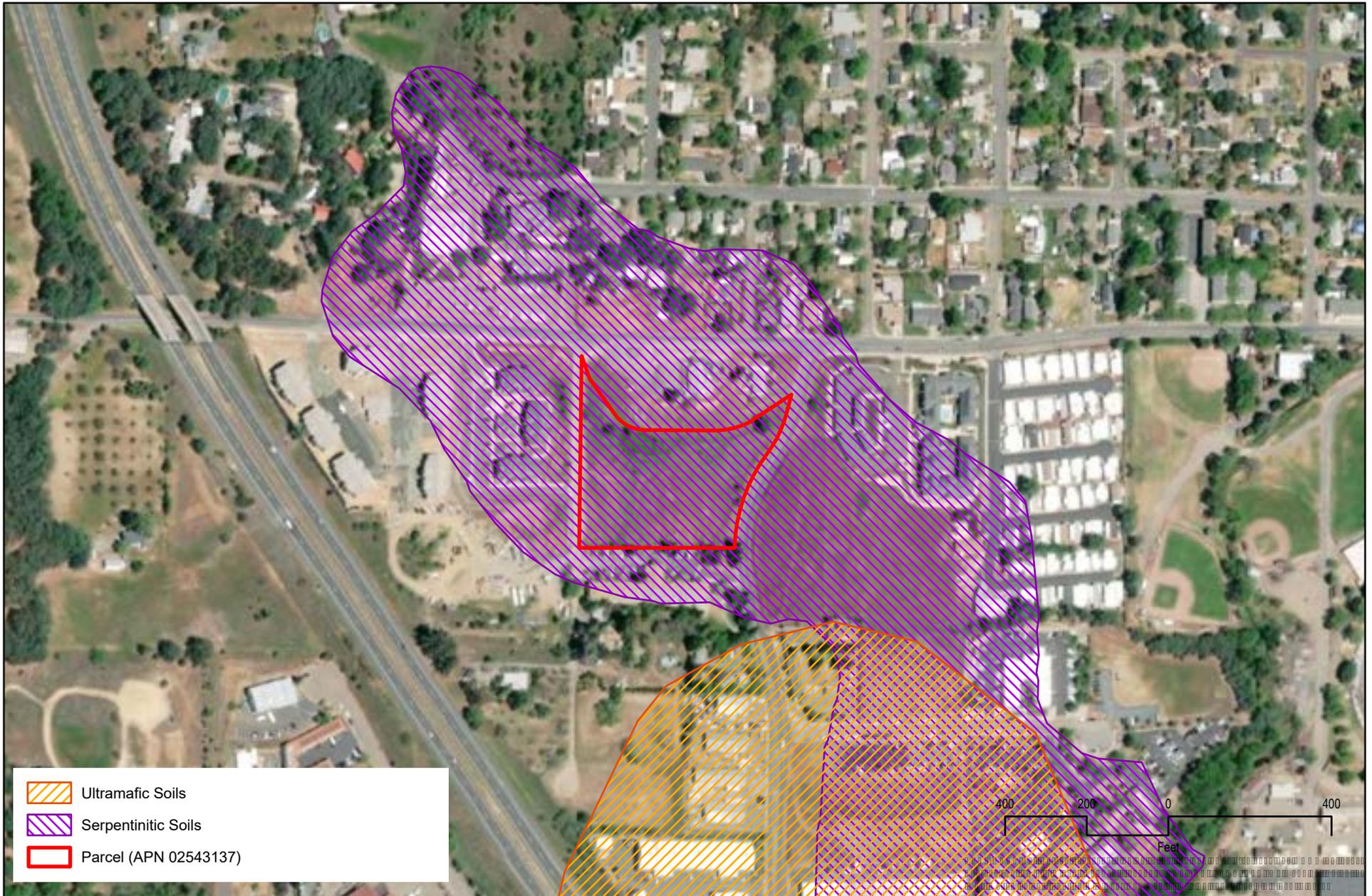
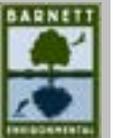


FIGURE 2b - SERPENTINITIC AND ULTRAMAFIC SOILS

Date: January 25, 2022



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Annual Grassland

Annual grassland is the dominant vegetative cover in the Study Area with the exception of a small soil stockpile area along the far-western boundary that supported a higher percentage of weedy annuals associated with past grading and placement of fill.

TABLE 1: WETLANDS AND “OTHER WATERS OF THE U.S.”

WETLANDS*	ACRES	SQUARE FEET
Seasonal Wetland Total	0.024	1,032
Total	0.024	1,032

The single mapped “other waters” feature is a low-gradient ephemeral drainage flowing along the northern boundary of the Study Area. This drainage intercepts and conveys runoff entering the site from the west via the Smith Street culvert within a narrowly incised channel to a culvert under Bevins Street to the east¹. Lake County calls these types of drainages “connector outfalls.” This feature is an incised channel with a defined bed and bank and an approximately two (2) feet wide “ordinary high water mark” (OHWM). There is a narrow riparian zone associated with this drainage that is restricted to the saturation zone on the sides of the channel.

This habitat type consists of a mix of native and non-native grasses and herbaceous annual and perennial species. Dominant non-native grasses observed included medusa-head grass (*Elymus caput-medusae*), wild oat (*Avena* sp.), rip-gut brome (*Bromus diandrus*), canary grass (*Phalaris minor*), and rescue grass (*Bromus catharticus*); native grasses observed included big squirreltail grass (*Elymus multisetus*), blue wild-rye (*Elymus glaucus* spp. *glaucus*) and beardless wild-rye (*Elymus triticoides*). Common non-native herbs observed included yellow star-thistle (*Centaurea solstitialis*), various species of vetch (*Vicia* spp.), and curly dock (*Rumex crispus*); native herbs observed included poppy (*Eschscholzia (californica)*), annual fireweed (*Epilobium brachycarpum*), and naked buckwheat (*Eriogonum nudum*).

Rock Outcrop

The entire Study Area is underlain with a single mapped soil unit: Henneke-Montara-Rock outcrop complex, 10 to 50 percent slopes. Metamorphic serpentinite is the bedrock or parent material of this soil unit, which is mostly exposed at the surface along the northern and south-central portions of the site. Native grasses supported by these very thin soils include big squirreltail grass and small fescue (*Festuca microstachys*). Native forbs (i.e., wildflowers) observed included larkspur (*Delphinium (variegatum)*), poppy (*Eschscholzia (californica)*), needle goldfields (*Lasthenia gracilis*), fringe-pod (*Thysanocarpus curvipes*), seep monkeyflower (*Erythranthe (guttata)*), buckwheat (*Eriogonum nudum*, *E. (roseum)*, and *Eriogonum* sp.), soap plant (*Chlorogalum* sp.) and two species of the Brodiaea Family (likely species of *Calochortus* and *Dichslostemma*). Non-native species are infrequent in these serpentine soils.

¹ The elevational drop between these two culverts is approximately 10 feet.



FIGURE 3 - NATIONAL WETLANDS INVENTORY (NWI) WETLANDS

Date: January 25, 2022





FIGURE 4 - CALIFORNIA AQUATIC RESOURCES INVENTORY (CARI) WETLAND

Date: January 25, 2022



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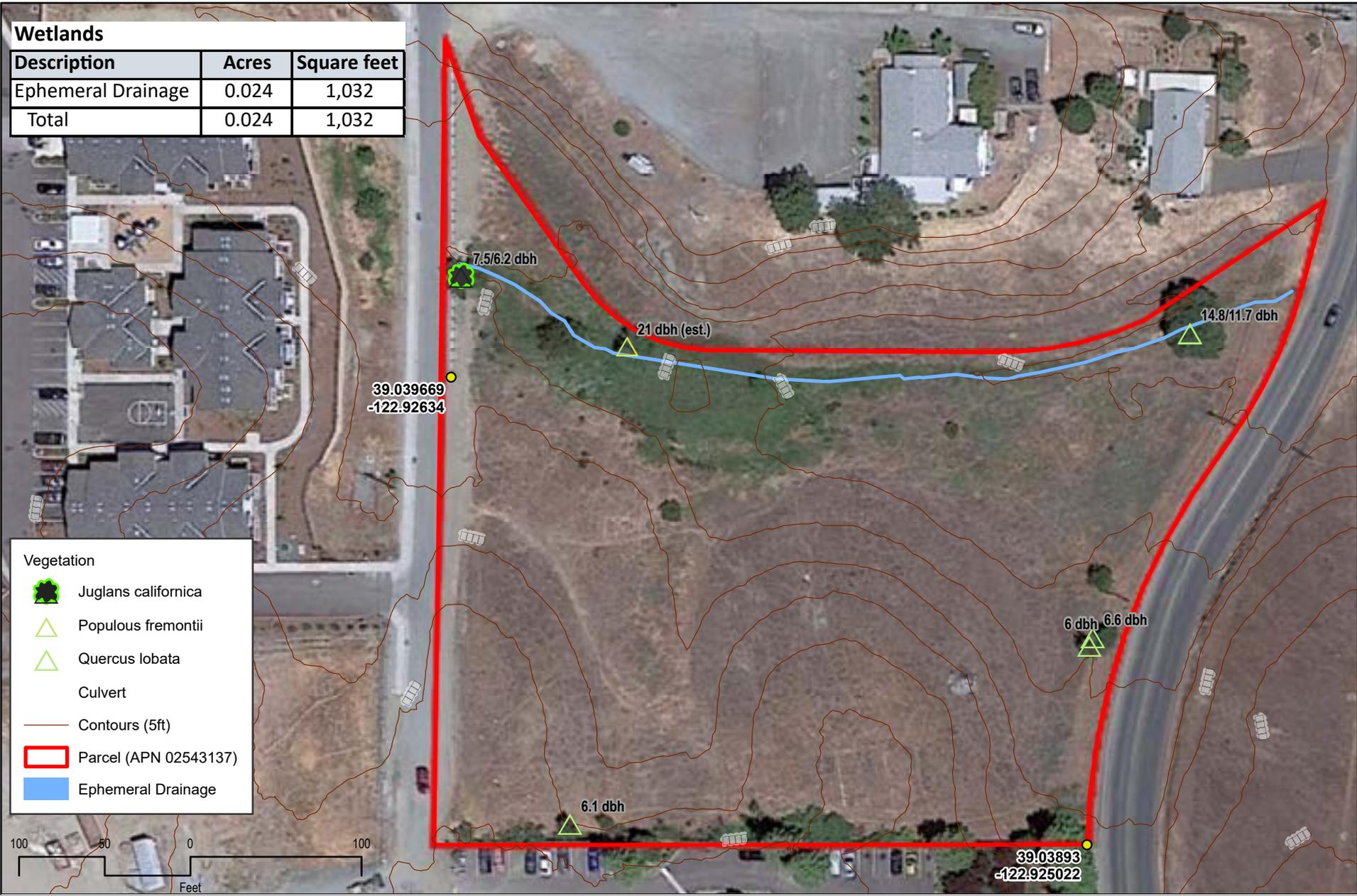


FIGURE 5 - FIELD-DELINEATED WETLANDS AND "OTHER WATERS OF THE U.S."

Date: February 05, 2022



Riparian

Riparian habitat is largely restricted to the saturation zone associated with the very narrowly incised channel of the single mapped ephemeral drainage that crosses the northern portion of the Study Area. Common graminoid species (i.e., grasses and grass-like plants) observed included rescuegrass, beardless wild-rye, Baltic rush (*Juncus balticus* ssp. *ater*), and iris-leaved rush (*Juncus xiphioides*). Native and non-native herbs observed included curly dock, annual fireweed, various species of vetch, poison hemlock (*Conium maculatum*), prickly lettuce (*Lactuca serriola*), and miner's lettuce (*Claytonia perfoliata*). Woody tree and shrub species observed included valley oak (*Quercus lobata*), California black walnut (*Juglans californica*), Fremont's cottonwood (*Populus fremontii* ssp. *fremontii*), coyote brush (*Baccharis pilularis*), and a large stand of Himalayan blackberry (*Rubus discolor*).

4.5 WILDLIFE

Wildlife abundance and diversity in urban habitats such as those within the Study Area is dependent on the amount of ongoing disturbance on potential wildlife habitat. Vegetation provides cover and food resources for animals adapted to urban environments. Small mammals such as house mice (*Mus musculus*), Norway rats (*Rattus norvegicus*), raccoons (*Procyon lotor*), and striped skunks (*Mephitis mephitis*) are common in these urban settings. Though no California ground squirrels (*Spermophilus beecheyi*) were observed onsite, several ground squirrel burrows were noticed on slopes north of the onsite drainage. The occasional gray fox (*Urocyon cinereoargenteus*) and coyote (*Canis latrans*) could also occasionally range across the site. Reptiles and amphibians expected to use the site include the western fence lizard (*Sceloporus occidentalis*) and Pacific treefrog (*Hyla regilla*).

Many birds could also use the site, including the: mourning dove (*Zenaida macroura*), rock dove (*Columba livia*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), western scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), American robin (*Turdus migratorius*), European starling (*Sturnus vulgaris*), northern mockingbird (*Mimus polyglottos*), California towhee (*Pipilo crissalis*), yellow-rumped warbler (*Dendroica coronata*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), savannah sparrow (*Passerculus sandwichensis*), western meadowlark (*Sturnella neglecta*), brown-headed cowbird (*Molothrus ater*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), American goldfinch (*Carduelis tristis*), and house sparrow (*Passer domesticus*). Common raptors such as the red-tailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus leucurus*), and American kestrel (*Falco sparverius*), among others could frequently be found foraging here.

5.0 SPECIAL STATUS SPECIES

Special status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the Federal Endangered Species Act (FESA) (50 CFR 17.11/17.12) (or formally proposed for listing) (64 FR 205, October 25, 1999; 57533-57547),
- Listed as endangered or threatened under the California Endangered Species Act (CESA) (or proposed for listing) (14 California Code of Regulations [CCR] 670.5),

- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code (FGC, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
- Designated a Species of Concern by the California Department of Fish and Game,
- Defined as rare or endangered under the California Environmental Quality Act (CEQA), or
- Occurring on List 1 or 2 maintained by the California Native Plant Society.

We reviewed California Natural Diversity Database (CNDDDB), California Native Plant Society (CNPS) Inventory, and U.S. Fish & Wildlife Service (FWS) iPAC database for special status species potentially occurring within the project vicinity (i.e. five-mile radius). While there may be a number of plant and animal species occurring within five miles of the Study Area (Figure 6), we can refine the list of those species with any real potential of occurring in the Study Area by filtering our query for relevant onsite habitats, locations, and elevations. A summary of the results of this query can be found in Table 2.

5.1 CRITICAL HABITAT FOR SPECIAL STATUS SPECIES

The Federal Endangered Species Act (FESA) requires the federal government to designate critical habitat for any listed species. Critical habitat is defined as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. There is no designated critical habitat in or within proximity of the Study Area.

TABLE 2: SPECIAL STATUS WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Birds						
Species	Federal	State	CNPS	Habitat	Potential for Occurrence	Rationale for Assessing Potential
burrowing owl <i>Athene cunicularia</i>		SSC		Burrowing owls live in burrows dug by other animals in open, treeless spaces. Favored nest burrow sites are those with sandy locations and areas with low vegetation around the burrows.	Low	The Study Area may provide potential habitat for this species. However, there are no reported CNDDDB occurrences of the burrowing owl within five miles of the Study Area, and Barnett Environmental noted no signs of this species or of any burrows during its February 2022 site survey.
white-tailed kite <i>Elanus leucurus</i>		FP		Found in a wide variety of open habitats in North America, including open oak grassland, desert grassland, farm country, marshes. The main requirements seem to be trees for perching and nesting, and open ground with high populations of rodents.	Very low	The site can provide marginal foraging habitat for this species. There are no reported CNDDDB occurrences of this species within five miles of the Study Area, and Barnett Environmental noted no sign of this species during its February 2022 site survey.
grasshopper sparrow <i>Ammodramus savannarum</i>		SSC		Grasshopper sparrows utilize prairie and cultivated grasslands, weedy fallow fields and alfalfa fields.	Very low	The Study Area's grassland community can provide marginal foraging habitat for this species. There are no reported CNDDDB occurrences of this species within five miles of the Study Area, and Barnett Environmental noted no sign of this species during its February 2022 site survey.
American peregrine falcon <i>Falco peregrinus anatum</i>		SSC, FP		One of the most widely distributed falcons and its range includes wetlands, deserts, forests and islands. Breeding habitats include a variety of locations from cliffs in uninhabited areas to tall buildings or bridges within the urban landscape. They thrive in mountainous areas with chaparral vegetation and on coasts.	Low	The Study Area can provide potential foraging habitat for this species. There are no reported CNDDDB occurrences of this species within five miles of the Study Area, and Barnett Environmental noted no sign of this species during its February 2022 site survey.
northern harrier <i>Circus cyaneus</i>		SSC		These birds inhabit grasslands, fields, marshes, upland prairies, savannas and alpine meadows. They also occur in wetland habitats and upland habitats such as desert steppe. They avoid forested and mountainous areas.	Low	The grassland vegetation community on site provides marginal foraging habitat for this species. There are no reported CNDDDB occurrences of this species within five miles of the Study Area, and Barnett Environmental noted no sign of this species during its February 2022 site survey.

Plants						
Species	Federal	State	CNPS	Habitat	Potential for Occurrence	Rationale for Assessing Potential
small-flowered calycadenia <i>Calycadenia micrantha</i>			1B.2	This species is found in barren to sparsely vegetated areas with little competition, such as roadsides, dry ridges and slopes, and openings in chaparral, oak woodland, forest, meadows and seeps (volcanic), and annual grassland. Often in talus, scree, or gravel.	Low	The Study Area's degraded vegetation on site can provide marginal habitat for this species. However, there is only one reported CNDDDB occurrence of this species within five miles of the Study Area 2.9 miles to the southwest in 2003. In addition, Barnett Environmental noted no sign of this species during its February 2022 site survey.
serpentine cryptantha <i>Cryptantha dissita</i>			1B.2	This species is found in serpentine substrates, rocky outcrops, gravelly slopes, and in chaparral and foothill woodlands.	Moderate	The rocky soil substrate on the Study Area can provide habitat for this species. There are six reported CNDDDB occurrences within five miles of the Study Area. The most recent was 1.6 miles to the northwest in 2010, and the closest was 0.39 to the southeast in 2011. However, there was no sign of this species during the Barnett Environmental February 2022 field survey.
Colusa layia <i>Layia septentrionalis</i>			1B.2	This species is found in foothill woodlands, chaparral, and valley grassland communities on serpentine or sandy soils.	Moderate	The serpentine soils in the Study Area provides suitable habitat for this species. There are six reported CNDDDB occurrences within five miles of the Study Area. The closest occurred in 2019, either within the parcel or a couple hundred feet to the west. However, there was no sign of this species during the Barnett Environmental February 2022 field survey.
Mayacamas popcornflower <i>Plagiobothrys lithocaryus</i>			1A	This species is found in moist places in foothill woodlands, chaparral, valley grasslands, and wetland-riparian communities.	Very low	The drainage and its riparian zone provide marginal habitat for this species. There are four reported occurrences within five miles of the Study Area. The most recent was in 1884. However, there was no sign of this species during the Barnett Environmental February 2022 site visit.
beaked tracyina <i>Tracyina rostrata</i>			1B.2	Found in foothill woodland and valley grassland communities. It is endemic to California, where it is known only from the grassy slopes of the North Coast Ranges north of the San Francisco Bay Area (Humboldt, Trinity, Mendocino, Lake, Alameda, and Sonoma Counties).	Very low	Although the grassland community in the Study Area can provide the appropriate habitat for this species, there is only one CNDDDB occurrences of this species within five miles of the Study Area, 2.9 miles to the northwest. The most recent in 1902. Barnett Environmental noted no sign of this species during its February 2022 site survey.

Plants						
Species	Federal	State	CNPS	Habitat	Potential for Occurrence	Rationale for Assessing Potential
Burke's goldfields <i>Lasthenia burkei</i>	FE	CE	1B.1	Located within vernal pools, meadows, and seeps.	None	There are no vernal pools or seeps that could provide habitat for this species. In addition, there are no CNDDDB occurrences of this species within five miles of the Study Area. Barnett Environmental noted no sign of this species during its February 2022 site survey.

Mammals						
Species	Federal	State	CNPS	Habitat	Potential for Occurrence	Rationale for Assessing Potential
American badger <i>Taxidea taxus</i>		SSC		Badgers live in dry, open grasslands, fields, and pastures. They can also live in deserts and marshes. They are found from high alpine meadows to sea level. Mostly nocturnal, but can be seen being active in early morning.	None	The degraded vegetative community in the Study Area provides no potential habitat for this species. There are four reported occurrences within five miles of the Study Area. However, there was no sign of this species during the Barnett Environmental February 2022 site visit.

Special Status Species Codes:

FE = Federally listed as Endangered
 FT = Federal listed as Threatened
 CE = State listed as Endangered
 CT = State listed as Threatened
 Rare = State listed as Rare
 FP = State, Fully Protected
 SSC = State Species of Special Concern

1B.1 = Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California
 1B.2 = Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California
 2B.1 = Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
 2B.2 = Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

Potential for Occurrence Codes:

None: No suitable habitat for the special status species within the Assessment Area

Very Low: Either the special status species is known to occur within five miles and there is marginal suitable habitat exists in the Assessment Area, or the Assessment Area provides suitable habitat, but the species is not known to occur within a five-mile radius.

Low: Marginally suitable habitat exists in the Assessment Area and the special status species occurs within 5 miles but surrounding urban land use conditions and regularity of human activity make it unlikely that the species occurs in the Assessment Area.

Moderate: The special status species is known to occur within a five-mile radius and the Assessment Area contains suitable habitat, however surrounding urban land use conditions and onsite disturbance reduce the likelihood of occurrence.

High: The Assessment area provides suitable habitat and there is either documentation of species occurrence within a five-mile radius or evidence gathered by a professional surveyor during an onsite field assessment.

Present: Species known to occur within the Assessment Area based on record search and/or evidence collect during onsite field surveys.

5.2 SPECIAL STATUS PLANTS AND WILDLIFE

There are five special status plant species that has any potential to occur onsite.

1. **Serpentine cryptantha** (*Crypthantha dissita*) – This annual herb is a 1B.1 California rare plant in the borage family. This species is an erect, tufted and stout herb growing to 3.1 to 9.8 inches high. It blooms from April through June and is has oblong to wide, linear, long soft hairy leaves crowded at the base. The inflorescence has two to three flowers with very small pedicles of 0.5 mm. The flower has a dense, soft hairy calyx with a few dark tipped bristles and a deciduous, white corolla with pale yellow appendages. This species is found in serpentine substrates, rocky outcrops, gravelly slopes, and in chaparral and foothill woodlands. The serpentine soils in the Study Area can provide habitat for this species. There are six reported CNDDDB occurrences within five miles of the Study Area. The most recent was 1.6 miles to the northwest in 2011, and the closest was 0.39 to the southeast in 2011. However, no serpentine cryptantha were observed during the Barnett Environmental February 2022 field survey.
2. **Small-flowered calycadenia** (*Calycadenia micrantha*) – This annual herb is a 1B.2 California rare plant in the daisy family. This annual plant produces a slender purplish stem four to 20 inches tall. The hairy leaves are 0.80 to two inches long. The inflorescence is a single flower head or small cluster of heads, each with one to six three-lobed yellow ray florets. It grows in barren to sparsely vegetated areas with little competition, such as roadsides, dry ridges and slopes, and openings in chaparral, oak woodland, forest, meadows and seeps (volcanic), and annual grassland, often in talus, scree, or gravel. However, there is only one reported CNDDDB occurrence of this species within five miles of the Study Area 2.9 miles to the southwest in 2003. However, no small-flowered calycadenia were observed during the Barnett Environmental February 2022 field survey.
3. **Colusia layia** (*Layia septentrionalis*) – This annual herb is a 1B.2 California rare plant in the daisy family. This is a small annual herb producing a glandular stem up to about 2.75 inches tall. The leaves are linear to lance-shaped, with the lower ones lobed and up to about 7 centimeters in length. The daisy-like flower heads contain toothed yellow ray florets and yellow disc florets with yellow anthers. The fruit is an achene; fruits on the disc florets have a long white pappus of plumelike bristles. This species is found in foothill woodlands, chaparral, and valley grassland communities on serpentine or sandy soils. There are six reported CNDDDB occurrences within five miles of the Study Area. The closest occurred in 2019, either within the parcel or a couple hundred feet to the west. However, no colusia layia were observed during the Barnett Environmental February 2022 field survey.
4. **Mayacamas popcornflower** (*Plagiobothrys lithocaryus*) – This annual herb is a 1A California rare plant in the Boraginaceae family. This species grows between 4 and 11.8 inches in height. It blooms from April through May and produces white flowers and nutlets. This species is found in moist places in foothill woodlands, chaparral, valley grasslands, and wetland-riparian communities. There are four reported occurrences within five miles of the Study Area. The most recent was in 1884. No mayacamas popcornflower were observed during the Barnett Environmental February 2022 field survey.

5. **Beaked tracyina** (*Tracyina rostrata*) – This annual herb is a 1B.2 California rare plant in the daisy family. This species can grow up to one foot tall. It flowers between May and June, producing yellow and purple blooms. It is found on grass hills in foothill woodlands and valley grassland communities. There is only one CNDDDB occurrences of this species within five miles of the Study Area, 2.9 miles to the northwest. However, no beaked tracyina were observed during the Barnett Environmental February 2022 field survey.

5.3 SPECIAL STATUS WILDLIFE

FEDERALLY LISTED SPECIES

There are no federally-listed animals that have the potential but are not known to occur within the Study Area (Appendix B, Table 2):

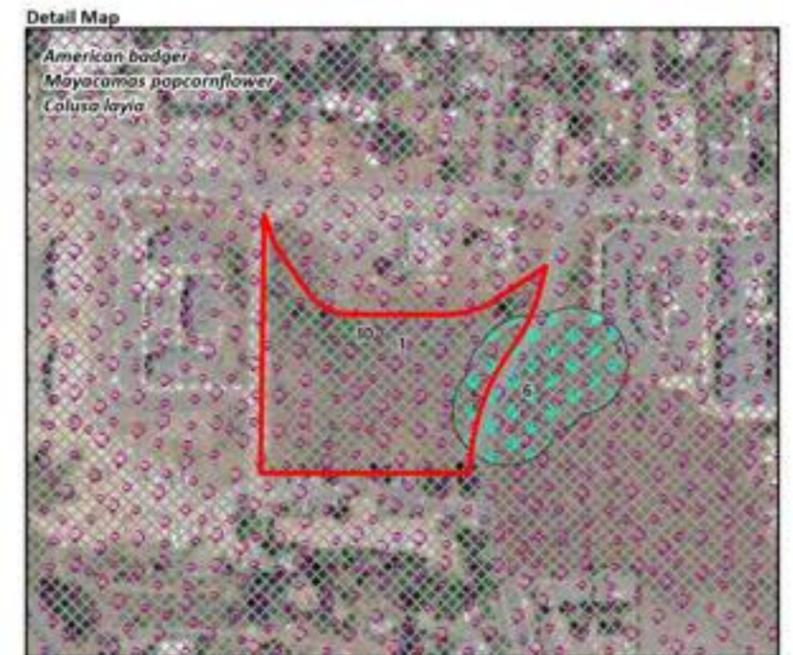
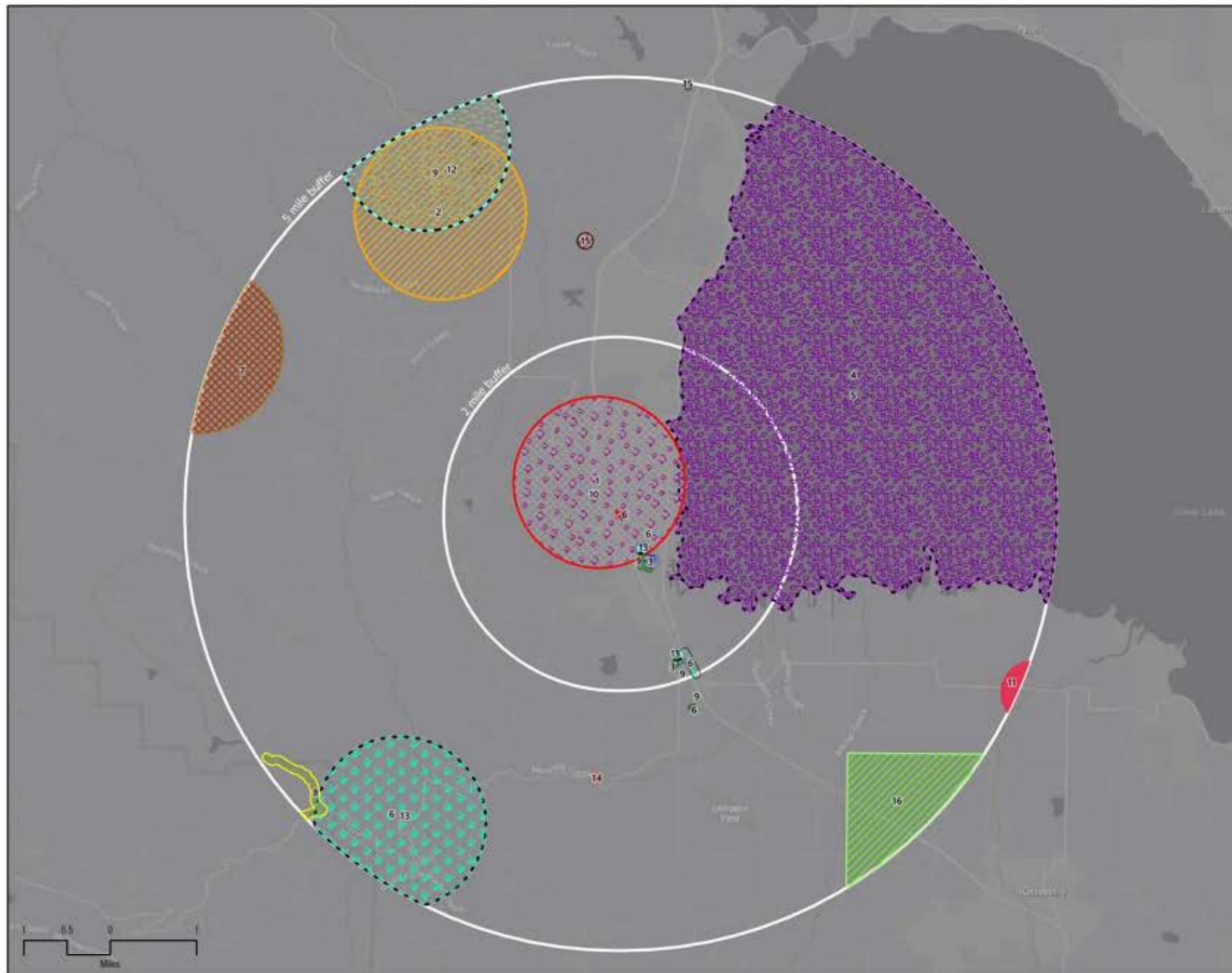
STATE-LISTED SPECIES

There are no state-listed animal species has the potential to occur within the Study Area (Table 2):

CALIFORNIA SPECIES OF SPECIAL CONCERN

Four California species of special concern have the potential to occur in the Study Area.

1. **Western burrowing owl** (*Athene cunicularia*) – The western burrowing owl is a species of special concern in California. It is a small, long-legged owl, ranging from seven to 10 inches in height. They have a round head, white eyebrows, yellow eyes, and long heads. Burrowing owls can be found in grasslands, rangelands, agricultural areas, deserts, or any other open dry area with low vegetation. They nest and roost in burrows, such as those excavated by prairie dogs. While the Study Area provides marginal habitat for this species, there have been no reported CNDDDB occurrences within five miles of the Study Area. In addition, there was no sign of this species or any burrows during the Barnett Environmental February 2022 site survey.
2. **Grasshopper sparrow** (*Ammodramus savannarum*) – This California species of special concern prefers to nest in mixed grassland habitats, hayfields, pastures, and grassy fallow fields. The grasslands and open habitats found throughout the Study Area may provide potentially suitable nesting and foraging habitat for this species. It is a small, flat-headed sparrow with a deep bill and has an unstreaked and buffy underside and rusty spotting or streaking on the back. It typically has a wingspan of approximately eight inches and a length of between 4.3 and 4.5 inches. The Study Area provides marginal foraging habitat for this species. There are no reported CNDDDB occurrences within five miles of the Study Area, and no grasshopper sparrows were observed during the Barnett Environmental February 2022 field survey.
3. **Northern harrier** (*Circus cyaneus*) – This California species of special concern is distinctive from a long distance away: a slim, long-tailed hawk gliding low over a marsh or grassland, holding its wings in a V-shape and sporting a white patch at the base of its tail. Up close it has an owl-like face that helps it hear mice and voles beneath the vegetation. These birds inhabit grasslands, fields, marshes, upland prairies, savannas and alpine meadows. They also occur in wetland habitats and upland habitats such as desert steppe and avoid forested and mountainous areas. The Study Area is too degraded to provide breeding habitat for this species.



- American badger, 1
- beaked tracyina, 2
- bent-flowered fiddleneck, 3
- Clear Lake hitch, 4
- Clear Lake tule perch, 5
- Colusa layia, 6
- Fisher, 7
- foothill yellow-legged frog, 8
- glandular western flax, 9
- Mayacamas popcornflower, 10
- red-bellied newt, 11
- serpentine cryptantha, 12
- small-flowered calycadenia, 13
- tricolored blackbird, 14
- western pond turtle, 15
- Parcel (APN 02543137)

CNDDDB version 1/2022. The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area CDFW: <https://www.wildlife.ca.gov/Data/CNDDDB> January 8, 2022. Sources: East, DeLorme, HERE, MapmyIndia. Scale: 1:78,000, original map 11x17.

FIGURE 6 - CALIFORNIA NATIONAL DIVERSITY DATABASE (CNDDDB) RECORDED SPECIES OBSERVATION

BEVINS STREET SENIOR APARTMENTS • LAKE COUNTY, CA



but can provides marginal foraging habitat. There are no reported CNDDDB occurrences within five miles of the Study Area. In addition, there was no sign of this species during the Barnett Environmental February 2022 site visit.

CALIFORNIA FULLY PROTECTED SPECIES

There is only one California fully protected species with the potential to occur in the Study Area.

1. **White-tailed kite** (*Elanus leucurus*) – This raptor is a fully protected species in California. A small to medium-sized raptor with narrow, pointed wings and a long tail. When perched, it looks rather big-headed with a long and skinny body. This species is easily identified by its entirely white tail, red eyes, and black shoulder patches. It occurs in open grasslands, fields, and meadows. Isolated trees in close proximity to foraging habitat are used for perching and nesting. The site provides marginal foraging habit for this species. There are no reported CNDDDB occurrences within five miles of the Study Area, and there was no sign of this species during the Barnett Environmental February 2022 site survey.

6.0 MITIGATION MEASURES FOR POTENTIAL IMPACTS

The following measures will be taken by the applicant to mitigate for any potential impacts for special species.

6.1 SPECIAL PLANT SPECIES

During the appropriate bloom period prior to construction, a qualified botanist will conduct special-status plant species presence/absence surveys within areas proposed for grading or modification, in accordance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (California Department of Fish and Wildlife, 2009) to determine which special-status plants with the potential to occur on site are evident and identifiable onsite. If any sensitive plant species are observed during the presence/absence surveys and it is determined that such plants would be impacted by project activities, CDFW and the USFWS (if the species is also on the federal list of sensitive species) would be consulted to determine appropriate measures to ensure the protection of the species and its habitat. Such mitigation should include avoidance or, if avoidance is not possible, relocation of affected plants to a mitigation site located in similar habitat within the project site in an area where no impacts are expected to occur. The relocation site should be in an area that is protected from impacts through human disturbance by fencing during the season that special-status plant species would be evident and identifiable—i.e., during their recognized bloom period.

6.2 SPECIAL BIRD SPECIES

A qualified biologist would conduct nesting bird surveys within 30 days of initiation of ground disturbance activities within the proposed construction footprint (plus predetermined buffer) suitable habitat (and within the appropriate nesting season) throughout the project site to avoid impacts to nesting birds associated with construction. Surveys shall be conducted prior to ground disturbing activities. If an active nest is located, all

clearing and construction within 300 feet of the nest (500 feet for raptor nests) or as designated appropriate by a biological monitor, shall be postponed until the nest is vacated and juveniles have fledged, and there is no evidence of a second attempt at nesting, as determined by a qualified biologist. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. Construction personnel should be instructed on the sensitivity of the area. The project proponent should record the results of the recommended protective measures described. Additional surveys would then be conducted if ground-disturbing activities are delayed due to active bird nesting, until the qualified biologist determines that the young associated with an active nest have fledged.

7.0 CONCLUSIONS

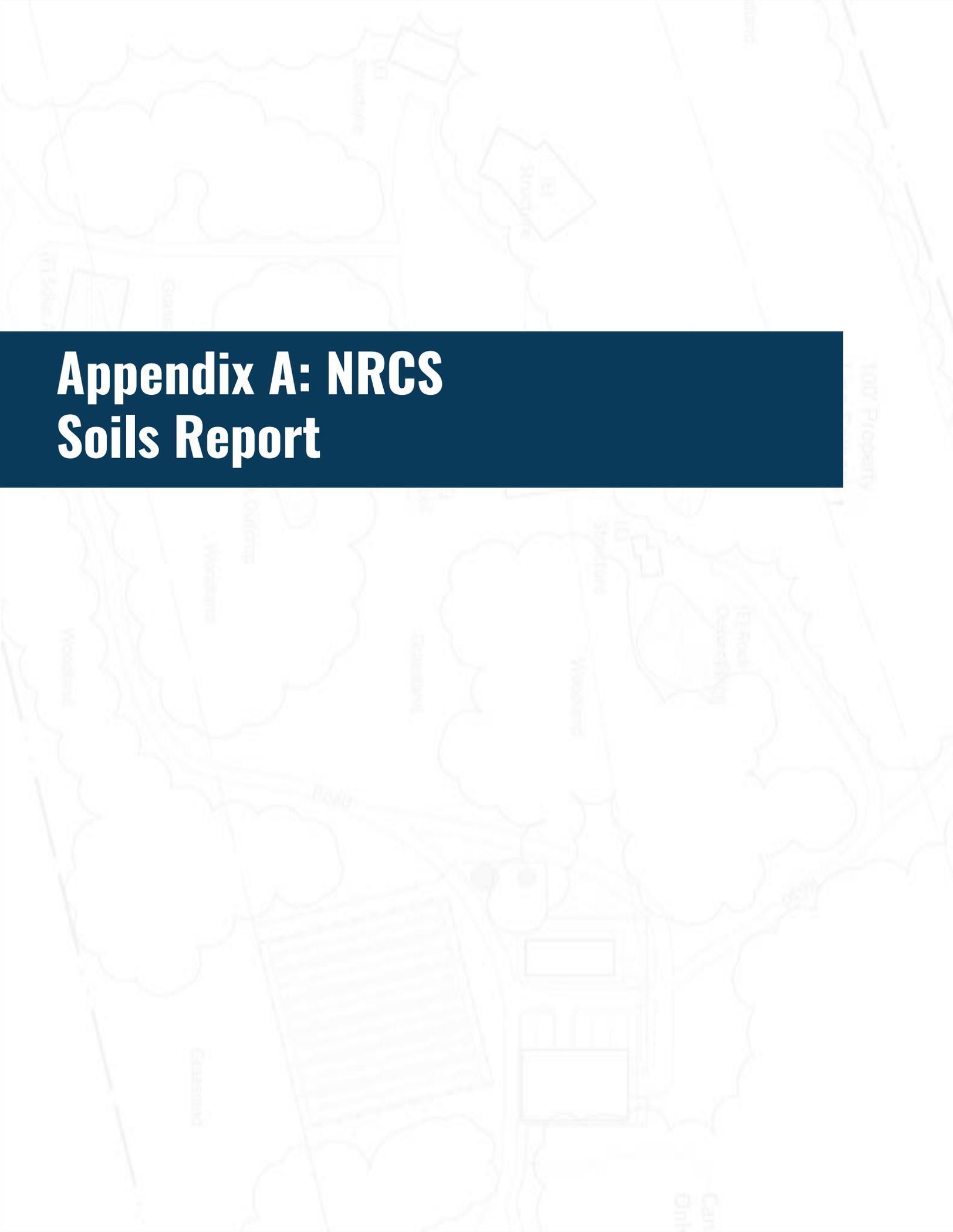
The Study Area contains approximately 0.024 acres of Waters of the U.S along its southern property boundaries. As of the writing of this report, the project intends to avoid the mapped wetland, and therefore, there would be no requirement for resource permitting if the development proceeds as planned.

There are five special status plant species (serpentine cryptantha, small-flowered calycadenia, colusia layia, mayacamas popcornflower, and beaked tracyina), three species of special concern (western burrowing owl, grasshopper sparrow, northern harrier), and one fully protected species (white-tailed kite) have the potential to occur on site. In order to confirm the presence or absence of these species of special concern, we recommend pre-construction surveys within two weeks of planned construction.

8.0 REFERENCES

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The background of the page is a detailed site plan map. It shows various features including: 'Structure' labels for buildings; 'Woodland' areas with tree symbols; 'Outcrop' and 'Grassland' regions; '100' Property' boundary lines; and '10' Scale' markings. A large dark blue banner is overlaid on the left side of the map, containing the title text.

Appendix A: NRCS Soils Report



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Lake County, California

Bevins Street Senior Apartments



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County, California
 Survey Area Data: Version 18, Sep 6, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 8, 2019—May 10, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
142	Henneke-Montara-Rock outcrop complex, 10 to 50 percent slopes, MLRA 15	3.1	100.0%
Totals for Area of Interest		3.1	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Lake County, California

142—Henneke-Montara-Rock outcrop complex, 10 to 50 percent slopes, MLRA 15

Map Unit Setting

National map unit symbol: 2xcb0
Elevation: 1,000 to 3,250 feet
Mean annual precipitation: 26 to 52 inches
Mean annual air temperature: 57 to 60 degrees F
Frost-free period: 212 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Henneke and similar soils: 40 percent
Montara and similar soils: 30 percent
Rock outcrop: 16 percent
Minor components: 14 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Henneke

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from serpentinite

Typical profile

A - 0 to 3 inches: gravelly loam
Bt1 - 3 to 11 inches: gravelly clay loam
Bt2 - 11 to 16 inches: very gravelly clay
Bt3 - 16 to 19 inches: very gravelly clay
R - 19 to 29 inches: bedrock

Properties and qualities

Slope: 10 to 50 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 2.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D

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Ecological site: F015XY010CA - Hills >40"ppt
Hydric soil rating: No

Description of Montara

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from serpentinite

Typical profile

A - 0 to 6 inches: clay loam
Bt - 6 to 12 inches: clay loam
R - 12 to 16 inches: bedrock

Properties and qualities

Slope: 10 to 50 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: F015XY010CA - Hills >40"ppt
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Free face
Down-slope shape: Convex
Across-slope shape: Convex

Interpretive groups

Land capability classification (irrigated): None specified
Ecological site: F015XY015CA - Loamy Mountains >40"ppt
Hydric soil rating: No

Minor Components

Dubakella

Percent of map unit: 5 percent
Landform: Hillslopes

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Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Okiota

Percent of map unit: 4 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Maxwell

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Millsholm

Percent of map unit: 2 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

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United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Lakeport (3912218))
 AND (Federal Listing Status IS (Endangered OR Threatened) OR State Listing Status IS (Endangered OR Threatened))

<i>Agelaius tricolor</i>		Element Code: ABPBXB0020	
tricolored blackbird			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1G2
	State: Threatened		State: S1S2
Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General:	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY AND VICINITY. LARGELY ENDEMIC TO CALIFORNIA.	
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.	

Occurrence No.	133	Map Index:	28367	EO Index:	24704	Element Last Seen:	1936-05-29
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1936-05-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2015-07-22	
Quad Summary:	Lakeport (3912218)						
County Summary:	Lake						
Lat/Long:	39.04479 / -122.93016		Accuracy:	1 mile			
UTM:	Zone-10 N4321749 E506043		Elevation (ft):	1330			
PLSS:	T14N, R10W, Sec. 24 (M)		Acres:	0.0			
Location:	VICINITY OF LAKEPORT, W SHORE OF CLEAR LAKE.						
Detailed Location:	MAPPED GENERALLY TO THE VICINITY OF LAKEPORT, EXACT LOCATION UNKNOWN. COLONY LOCATION DESCRIBED ONLY AS "NEAR LAKEPORT." COLONY DATA ADDITIONALLY STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "LAKEPORT."						
Ecological:	HABITAT IN 1936 DESCRIBED AS CATTAIL MARSH. COLONY PRESUMED EXTIRPATED BY BEEDY (1991).						
General:	A BREEDING COLONY COMPOSED OF ABOUT 50 NESTS OBSERVED ON 29 MAY 1936 (NEFF 1937). FURTHER RESEARCH NEEDED TO CONFIRM FINAL COLONY STATUS.						
Owner/Manager:	BIA-BIG VALLEY RANCHERIA, PVT						



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California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	587	Map Index: 96915	EO Index: 98142	Element Last Seen:	2013-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2014-04-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-07-22

Quad Summary: Lakeport (3912218)

County Summary: Lake

Lat/Long:	39.11139 / -122.91188	Accuracy:	80 meters
UTM:	Zone-10 N4329141 E507617	Elevation (ft):	1345
PLSS:	T15N, R09W, Sec. 31, NW (M)	Acres:	0.0

Location: IMMEDIATELY S OF WHALEN WAY & LYONS CREEK INTERSECTION, 0.1 MI W OF HWY 29 & WHALEN WAY INTERSECTION, N OF LAKEPORT.

Detailed Location: COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "LYONS CREEK." MAPPED ACCORDING TO LOCATION PROVIDED IN PORTAL. COLONY LOCATION VISIBLE IN GOOGLE STREET VIEW ALONG WHALEN WAY.

Ecological: G. CHANIOT REPORTED THAT HE HAS CONFIRMED BREEDING AT THIS SITE EACH YEAR FROM 2005-2013. BIRDS GATHERED IN BARE COTTONWOODS IN 2011.

General: ~175 BIRDS OBS ON 3 JUN 2005; CARRYING NEST MATERIAL. 0 OBS ON 31 MAR, ~620 BIRDS OBS ON 25 APR 2008; CARRYING FOOD/DISPLAYING, EARLY NESTING STAGE. ~175 OBS ON 16-18 APR 2011; NEST BUILDING/COPULATION. BREEDING 2005-13. 0 OBS 18 APR 2014.

Owner/Manager: UNKNOWN

Occurrence No.	588	Map Index: 96922	EO Index: 98146	Element Last Seen:	2014-04-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2014-04-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2015-07-22

Quad Summary: Lakeport (3912218)

County Summary: Lake

Lat/Long:	39.08519 / -122.93369	Accuracy:	1/10 mile
UTM:	Zone-10 N4326233 E505734	Elevation (ft):	1430
PLSS:	T14N, R10W, Sec. 02, SE (M)	Acres:	0.0

Location: EACHUS LAKE, ABOUT 0.4 MI W OF LEAR DR & HILL RD INTERSECTION, N OF LAKEPORT.

Detailed Location: COLONY DATA STORED IN UC DAVIS TRICOLORED BLACKBIRD PORTAL; SITE NAME "EACHUS LAKE." MAPPED ACCORDING TO LOCATION PROVIDED IN PORTAL. COLONY OBSERVED FROM ABOUT 1,000M. COLONY VIEWED FROM LEAL DR, WHERE IT BENDS NORTHWARD.

Ecological: SMALL LAKE IN A DEPRESSION WITH STANDING WATER MOSTLY COVERED WITH AZOLLA. AN ISLAND OF CATTAILS IN THE MIDDLE WITH A FEW TALL SEDGES, A FEW COTTONWOODS AND WILLOWS NEARBY. SURROUNDED BY GRASSLAND, OAK SAVANNAH, AND BUILDINGS.

General: ~150 BIRDS OBS ON 18 APR 2014; SOME MALES DISPLAYING, GROUPS OF MALES & FEMALES OBS FLYING IN & OUT OF ACTIVE COLONY. DISCOVERED BY FOLLOWING FLIGHT LINES OF 50 BIRDS. DIFFICULT TO OBS COLONY, NESTING NOT CONFIRMED, FURTHER RESEARCH NEEDED.

Owner/Manager: PVT, UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



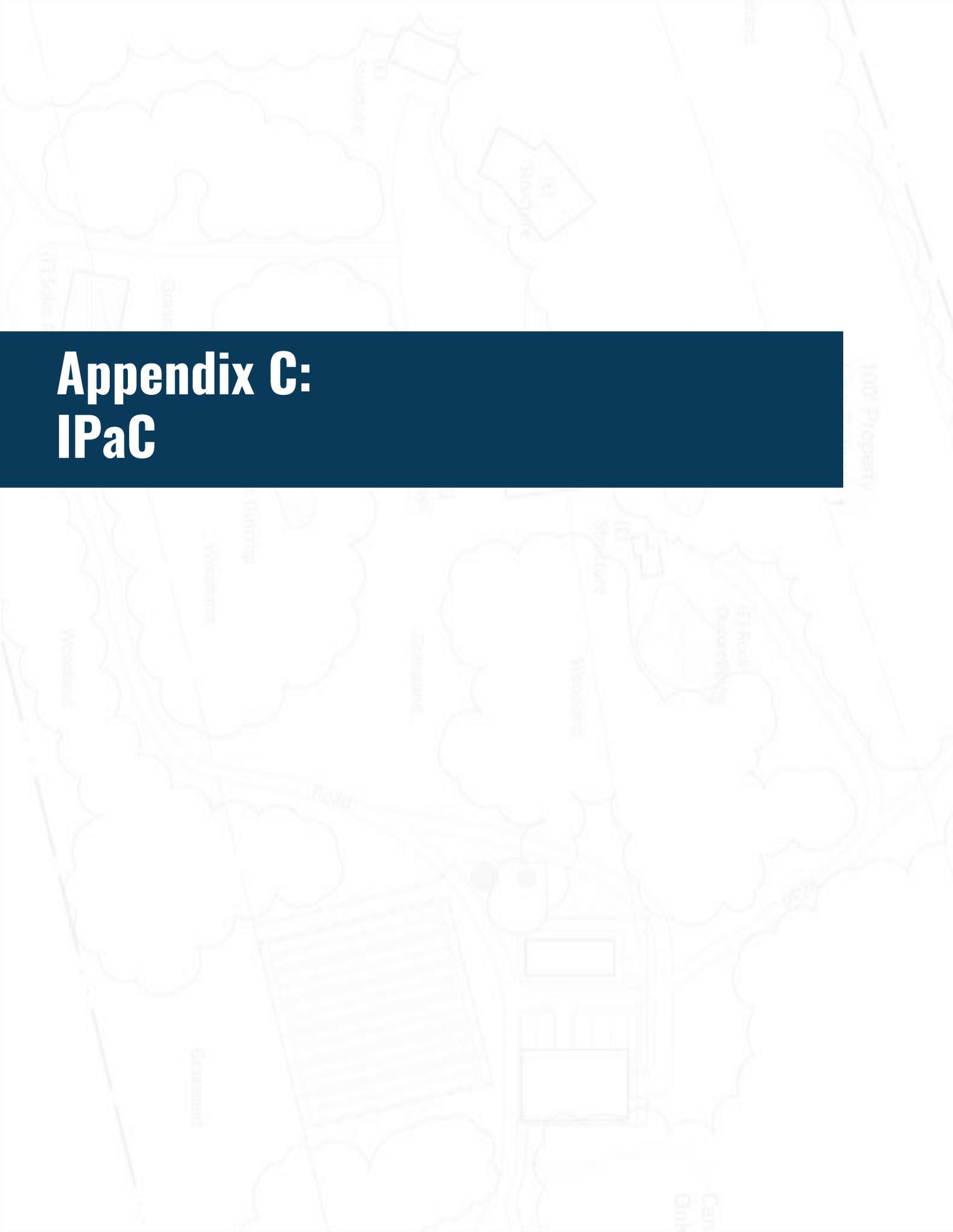
<i>Lavinia exilicauda chi</i>		Element Code: AFCJB19011	
Clear Lake hitch			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4T1
	State: Threatened		State: S1
	Other: AFS_VU-Vulnerable, USFS_S-Sensitive		
Habitat:	General: FOUND ONLY IN CLEAR LAKE, LAKE COUNTY, AND ASSOCIATED PONDS. SPAWNS IN STREAMS FLOWING INTO CLEAR LAKE.		
	Micro: ADULTS FOUND IN THE LIMNETIC ZONE. JUVENILES FOUND IN THE NEARSHORE SHALLOW-WATER HABITAT HIDING IN THE VEGETATION.		

Occurrence No.	4	Map Index:	43098	EO Index:	63621	Element Last Seen:	1962-04-08
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1962-04-08	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-12-28	

Quad Summary: Clearlake Highlands (3812286), Clearlake Oaks (3912216), Lucerne (3912217), Lakeport (3912218)
County Summary: Lake

Lat/Long:	39.02646 / -122.77960	Accuracy:	non-specific area
UTM:	Zone-10 N4319736 E519077	Elevation (ft):	1326
PLSS:	T14N, R08W (M)	Acres:	39250.2

Location: CLEAR LAKE.
Detailed Location:
Ecological:
General: COLLECTED 9 APR 1961 BY UCB ZOOLOGY 138 CLASS (CAS #72868) AND 8 APR 1962 BY P.R. NEEDHAM, & D.W. SEEGRIST & PARTY (CAS #24033) PARATYPE.
Owner/Manager: UNKNOWN



Appendix C: IPaC

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Lake County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1123	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Burke's Goldfields <i>Lasthenia burkei</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4338	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED)

FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

California Thrasher *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jun 1 to Aug 31

Common Yellowthroat *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

Lawrence's Goldfinch *Carduelis lawrencei*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Breeds Mar 20 to Sep 20

Marbled Godwit *Limosa fedoa*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Breeds elsewhere

Nuttall's Woodpecker *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

Oak Titmouse *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Short-billed Dowitcher *Limnodromus griseus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Tricolored Blackbird *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

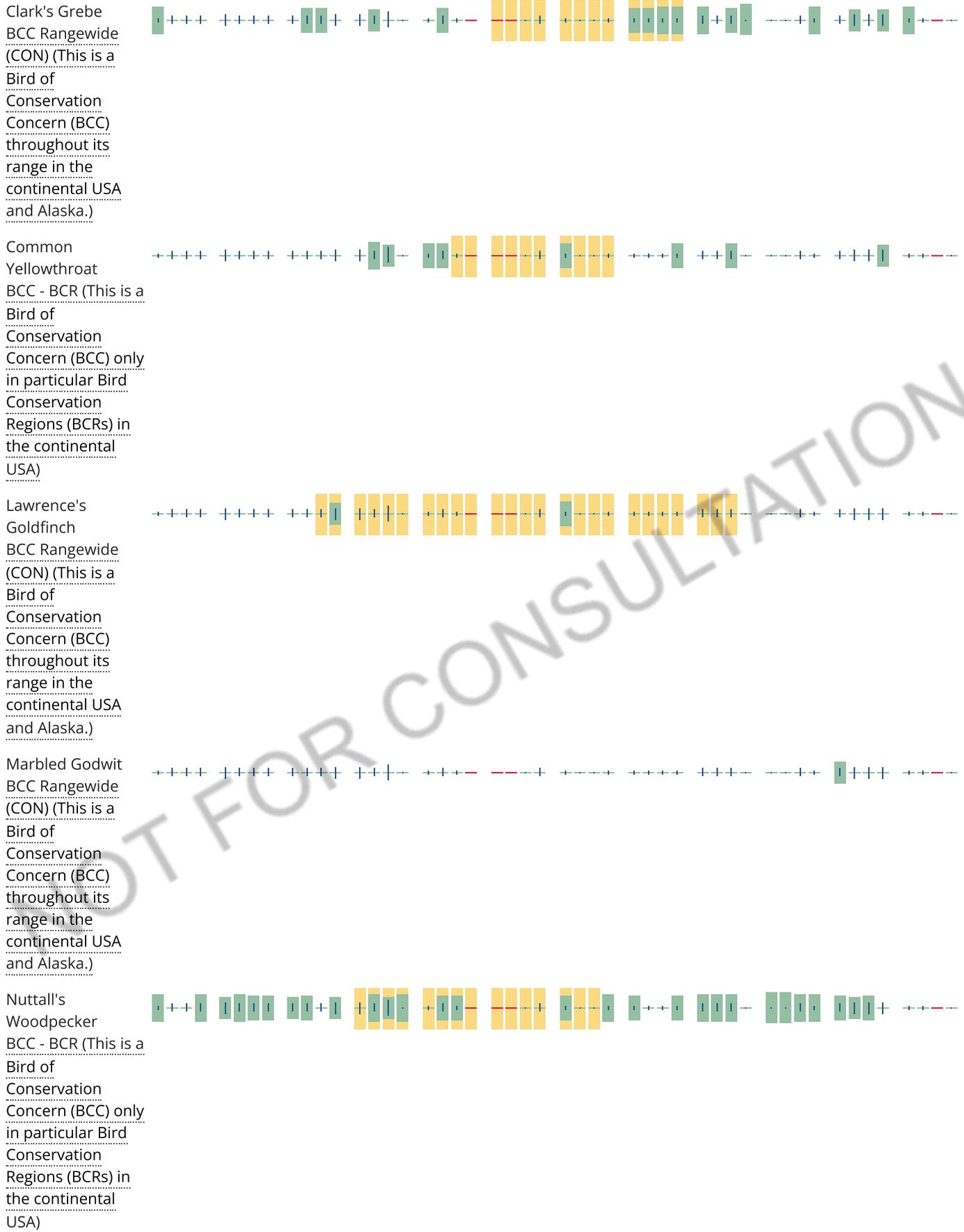
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

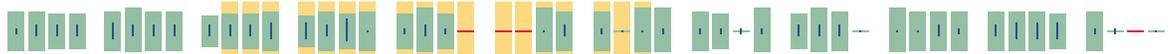
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



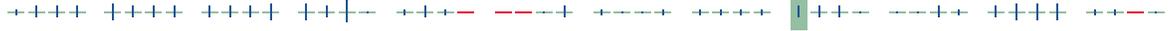


NOT FOR CONSULTATION

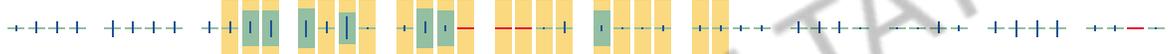
Oak Titmouse
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



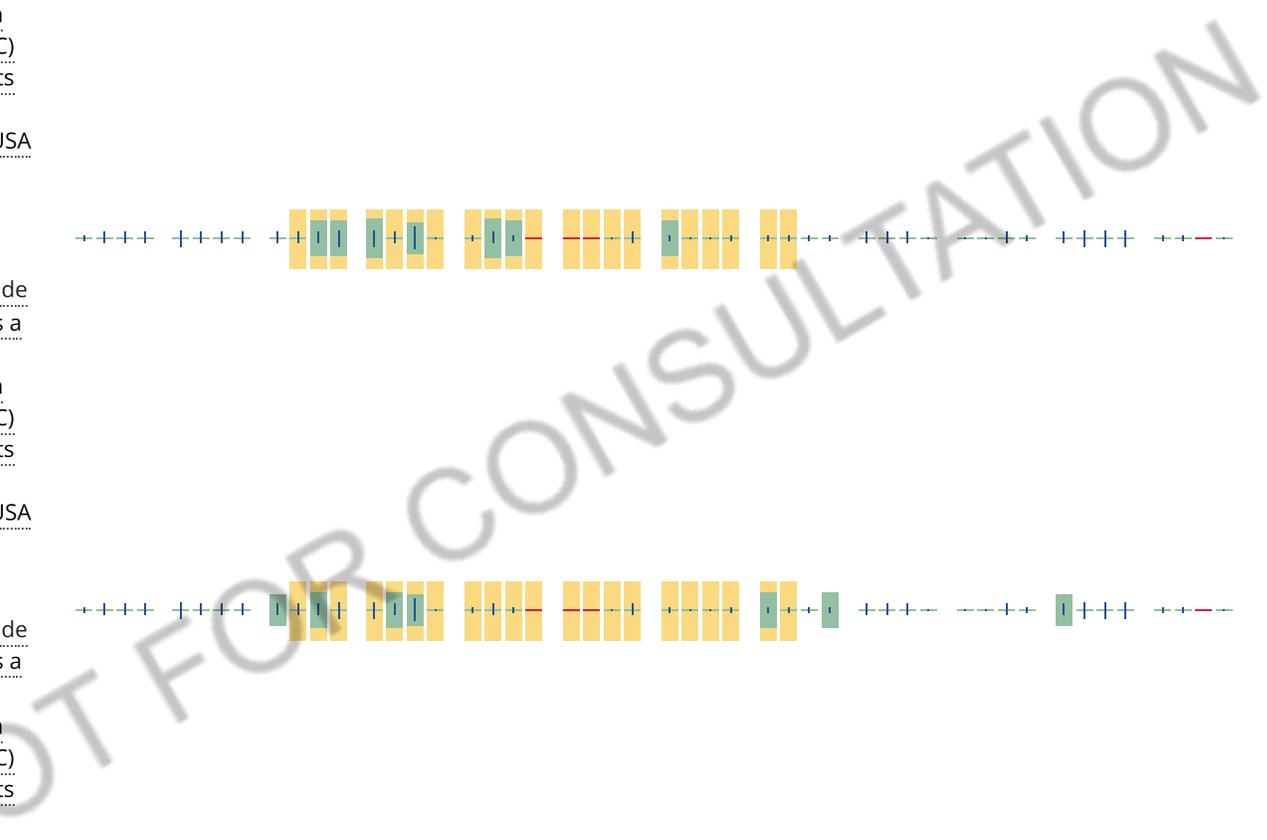
Short-billed
 Dowitcher
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Tricolored
 Blackbird
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Wrentit
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

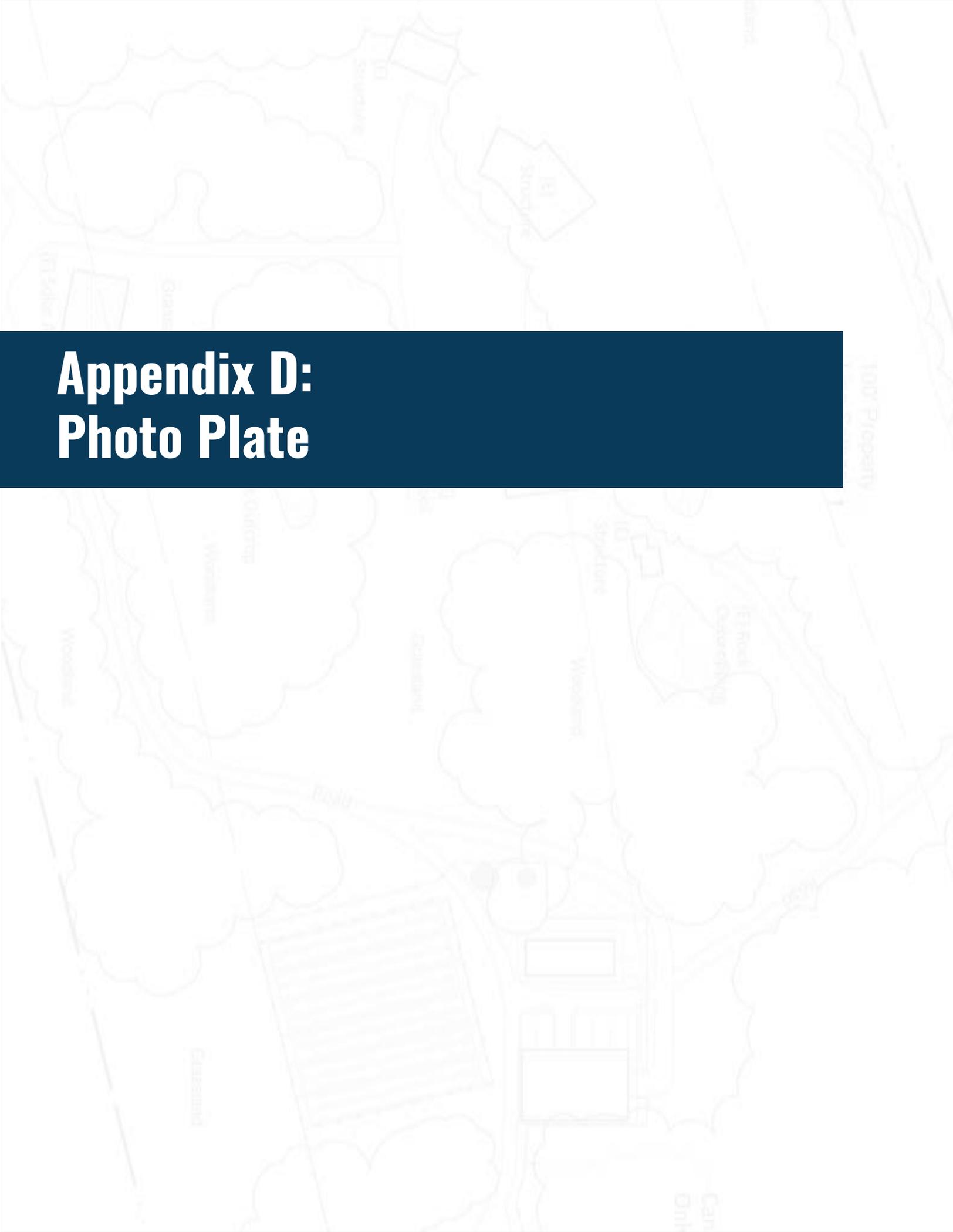
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in

activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

A detailed site plan map showing property boundaries, structures, and vegetation. The map includes labels for various features such as 'Structure', 'Woodland', 'Outcrop', 'Road', 'Grassland', and '100' Property'. A dark blue banner is overlaid on the left side of the map, containing the text 'Appendix D: Photo Plate'.

Appendix D: Photo Plate



1. Photograph shows existing conditions of the property taken from the southwest corner, facing northeast.



2. Photograph taken from same location, facing north.

Barnett Environmental
Bevins Street Property; Lake County, CA



3. Photograph taken from southeast corner of property, facing north/northwest. Bevins Street is just outside the frame along the far right side of the photo.



4. Photograph taken in the northeast corner of the property, facing southwest. Ephemeral drainage in the center of the photograph was the only mapped “other waters” feature present within the property; surface water was present and it had an Ordinary High Water Mark (OHWM) of 2 feet along the mapped length. Water exits the property through the culvert seen in the bottom-center of the photograph.

Barnett Environmental
Bevins Street Property; Lake County, CA



5. Photograph taken in the northwest corner of the property, facing southeast.



6. Photograph shows upstream end of ephemeral drainage on the property, facing east. Mapped feature showed incision with a defined bed/bank and OHWM of 2 feet. Note the exposed rock outcropping along the northern boundary of the property at the upper-left of the photograph.

Barnett Environmental
Bevins Street Property; Lake County, CA

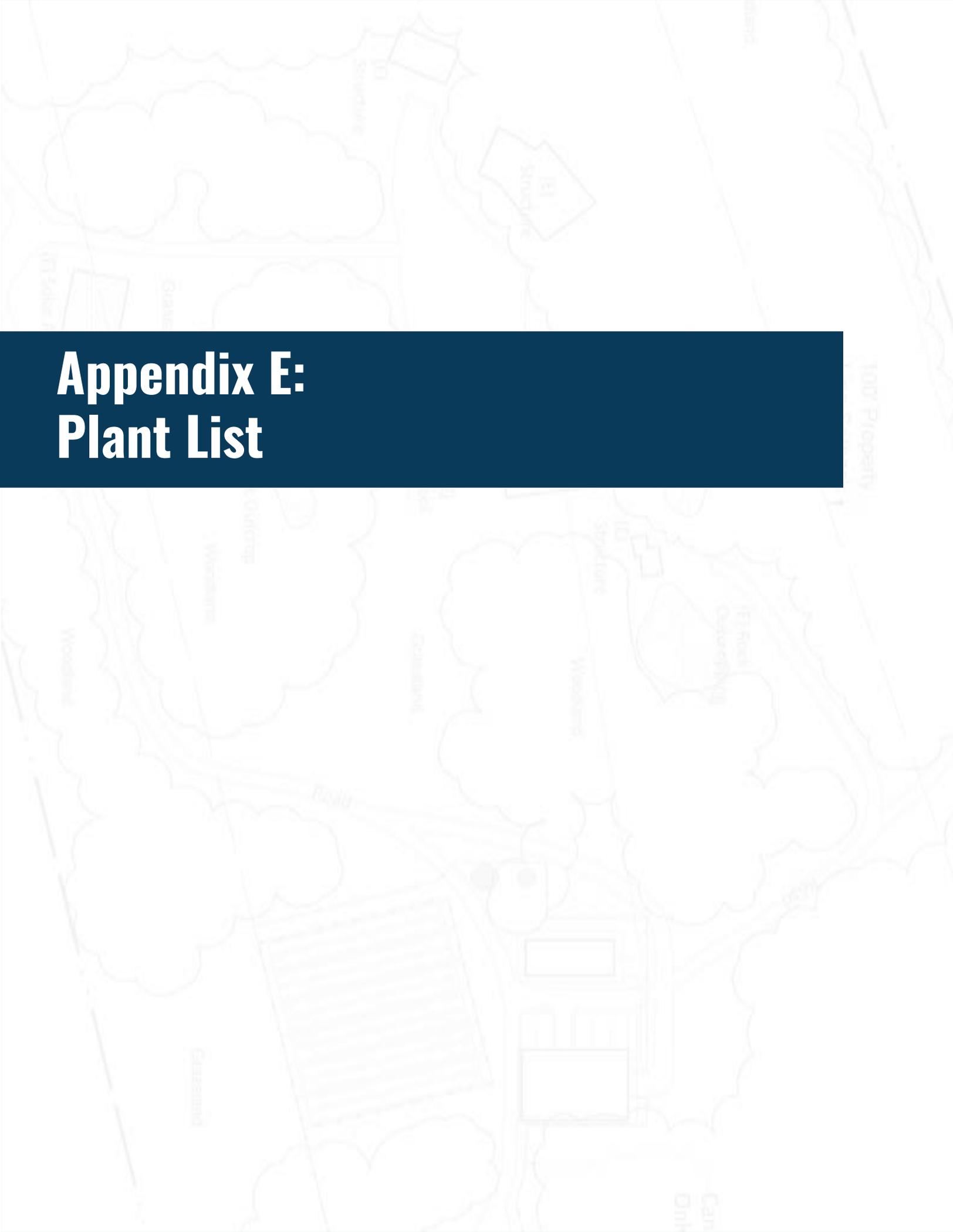


7. Photograph shows culvert running underneath Smith Street along western boundary of property.



8. Photograph shows representative example of exposed Henneke-Montara-Rock outcropping, which is the parent material underlain throughout the entire property. Soils are extremely shallow and support a number of native species including big squirreltail grass, goldfields, soap plant, three species of buckwheat, and two members of the Brodiaea family (vegetative/non-flowering at the time of the field delineation).

Barnett Environmental
Bevins Street Property; Lake County, CA

A detailed landscape site plan is visible in the background, showing various elements like trees, structures, and paths. Labels include 'Structure', 'Woodland', 'Outcrop', 'Road', 'Grassland', '100' Property', and 'Canal'.

Appendix E: Plant List

Project: Bevins Street Property
 Lake County, California
 Date: 2/2/2022
 Botanist/Wetlands Ecologist: Christopher Bronny

Wetland Indicator Status reflects updated 2012 National Wetland Plant List (NWPL) for Arid West (AW)

Nomenclature follows The Jepson Manual, 2nd Ed., 2012

*denotes naturalized species

Plant species not given a "Wetland Indicator Status" designation are considered UPL for wetland delineation purposes

Scientific Name	Common Name	Wetland Indicator Status
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Section - Gymnosperms

Pinaceae

<i>Pinus</i> sp.	Pine	Varies
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Section - Eudicots

Amaranthaceae

<i>Amaranthus albus</i> *	Tumbleweed	FACU
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Apiaceae

<i>Conium maculatum</i> *	Poison-hemlock	FACW
---------------------------	----------------	------

<i>Daucus carota</i> *	Queen Anne's-lace	UPL
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<i>Tauschia (hartwegii)</i>	Tauschia	
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Apocynaceae

<i>Vinca major</i> *	Periwinkle	
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Asteraceae

<i>Baccharis pilularis</i>	Coyote brush	
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<i>Centaurea solstitialis</i> *	Yellow star-thistle	
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<i>Lactuca serriola</i> *	Prickly lettuce	FACU
---------------------------	-----------------	------

<i>Lasthenia gracilis</i>	Needle goldfields	
---------------------------	-------------------	--

Boraginaceae

<i>Amsinckia</i> sp.	Fiddleneck	
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<i>Phacelia (imbricata)</i>	Scorpionweed	
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Brassicaceae

<i>Hirschfeldia incana</i> *	Short-pod mustard	
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Dipsacaceae

<i>Dipsacus fullonum</i> *	Teasel	FAC
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Fabaceae

<i>Acmispon (heermannii)</i>	Birdsfoot trefoil	
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<i>Cytisus scoparius</i> *	Scotch broom	
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<i>Lepidium nitidum</i>	Shining peppergrass	
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<i>Thysanocarpus curvipes</i>	Fringe-pod	
<i>Trifolium</i> spp.	Clover	Varies
<i>Vicia</i> spp.*	Vetch	Varies
Fagaceae		
<i>Quercus lobata</i>	Valley oak	FACU
Geraniaceae		
<i>Geranium molle</i> *	Dove's-foot geranium	
Juglandaceae		
<i>Juglans californica</i>	California black walnut	FAC
Monitaceae		
<i>Calandrinia ciliata</i>	Red maids	FACU
<i>Claytonia perfoliata</i>	Miner's lettuce	FAC
Oleaceae		
<i>Ligustrum</i> sp.	Privet	
Onagraceae		
<i>Camissonia contorta</i>	Contorted suncup	
<i>Epilobium brachycarpum</i>	Annual fireweed	
Papaveraceae		
<i>Eschscholzia (californica)</i>	Poppy	
Phrymaceae		
<i>Erythranthe (guttata)</i>	Seep monkeyflower	OBL
Phytolaccaceae		
<i>Phytolacca americana</i> *	Pokeweed	FAC
Polygonaceae		
<i>Eriogonum nudum</i> var. <i>nudum</i>	Naked buckwheat	
<i>Eriogonum (roseum)</i>	Wand buckwheat	
<i>Rumex crispus</i> *	Curly dock	FAC
Ranunculaceae		
<i>Delphinium (variegatum)</i>	Larkspur	
Rosaceae		
<i>Rubus discolor</i> *	Himalayan blackberry	FACU
<i>Prunus</i> sp.*	Unknown	
Salicaceae		
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont's cottonwood	
Scrophulariaceae		

<i>Verbascum blattaria</i> *	Moth mullein	
Simaroubaceae		
<i>Ailanthus altissima</i> *	Tree-of-heaven	FACU
Solanaceae		
<i>Datura stramonium</i> *	Jimson-weed	
<i>Section - Monocots</i>		
Agavaceae		
<i>Chlorogalum</i> sp.	Soap plant	
Juncaceae		
<i>Juncus balticus</i> ssp. <i>ater</i>	Baltic rush	
<i>Juncus xiphioides</i>	Iris-leaved rush	OBL
Poaceae		
<i>Avena</i> sp.*	Wild oat	
<i>Bromus catharticus</i> *	Rescuegrass	
<i>Bromus diandrus</i> *	Rip-gut brome	
<i>Elymus caput-medusae</i> *	Medusahead grass	
<i>Elymus glaucus</i> ssp. <i>glaucus</i>	Blue wild-rye	FACU
<i>Elymus multisetus</i>	Big squirreltail grass	
<i>Festuca microstachys</i>	Small fescue	
<i>Elymus triticoides</i>	Beardless wild-rye	FAC
<i>Phalaris minor</i> *	Canary grass	
Themidaceae		
<i>Calochortus</i> sp.	Mariposa lily	
<i>Dichelostemma (capitatum)</i>	Blue dicks	

Wetland Plant Indicator Status Categories

Indicator Category	Symbol	Ecological Description
Obligate Wetland Plant	OBL	Almost always occur in wetlands.
Facultative Wetland Plant	FACW	Usually occur in wetlands, but may occur in non-wetlands.
Facultative Plant	FAC	Occur in wetlands and non-wetlands.
Facultative Upland Plant	FACU	Usually occur in non-wetlands, but may occur in wetlands.

Upland Plant

UPL

Almost never occur in wetlands.

*Based upon revised information contained in Army Corps of Engineers 2012 The National Wetland Plant List Indicator Rating Definitions (ERDC/CRREL TR-12-11)

APPENDIX B

CALEEMOD AIR QUALITY MODELING RESULTS

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Bevins Street Senior Apartments
Lake County AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	51.00	Space	0.20	20,400.00	0
Apartment Mid Rise	40.00	Dwelling Unit	1.80	41,449.00	114

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	67
Climate Zone	1			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Building square footage and lot acreage based on site plan; parking lot acreage based on AQ questionnaire.

Construction Phase - Phase timing based on AQ Questionnaire provided by the project applicant.

Grading -

Area Mitigation -

Water Mitigation - Compliant with MWELO

Mobile Land Use Mitigation - Based on applicant provided AQ Questionnaire

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	200.00	220.00

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	20.00
tblLandUse	LandUseSquareFeet	40,000.00	41,449.00
tblLandUse	LotAcreage	0.46	0.20
tblLandUse	LotAcreage	1.05	1.80

2.0 Emissions Summary

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6323	1.4080	1.5318	2.8900e-003	0.1672	0.0605	0.2277	0.0734	0.0580	0.1313	0.0000	246.2516	246.2516	0.0413	3.0100e-003	248.1820
2024	0.2739	0.4071	0.5074	9.4000e-004	0.0127	0.0163	0.0290	3.4000e-003	0.0158	0.0192	0.0000	79.9773	79.9773	0.0104	1.1200e-003	80.5685
Maximum	0.6323	1.4080	1.5318	2.8900e-003	0.1672	0.0605	0.2277	0.0734	0.0580	0.1313	0.0000	246.2516	246.2516	0.0413	3.0100e-003	248.1820

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6323	1.4080	1.5318	2.8900e-003	0.1672	0.0605	0.2277	0.0734	0.0580	0.1313	0.0000	246.2514	246.2514	0.0413	3.0100e-003	248.1817
2024	0.2739	0.4071	0.5074	9.4000e-004	0.0127	0.0163	0.0290	3.4000e-003	0.0158	0.0192	0.0000	79.9772	79.9772	0.0104	1.1200e-003	80.5684
Maximum	0.6323	1.4080	1.5318	2.8900e-003	0.1672	0.0605	0.2277	0.0734	0.0580	0.1313	0.0000	246.2514	246.2514	0.0413	3.0100e-003	248.1817

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2023	5-31-2023	0.4064	0.4064
2	6-1-2023	8-31-2023	0.6953	0.6953
3	9-1-2023	11-30-2023	0.7054	0.7054
4	12-1-2023	2-29-2024	0.6868	0.6868
5	3-1-2024	5-31-2024	0.2305	0.2305
		Highest	0.7054	0.7054

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7476	0.0524	3.3955	5.6300e-003		0.4360	0.4360		0.4360	0.4360	41.3183	17.8144	59.1327	0.0386	3.2500e-003	61.0661
Energy	8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	23.4341	23.4341	2.6400e-003	4.5000e-004	23.6340
Mobile	0.1888	0.2633	1.5441	2.3600e-003	0.2188	2.8000e-003	0.2216	0.0586	2.6300e-003	0.0612	0.0000	220.8252	220.8252	0.0181	0.0130	225.1479
Waste						0.0000	0.0000		0.0000	0.0000	3.7350	0.0000	3.7350	0.2207	0.0000	9.2534
Water						0.0000	0.0000		0.0000	0.0000	0.8268	1.8368	2.6636	0.0852	2.0400e-003	5.4024
Total	2.9372	0.3227	4.9425	8.0300e-003	0.2188	0.4394	0.6582	0.0586	0.4392	0.4978	45.8802	263.9104	309.7906	0.3653	0.0187	324.5037

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2377	3.4200e-003	0.2974	2.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	0.4861	0.4861	4.7000e-004	0.0000	0.4978
Energy	8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	23.4341	23.4341	2.6400e-003	4.5000e-004	23.6340
Mobile	0.1871	0.2587	1.5181	2.3100e-003	0.2144	2.7400e-003	0.2172	0.0574	2.5800e-003	0.0600	0.0000	216.5124	216.5124	0.0179	0.0128	220.7660
Waste						0.0000	0.0000		0.0000	0.0000	3.7350	0.0000	3.7350	0.2207	0.0000	9.2534
Water						0.0000	0.0000		0.0000	0.0000	0.8268	1.7304	2.5572	0.0852	2.0400e-003	5.2949
Total	0.4256	0.2690	1.8184	2.3700e-003	0.2144	4.9500e-003	0.2194	0.0574	4.7900e-003	0.0622	4.5618	242.1630	246.7248	0.3269	0.0153	259.4461

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	85.51	16.62	63.21	70.49	2.00	98.87	66.67	2.00	98.91	87.50	90.06	8.24	20.36	10.51	18.53	20.05

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2023	3/28/2023	5	20	
2	Grading	Grading	3/29/2023	4/25/2023	5	20	
3	Paving	Paving	4/26/2023	5/23/2023	5	20	

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4	Building Construction	Building Construction	5/24/2023	3/26/2024	5	220
5	Architectural Coating	Architectural Coating	6/7/2023	4/9/2024	5	220

Acres of Grading (Site Preparation Phase): 18.75

Acres of Grading (Grading Phase): 20

Acres of Paving: 0.2

Residential Indoor: 83,934; Residential Outdoor: 27,978; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,224 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	37.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0626	0.0000	0.0626	0.0300	0.0000	0.0300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1243	0.0664	1.7000e-004		5.0700e-003	5.0700e-003		4.6700e-003	4.6700e-003	0.0000	15.1142	15.1142	4.8900e-003	0.0000	15.2364
Total	0.0113	0.1243	0.0664	1.7000e-004	0.0626	5.0700e-003	0.0677	0.0300	4.6700e-003	0.0347	0.0000	15.1142	15.1142	4.8900e-003	0.0000	15.2364

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.3000e-004	3.2000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5466	0.5466	3.0000e-005	2.0000e-005	0.5541
Total	5.2000e-004	3.3000e-004	3.2000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5466	0.5466	3.0000e-005	2.0000e-005	0.5541

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0626	0.0000	0.0626	0.0300	0.0000	0.0300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1243	0.0664	1.7000e-004		5.0700e-003	5.0700e-003		4.6700e-003	4.6700e-003	0.0000	15.1142	15.1142	4.8900e-003	0.0000	15.2364
Total	0.0113	0.1243	0.0664	1.7000e-004	0.0626	5.0700e-003	0.0677	0.0300	4.6700e-003	0.0347	0.0000	15.1142	15.1142	4.8900e-003	0.0000	15.2364

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3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.3000e-004	3.2000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5466	0.5466	3.0000e-005	2.0000e-005	0.5541
Total	5.2000e-004	3.3000e-004	3.2000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5466	0.5466	3.0000e-005	2.0000e-005	0.5541

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1447	0.0870	2.1000e-004		6.0400e-003	6.0400e-003		5.5600e-003	5.5600e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503
Total	0.0133	0.1447	0.0870	2.1000e-004	0.0708	6.0400e-003	0.0769	0.0343	5.5600e-003	0.0398	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503

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3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.1000e-004	4.0000e-003	1.0000e-005	7.9000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.6833	0.6833	3.0000e-005	3.0000e-005	0.6927
Total	6.4000e-004	4.1000e-004	4.0000e-003	1.0000e-005	7.9000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.6833	0.6833	3.0000e-005	3.0000e-005	0.6927

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1447	0.0870	2.1000e-004		6.0400e-003	6.0400e-003		5.5600e-003	5.5600e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503
Total	0.0133	0.1447	0.0870	2.1000e-004	0.0708	6.0400e-003	0.0769	0.0343	5.5600e-003	0.0398	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503

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3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.1000e-004	4.0000e-003	1.0000e-005	7.9000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.6833	0.6833	3.0000e-005	3.0000e-005	0.6927
Total	6.4000e-004	4.1000e-004	4.0000e-003	1.0000e-005	7.9000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.6833	0.6833	3.0000e-005	3.0000e-005	0.6927

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.4500e-003	0.0624	0.0880	1.4000e-004		3.0800e-003	3.0800e-003		2.8500e-003	2.8500e-003	0.0000	11.7724	11.7724	3.7300e-003	0.0000	11.8657
Paving	2.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0624	0.0880	1.4000e-004		3.0800e-003	3.0800e-003		2.8500e-003	2.8500e-003	0.0000	11.7724	11.7724	3.7300e-003	0.0000	11.8657

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3.4 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	5.3000e-004	5.2000e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8883	0.8883	5.0000e-005	4.0000e-005	0.9005
Total	8.4000e-004	5.3000e-004	5.2000e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8883	0.8883	5.0000e-005	4.0000e-005	0.9005

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.4500e-003	0.0624	0.0880	1.4000e-004		3.0800e-003	3.0800e-003		2.8500e-003	2.8500e-003	0.0000	11.7724	11.7724	3.7300e-003	0.0000	11.8657
Paving	2.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0624	0.0880	1.4000e-004		3.0800e-003	3.0800e-003		2.8500e-003	2.8500e-003	0.0000	11.7724	11.7724	3.7300e-003	0.0000	11.8657

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3.4 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	5.3000e-004	5.2000e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8883	0.8883	5.0000e-005	4.0000e-005	0.9005
Total	8.4000e-004	5.3000e-004	5.2000e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8883	0.8883	5.0000e-005	4.0000e-005	0.9005

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1203	0.9251	0.9963	1.7400e-003		0.0406	0.0406		0.0393	0.0393	0.0000	143.4633	143.4633	0.0244	0.0000	144.0723
Total	0.1203	0.9251	0.9963	1.7400e-003		0.0406	0.0406		0.0393	0.0393	0.0000	143.4633	143.4633	0.0244	0.0000	144.0723

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2800e-003	0.0399	0.0100	1.4000e-004	4.1300e-003	2.3000e-004	4.3700e-003	1.2000e-003	2.2000e-004	1.4200e-003	0.0000	13.2739	13.2739	6.0000e-005	1.9400e-003	13.8525
Worker	0.0189	0.0119	0.1169	2.2000e-004	0.0231	1.7000e-004	0.0232	6.1300e-003	1.6000e-004	6.2900e-003	0.0000	19.9722	19.9722	1.0100e-003	8.4000e-004	20.2470
Total	0.0201	0.0518	0.1269	3.6000e-004	0.0272	4.0000e-004	0.0276	7.3300e-003	3.8000e-004	7.7100e-003	0.0000	33.2461	33.2461	1.0700e-003	2.7800e-003	34.0995

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1203	0.9251	0.9963	1.7400e-003		0.0406	0.0406		0.0393	0.0393	0.0000	143.4631	143.4631	0.0244	0.0000	144.0722
Total	0.1203	0.9251	0.9963	1.7400e-003		0.0406	0.0406		0.0393	0.0393	0.0000	143.4631	143.4631	0.0244	0.0000	144.0722

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2800e-003	0.0399	0.0100	1.4000e-004	4.1300e-003	2.3000e-004	4.3700e-003	1.2000e-003	2.2000e-004	1.4200e-003	0.0000	13.2739	13.2739	6.0000e-005	1.9400e-003	13.8525
Worker	0.0189	0.0119	0.1169	2.2000e-004	0.0231	1.7000e-004	0.0232	6.1300e-003	1.6000e-004	6.2900e-003	0.0000	19.9722	19.9722	1.0100e-003	8.4000e-004	20.2470
Total	0.0201	0.0518	0.1269	3.6000e-004	0.0272	4.0000e-004	0.0276	7.3300e-003	3.8000e-004	7.7100e-003	0.0000	33.2461	33.2461	1.0700e-003	2.7800e-003	34.0995

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0440	0.3430	0.3880	6.8000e-004		0.0140	0.0140		0.0135	0.0135	0.0000	56.2995	56.2995	9.3800e-003	0.0000	56.5339
Total	0.0440	0.3430	0.3880	6.8000e-004		0.0140	0.0140		0.0135	0.0135	0.0000	56.2995	56.2995	9.3800e-003	0.0000	56.5339

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3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0153	3.7200e-003	5.0000e-005	1.6200e-003	9.0000e-005	1.7100e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	5.1489	5.1489	2.0000e-005	7.5000e-004	5.3730
Worker	6.8800e-003	4.1100e-003	0.0414	8.0000e-005	9.0500e-003	6.0000e-005	9.1100e-003	2.4100e-003	6.0000e-005	2.4600e-003	0.0000	7.6553	7.6553	3.6000e-004	3.0000e-004	7.7534
Total	7.3400e-003	0.0194	0.0452	1.3000e-004	0.0107	1.5000e-004	0.0108	2.8800e-003	1.4000e-004	3.0100e-003	0.0000	12.8042	12.8042	3.8000e-004	1.0500e-003	13.1265

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0440	0.3430	0.3880	6.8000e-004		0.0140	0.0140		0.0135	0.0135	0.0000	56.2994	56.2994	9.3800e-003	0.0000	56.5338
Total	0.0440	0.3430	0.3880	6.8000e-004		0.0140	0.0140		0.0135	0.0135	0.0000	56.2994	56.2994	9.3800e-003	0.0000	56.5338

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0153	3.7200e-003	5.0000e-005	1.6200e-003	9.0000e-005	1.7100e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	5.1489	5.1489	2.0000e-005	7.5000e-004	5.3730
Worker	6.8800e-003	4.1100e-003	0.0414	8.0000e-005	9.0500e-003	6.0000e-005	9.1100e-003	2.4100e-003	6.0000e-005	2.4600e-003	0.0000	7.6553	7.6553	3.6000e-004	3.0000e-004	7.7534
Total	7.3400e-003	0.0194	0.0452	1.3000e-004	0.0107	1.5000e-004	0.0108	2.8800e-003	1.4000e-004	3.0100e-003	0.0000	12.8042	12.8042	3.8000e-004	1.0500e-003	13.1265

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4410					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0964	0.1340	2.2000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	0.0000	18.8941	18.8941	1.1300e-003	0.0000	18.9223
Total	0.4551	0.0964	0.1340	2.2000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	0.0000	18.8941	18.8941	1.1300e-003	0.0000	18.9223

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3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3400e-003	2.1100e-003	0.0207	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.5394	3.5394	1.8000e-004	1.5000e-004	3.5881
Total	3.3400e-003	2.1100e-003	0.0207	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.5394	3.5394	1.8000e-004	1.5000e-004	3.5881

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4410					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0964	0.1340	2.2000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	0.0000	18.8941	18.8941	1.1300e-003	0.0000	18.9223
Total	0.4551	0.0964	0.1340	2.2000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	0.0000	18.8941	18.8941	1.1300e-003	0.0000	18.9223

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3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3400e-003	2.1100e-003	0.0207	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.5394	3.5394	1.8000e-004	1.5000e-004	3.5881
Total	3.3400e-003	2.1100e-003	0.0207	4.0000e-005	4.0900e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.5394	3.5394	1.8000e-004	1.5000e-004	3.5881

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2145					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5100e-003	0.0439	0.0652	1.1000e-004		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	9.1917	9.1917	5.2000e-004	0.0000	9.2047
Total	0.2210	0.0439	0.0652	1.1000e-004		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	9.1917	9.1917	5.2000e-004	0.0000	9.2047

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3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	9.0000e-004	9.1000e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6819	1.6819	8.0000e-005	7.0000e-005	1.7035
Total	1.5100e-003	9.0000e-004	9.1000e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6819	1.6819	8.0000e-005	7.0000e-005	1.7035

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2145					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5100e-003	0.0439	0.0652	1.1000e-004		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	9.1917	9.1917	5.2000e-004	0.0000	9.2046
Total	0.2210	0.0439	0.0652	1.1000e-004		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	9.1917	9.1917	5.2000e-004	0.0000	9.2046

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	9.0000e-004	9.1000e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6819	1.6819	8.0000e-005	7.0000e-005	1.7035
Total	1.5100e-003	9.0000e-004	9.1000e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6819	1.6819	8.0000e-005	7.0000e-005	1.7035

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1871	0.2587	1.5181	2.3100e-003	0.2144	2.7400e-003	0.2172	0.0574	2.5800e-003	0.0600	0.0000	216.5124	216.5124	0.0179	0.0128	220.7660
Unmitigated	0.1888	0.2633	1.5441	2.3600e-003	0.2188	2.8000e-003	0.2216	0.0586	2.6300e-003	0.0612	0.0000	220.8252	220.8252	0.0181	0.0130	225.1479

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	217.60	196.40	163.60	592,077	580,235
Parking Lot	0.00	0.00	0.00		
Total	217.60	196.40	163.60	592,077	580,235

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.464659	0.064863	0.191817	0.155973	0.051760	0.009603	0.008536	0.006240	0.000416	0.000000	0.037661	0.001217	0.007255
Parking Lot	0.464659	0.064863	0.191817	0.155973	0.051760	0.009603	0.008536	0.006240	0.000416	0.000000	0.037661	0.001217	0.007255

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.3625	15.3625	2.4900e-003	3.0000e-004	15.5144
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.3625	15.3625	2.4900e-003	3.0000e-004	15.5144
Natural Gas Mitigated	8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0716	8.0716	1.5000e-004	1.5000e-004	8.1196
Natural Gas Unmitigated	8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0716	8.0716	1.5000e-004	1.5000e-004	8.1196

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	151256	8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0716	8.0716	1.5000e-004	1.5000e-004	8.1196
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0716	8.0716	1.5000e-004	1.5000e-004	8.1196

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	151256	8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0716	8.0716	1.5000e-004	1.5000e-004	8.1196
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.2000e-004	6.9700e-003	2.9700e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0716	8.0716	1.5000e-004	1.5000e-004	8.1196

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	158898	14.7019	2.3800e-003	2.9000e-004	14.8473
Parking Lot	7140	0.6606	1.1000e-004	1.0000e-005	0.6672
Total		15.3625	2.4900e-003	3.0000e-004	15.5144

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	158898	14.7019	2.3800e-003	2.9000e-004	14.8473
Parking Lot	7140	0.6606	1.1000e-004	1.0000e-005	0.6672
Total		15.3625	2.4900e-003	3.0000e-004	15.5144

6.0 Area Detail

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2377	3.4200e-003	0.2974	2.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	0.4861	0.4861	4.7000e-004	0.0000	0.4978
Unmitigated	2.7476	0.0524	3.3955	5.6300e-003		0.4360	0.4360		0.4360	0.4360	41.3183	17.8144	59.1327	0.0386	3.2500e-003	61.0661

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0656					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5099	0.0490	3.0981	5.6100e-003		0.4344	0.4344		0.4344	0.4344	41.3183	17.3283	58.6466	0.0381	3.2500e-003	60.5684
Landscaping	8.9700e-003	3.4200e-003	0.2974	2.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	0.4861	0.4861	4.7000e-004	0.0000	0.4978
Total	2.7476	0.0524	3.3955	5.6300e-003		0.4360	0.4360		0.4360	0.4360	41.3183	17.8144	59.1327	0.0386	3.2500e-003	61.0661

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0656					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.9700e-003	3.4200e-003	0.2974	2.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	0.4861	0.4861	4.7000e-004	0.0000	0.4978
Total	0.2377	3.4200e-003	0.2974	2.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	0.4861	0.4861	4.7000e-004	0.0000	0.4978

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.5572	0.0852	2.0400e-003	5.2949
Unmitigated	2.6636	0.0852	2.0400e-003	5.4024

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	2.60616 / 1.64301	2.6636	0.0852	2.0400e-003	5.4024
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.6636	0.0852	2.0400e-003	5.4024

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	2.60616 / 1.31441	2.5572	0.0852	2.0400e-003	5.2949
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.5572	0.0852	2.0400e-003	5.2949

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.7350	0.2207	0.0000	9.2534
Unmitigated	3.7350	0.2207	0.0000	9.2534

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	18.4	3.7350	0.2207	0.0000	9.2534
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		3.7350	0.2207	0.0000	9.2534

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	18.4	3.7350	0.2207	0.0000	9.2534
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		3.7350	0.2207	0.0000	9.2534

9.0 Operational Offroad

Bevins Street Senior Apartments - Lake County AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Bevins Street Senior Apartments
Lake County AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	51.00	Space	0.20	20,400.00	0
Apartment Mid Rise	40.00	Dwelling Unit	1.80	41,449.00	114

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	67
Climate Zone	1			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Building square footage and lot acreage based on site plan; parking lot acreage based on AQ questionnaire.
 Construction Phase - Phase timing based on AQ Questionnaire provided by the project applicant.
 Grading -
 Area Mitigation -
 Water Mitigation - Compliant with MWEL0
 Mobile Land Use Mitigation - Based on applicant provided AQ Questionnaire

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	200.00	220.00

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	20.00
tblLandUse	LandUseSquareFeet	40,000.00	41,449.00
tblLandUse	LotAcreage	0.46	0.20
tblLandUse	LotAcreage	1.05	1.80

2.0 Emissions Summary

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	7.9936	14.5036	16.4607	0.0302	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,819.9929	2,819.9929	0.6491	0.0398	2,841.1812
2024	7.8566	12.8973	16.1704	0.0301	0.4155	0.5167	0.9323	0.1114	0.5006	0.6121	0.0000	2,809.7805	2,809.7805	0.3642	0.0383	2,830.3008
Maximum	7.9936	14.5036	16.4607	0.0302	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,819.9929	2,819.9929	0.6491	0.0398	2,841.1812

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	7.9936	14.5036	16.4607	0.0302	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,819.9929	2,819.9929	0.6491	0.0398	2,841.1812
2024	7.8566	12.8973	16.1704	0.0301	0.4155	0.5167	0.9323	0.1114	0.5006	0.6121	0.0000	2,809.7805	2,809.7805	0.3642	0.0383	2,830.3008
Maximum	7.9936	14.5036	16.4607	0.0302	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,819.9929	2,819.9929	0.6491	0.0398	2,841.1812

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	62.5689	1.2335	78.8681	0.1371		10.6131	10.6131		10.6131	10.6131	1,110.8692	471.8356	1,582.7048	1.0309	0.0874	1,634.5155
Energy	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
Mobile	1.2328	1.4087	9.0132	0.0142	1.3164	0.0162	1.3326	0.3515	0.0152	0.3667		1,469.5356	1,469.5356	0.1084	0.0783	1,495.5759
Total	63.8062	2.6804	87.8976	0.1516	1.3164	10.6324	11.9488	0.3515	10.6314	10.9829	1,110.8692	1,990.1242	3,100.9934	1.1402	0.1666	3,179.1341

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3531	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.9533	5.9533	5.7300e-003	0.0000	6.0965
Energy	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
Mobile	1.2232	1.3839	8.8553	0.0140	1.2901	0.0159	1.3060	0.3445	0.0149	0.3594		1,440.7936	1,440.7936	0.1069	0.0770	1,466.4132
Total	2.5807	1.4602	12.1755	0.0144	1.2901	0.0373	1.3274	0.3445	0.0363	0.3808	0.0000	1,495.4998	1,495.4998	0.1136	0.0779	1,521.5524

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	95.96	45.53	86.15	90.52	2.00	99.65	88.89	2.00	99.66	96.53	100.00	24.85	51.77	90.04	53.24	52.14

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2023	3/28/2023	5	20	
2	Grading	Grading	3/29/2023	4/25/2023	5	20	
3	Paving	Paving	4/26/2023	5/23/2023	5	20	
4	Building Construction	Building Construction	5/24/2023	3/26/2024	5	220	
5	Architectural Coating	Architectural Coating	6/7/2023	4/9/2024	5	220	

Acres of Grading (Site Preparation Phase): 18.75

Acres of Grading (Grading Phase): 20

Acres of Paving: 0.2

Residential Indoor: 83,934; Residential Outdoor: 27,978; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,224 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	37.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2635	0.0000	6.2635	3.0038	0.0000	3.0038			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	6.2635	0.5074	6.7709	3.0038	0.4668	3.4706		1,666.0573	1,666.0573	0.5388		1,679.5282

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0552	0.0288	0.3480	6.2000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		63.9265	63.9265	2.9100e-003	2.3200e-003	64.6915
Total	0.0552	0.0288	0.3480	6.2000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		63.9265	63.9265	2.9100e-003	2.3200e-003	64.6915

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2635	0.0000	6.2635	3.0038	0.0000	3.0038			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	6.2635	0.5074	6.7709	3.0038	0.4668	3.4706	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0552	0.0288	0.3480	6.2000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		63.9265	63.9265	2.9100e-003	2.3200e-003	64.6915
Total	0.0552	0.0288	0.3480	6.2000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		63.9265	63.9265	2.9100e-003	2.3200e-003	64.6915

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.6147	1,995.6147	0.6454		2,011.7503

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0690	0.0360	0.4350	7.8000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		79.9081	79.9081	3.6400e-003	2.9000e-003	80.8643
Total	0.0690	0.0360	0.4350	7.8000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		79.9081	79.9081	3.6400e-003	2.9000e-003	80.8643

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0690	0.0360	0.4350	7.8000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		79.9081	79.9081	3.6400e-003	2.9000e-003	80.8643
Total	0.0690	0.0360	0.4350	7.8000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		79.9081	79.9081	3.6400e-003	2.9000e-003	80.8643

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6708	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0897	0.0468	0.5654	1.0200e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		103.8806	103.8806	4.7300e-003	3.7700e-003	105.1236
Total	0.0897	0.0468	0.5654	1.0200e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		103.8806	103.8806	4.7300e-003	3.7700e-003	105.1236

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6708	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0897	0.0468	0.5654	1.0200e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		103.8806	103.8806	4.7300e-003	3.7700e-003	105.1236
Total	0.0897	0.0468	0.5654	1.0200e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		103.8806	103.8806	4.7300e-003	3.7700e-003	105.1236

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0162	0.4876	0.1248	1.7600e-003	0.0541	2.9600e-003	0.0571	0.0156	2.8300e-003	0.0184		185.1615	185.1615	7.8000e-004	0.0270	193.2235
Worker	0.2552	0.1333	1.6093	2.8900e-003	0.3040	2.1800e-003	0.3061	0.0806	2.0100e-003	0.0826		295.6600	295.6600	0.0135	0.0107	299.1980
Total	0.2715	0.6209	1.7341	4.6500e-003	0.3580	5.1400e-003	0.3632	0.0962	4.8400e-003	0.1010		480.8215	480.8215	0.0142	0.0377	492.4214

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0162	0.4876	0.1248	1.7600e-003	0.0541	2.9600e-003	0.0571	0.0156	2.8300e-003	0.0184		185.1615	185.1615	7.8000e-004	0.0270	193.2235
Worker	0.2552	0.1333	1.6093	2.8900e-003	0.3040	2.1800e-003	0.3061	0.0806	2.0100e-003	0.0826		295.6600	295.6600	0.0135	0.0107	299.1980
Total	0.2715	0.6209	1.7341	4.6500e-003	0.3580	5.1400e-003	0.3632	0.0962	4.8400e-003	0.1010		480.8215	480.8215	0.0142	0.0377	492.4214

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.4751	0.1176	1.7400e-003	0.0541	2.8400e-003	0.0569	0.0156	2.7200e-003	0.0183		183.0295	183.0295	7.1000e-004	0.0267	190.9879
Worker	0.2372	0.1173	1.4510	2.8000e-003	0.3040	2.0000e-003	0.3060	0.0806	1.8500e-003	0.0825		288.7527	288.7527	0.0120	9.8000e-003	291.9740
Total	0.2521	0.5925	1.5686	4.5400e-003	0.3580	4.8400e-003	0.3629	0.0962	4.5700e-003	0.1008		471.7822	471.7822	0.0127	0.0365	482.9619

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.4751	0.1176	1.7400e-003	0.0541	2.8400e-003	0.0569	0.0156	2.7200e-003	0.0183		183.0295	183.0295	7.1000e-004	0.0267	190.9879
Worker	0.2372	0.1173	1.4510	2.8000e-003	0.3040	2.0000e-003	0.3060	0.0806	1.8500e-003	0.0825		288.7527	288.7527	0.0120	9.8000e-003	291.9740
Total	0.2521	0.5925	1.5686	4.5400e-003	0.3580	4.8400e-003	0.3629	0.0962	4.5700e-003	0.1008		471.7822	471.7822	0.0127	0.0365	482.9619

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	6.1506	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0483	0.0252	0.3045	5.5000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		55.9357	55.9357	2.5500e-003	2.0300e-003	56.6050
Total	0.0483	0.0252	0.3045	5.5000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		55.9357	55.9357	2.5500e-003	2.0300e-003	56.6050

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	6.1506	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0483	0.0252	0.3045	5.5000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		55.9357	55.9357	2.5500e-003	2.0300e-003	56.6050
Total	0.0483	0.0252	0.3045	5.5000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		55.9357	55.9357	2.5500e-003	2.0300e-003	56.6050

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	6.1397	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0449	0.0222	0.2745	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		54.6289	54.6289	2.2700e-003	1.8500e-003	55.2383
Total	0.0449	0.0222	0.2745	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		54.6289	54.6289	2.2700e-003	1.8500e-003	55.2383

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	6.1397	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0449	0.0222	0.2745	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		54.6289	54.6289	2.2700e-003	1.8500e-003	55.2383
Total	0.0449	0.0222	0.2745	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		54.6289	54.6289	2.2700e-003	1.8500e-003	55.2383

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2232	1.3839	8.8553	0.0140	1.2901	0.0159	1.3060	0.3445	0.0149	0.3594		1,440.7936	1,440.7936	0.1069	0.0770	1,466.4132
Unmitigated	1.2328	1.4087	9.0132	0.0142	1.3164	0.0162	1.3326	0.3515	0.0152	0.3667		1,469.5356	1,469.5356	0.1084	0.0783	1,495.5759

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	217.60	196.40	163.60	592,077	580,235
Parking Lot	0.00	0.00	0.00		
Total	217.60	196.40	163.60	592,077	580,235

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.464659	0.064863	0.191817	0.155973	0.051760	0.009603	0.008536	0.006240	0.000416	0.000000	0.037661	0.001217	0.007255
Parking Lot	0.464659	0.064863	0.191817	0.155973	0.051760	0.009603	0.008536	0.006240	0.000416	0.000000	0.037661	0.001217	0.007255

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
NaturalGas Unmitigated	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	414.4	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0.4144	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427

6.0 Area Detail

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3531	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.9533	5.9533	5.7300e-003	0.0000	6.0965
Unmitigated	62.5689	1.2335	78.8681	0.1371		10.6131	10.6131		10.6131	10.6131	1,110.8692	471.8356	1,582.7048	1.0309	0.0874	1,634.5155

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3592					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8942					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	61.2158	1.1955	75.5643	0.1369		10.5948	10.5948		10.5948	10.5948	1,110.8692	465.8824	1,576.7516	1.0252	0.0874	1,628.4190
Landscaping	0.0997	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183		5.9533	5.9533	5.7300e-003		6.0965
Total	62.5689	1.2335	78.8681	0.1371		10.6131	10.6131		10.6131	10.6131	1,110.8692	471.8356	1,582.7048	1.0309	0.0874	1,634.5155

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3592					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8942					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0997	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183		5.9533	5.9533	5.7300e-003		6.0965
Total	1.3531	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.9533	5.9533	5.7300e-003	0.0000	6.0965

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Bevins Street Senior Apartments - Lake County AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Bevins Street Senior Apartments
Lake County AQMD Air District, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	51.00	Space	0.20	20,400.00	0
Apartment Mid Rise	40.00	Dwelling Unit	1.80	41,449.00	114

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	67
Climate Zone	1			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Building square footage and lot acreage based on site plan; parking lot acreage based on AQ questionnaire.
 Construction Phase - Phase timing based on AQ Questionnaire provided by the project applicant.
 Grading -
 Area Mitigation -
 Water Mitigation - Compliant with MWEL0
 Mobile Land Use Mitigation - Based on applicant provided AQ Questionnaire

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	200.00	220.00

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	20.00
tblLandUse	LandUseSquareFeet	40,000.00	41,449.00
tblLandUse	LotAcreage	0.46	0.20
tblLandUse	LotAcreage	1.05	1.80

2.0 Emissions Summary

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	8.0642	14.5035	16.3578	0.0301	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,811.222 1	2,811.222 1	0.6490	0.0398	2,832.402 2
2024	7.9223	12.9014	16.0788	0.0300	0.4155	0.5167	0.9323	0.1114	0.5006	0.6121	0.0000	2,801.255 0	2,801.255 0	0.3642	0.0383	2,821.769 4
Maximum	8.0642	14.5035	16.3578	0.0301	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,811.222 1	2,811.222 1	0.6490	0.0398	2,832.402 2

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	8.0642	14.5035	16.3578	0.0301	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,811.222 1	2,811.222 1	0.6490	0.0398	2,832.402 2
2024	7.9223	12.9014	16.0788	0.0300	0.4155	0.5167	0.9323	0.1114	0.5006	0.6121	0.0000	2,801.255 0	2,801.255 0	0.3642	0.0383	2,821.769 4
Maximum	8.0642	14.5035	16.3578	0.0301	7.1647	0.6049	7.7697	3.4465	0.5729	4.0031	0.0000	2,811.222 1	2,811.222 1	0.6490	0.0398	2,832.402 2

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	62.5689	1.2335	78.8681	0.1371		10.6131	10.6131		10.6131	10.6131	1,110.869 2	471.8356	1,582.704 8	1.0309	0.0874	1,634.515 5
Energy	4.4700e- 003	0.0382	0.0163	2.4000e- 004		3.0900e- 003	3.0900e- 003		3.0900e- 003	3.0900e- 003		48.7529	48.7529	9.3000e- 004	8.9000e- 004	49.0427
Mobile	1.3927	1.4136	8.6742	0.0140	1.3164	0.0162	1.3326	0.3515	0.0152	0.3667		1,442.354 5	1,442.354 5	0.1085	0.0784	1,468.413 7
Total	63.9660	2.6854	87.5586	0.1513	1.3164	10.6324	11.9488	0.3515	10.6314	10.9830	1,110.869 2	1,962.943 1	3,073.812 3	1.1403	0.1666	3,151.971 9

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3531	0.0381	3.3039	1.7000e- 004		0.0183	0.0183		0.0183	0.0183	0.0000	5.9533	5.9533	5.7300e- 003	0.0000	6.0965
Energy	4.4700e- 003	0.0382	0.0163	2.4000e- 004		3.0900e- 003	3.0900e- 003		3.0900e- 003	3.0900e- 003		48.7529	48.7529	9.3000e- 004	8.9000e- 004	49.0427
Mobile	1.3831	1.3888	8.5236	0.0137	1.2901	0.0159	1.3060	0.3445	0.0149	0.3594		1,414.158 0	1,414.158 0	0.1070	0.0771	1,439.797 5
Total	2.7407	1.4650	11.8437	0.0141	1.2901	0.0373	1.3274	0.3445	0.0363	0.3808	0.0000	1,468.864 2	1,468.864 2	0.1137	0.0780	1,494.936 7

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	95.72	45.44	86.47	90.67	2.00	99.65	88.89	2.00	99.66	96.53	100.00	25.17	52.21	90.03	53.22	52.57

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2023	3/28/2023	5	20	
2	Grading	Grading	3/29/2023	4/25/2023	5	20	
3	Paving	Paving	4/26/2023	5/23/2023	5	20	
4	Building Construction	Building Construction	5/24/2023	3/26/2024	5	220	
5	Architectural Coating	Architectural Coating	6/7/2023	4/9/2024	5	220	

Acres of Grading (Site Preparation Phase): 18.75

Acres of Grading (Grading Phase): 20

Acres of Paving: 0.2

Residential Indoor: 83,934; Residential Outdoor: 27,978; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,224 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	37.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2635	0.0000	6.2635	3.0038	0.0000	3.0038			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	6.2635	0.5074	6.7709	3.0038	0.4668	3.4706		1,666.057 3	1,666.057 3	0.5388		1,679.528 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0679	0.0287	0.3287	6.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		62.3081	62.3081	2.8900e-003	2.3100e-003	63.0703
Total	0.0679	0.0287	0.3287	6.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		62.3081	62.3081	2.8900e-003	2.3100e-003	63.0703

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2635	0.0000	6.2635	3.0038	0.0000	3.0038			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	6.2635	0.5074	6.7709	3.0038	0.4668	3.4706	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0679	0.0287	0.3287	6.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		62.3081	62.3081	2.8900e-003	2.3100e-003	63.0703
Total	0.0679	0.0287	0.3287	6.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		62.3081	62.3081	2.8900e-003	2.3100e-003	63.0703

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.6147	1,995.6147	0.6454		2,011.7503

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0848	0.0359	0.4108	7.6000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		77.8851	77.8851	3.6200e-003	2.8900e-003	78.8378
Total	0.0848	0.0359	0.4108	7.6000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		77.8851	77.8851	3.6200e-003	2.8900e-003	78.8378

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0848	0.0359	0.4108	7.6000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		77.8851	77.8851	3.6200e-003	2.8900e-003	78.8378
Total	0.0848	0.0359	0.4108	7.6000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		77.8851	77.8851	3.6200e-003	2.8900e-003	78.8378

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6708	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1103	0.0466	0.5341	9.9000e-004	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		101.2506	101.2506	4.7000e-003	3.7600e-003	102.4892
Total	0.1103	0.0466	0.5341	9.9000e-004	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		101.2506	101.2506	4.7000e-003	3.7600e-003	102.4892

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6708	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1103	0.0466	0.5341	9.9000e-004	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		101.2506	101.2506	4.7000e-003	3.7600e-003	102.4892
Total	0.1103	0.0466	0.5341	9.9000e-004	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		101.2506	101.2506	4.7000e-003	3.7600e-003	102.4892

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0172	0.4923	0.1281	1.7600e-003	0.0541	2.9700e-003	0.0571	0.0156	2.8400e-003	0.0184		185.2921	185.2921	7.6000e-004	0.0270	193.3610
Worker	0.3138	0.1327	1.5200	2.8200e-003	0.3040	2.1800e-003	0.3061	0.0806	2.0100e-003	0.0826		288.1747	288.1747	0.0134	0.0107	291.7000
Total	0.3310	0.6250	1.6480	4.5800e-003	0.3580	5.1500e-003	0.3632	0.0962	4.8500e-003	0.1010		473.4668	473.4668	0.0142	0.0377	485.0609

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0172	0.4923	0.1281	1.7600e-003	0.0541	2.9700e-003	0.0571	0.0156	2.8400e-003	0.0184		185.2921	185.2921	7.6000e-004	0.0270	193.3610
Worker	0.3138	0.1327	1.5200	2.8200e-003	0.3040	2.1800e-003	0.3061	0.0806	2.0100e-003	0.0826		288.1747	288.1747	0.0134	0.0107	291.7000
Total	0.3310	0.6250	1.6480	4.5800e-003	0.3580	5.1500e-003	0.3632	0.0962	4.8500e-003	0.1010		473.4668	473.4668	0.0142	0.0377	485.0609

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0157	0.4799	0.1209	1.7400e-003	0.0541	2.8500e-003	0.0570	0.0156	2.7300e-003	0.0183		183.1712	183.1712	6.9000e-004	0.0267	191.1369
Worker	0.2917	0.1168	1.3712	2.7300e-003	0.3040	2.0000e-003	0.3060	0.0806	1.8500e-003	0.0825		281.4644	281.4644	0.0120	9.7700e-003	284.6746
Total	0.3074	0.5967	1.4921	4.4700e-003	0.3580	4.8500e-003	0.3629	0.0962	4.5800e-003	0.1008		464.6355	464.6355	0.0127	0.0364	475.8116

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0157	0.4799	0.1209	1.7400e-003	0.0541	2.8500e-003	0.0570	0.0156	2.7300e-003	0.0183		183.1712	183.1712	6.9000e-004	0.0267	191.1369
Worker	0.2917	0.1168	1.3712	2.7300e-003	0.3040	2.0000e-003	0.3060	0.0806	1.8500e-003	0.0825		281.4644	281.4644	0.0120	9.7700e-003	284.6746
Total	0.3074	0.5967	1.4921	4.4700e-003	0.3580	4.8500e-003	0.3629	0.0962	4.5800e-003	0.1008		464.6355	464.6355	0.0127	0.0364	475.8116

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	6.1506	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0594	0.0251	0.2876	5.3000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		54.5196	54.5196	2.5300e-003	2.0300e-003	55.1865
Total	0.0594	0.0251	0.2876	5.3000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		54.5196	54.5196	2.5300e-003	2.0300e-003	55.1865

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	6.1506	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0594	0.0251	0.2876	5.3000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		54.5196	54.5196	2.5300e-003	2.0300e-003	55.1865
Total	0.0594	0.0251	0.2876	5.3000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		54.5196	54.5196	2.5300e-003	2.0300e-003	55.1865

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	6.1397	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0552	0.0221	0.2594	5.2000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		53.2500	53.2500	2.2700e-003	1.8500e-003	53.8574
Total	0.0552	0.0221	0.2594	5.2000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		53.2500	53.2500	2.2700e-003	1.8500e-003	53.8574

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.9589					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	6.1397	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0552	0.0221	0.2594	5.2000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		53.2500	53.2500	2.2700e-003	1.8500e-003	53.8574
Total	0.0552	0.0221	0.2594	5.2000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		53.2500	53.2500	2.2700e-003	1.8500e-003	53.8574

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3831	1.3888	8.5236	0.0137	1.2901	0.0159	1.3060	0.3445	0.0149	0.3594		1,414.1580	1,414.1580	0.1070	0.0771	1,439.7975
Unmitigated	1.3927	1.4136	8.6742	0.0140	1.3164	0.0162	1.3326	0.3515	0.0152	0.3667		1,442.3545	1,442.3545	0.1085	0.0784	1,468.4137

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	217.60	196.40	163.60	592,077	580,235
Parking Lot	0.00	0.00	0.00		
Total	217.60	196.40	163.60	592,077	580,235

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.464659	0.064863	0.191817	0.155973	0.051760	0.009603	0.008536	0.006240	0.000416	0.000000	0.037661	0.001217	0.007255
Parking Lot	0.464659	0.064863	0.191817	0.155973	0.051760	0.009603	0.008536	0.006240	0.000416	0.000000	0.037661	0.001217	0.007255

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
NaturalGas Unmitigated	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	414.4	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0.4144	4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4700e-003	0.0382	0.0163	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003		48.7529	48.7529	9.3000e-004	8.9000e-004	49.0427

6.0 Area Detail

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3531	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.9533	5.9533	5.7300e-003	0.0000	6.0965
Unmitigated	62.5689	1.2335	78.8681	0.1371		10.6131	10.6131		10.6131	10.6131	1,110.8692	471.8356	1,582.7048	1.0309	0.0874	1,634.5155

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3592					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8942					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	61.2158	1.1955	75.5643	0.1369		10.5948	10.5948		10.5948	10.5948	1,110.8692	465.8824	1,576.7516	1.0252	0.0874	1,628.4190
Landscaping	0.0997	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183		5.9533	5.9533	5.7300e-003		6.0965
Total	62.5689	1.2335	78.8681	0.1371		10.6131	10.6131		10.6131	10.6131	1,110.8692	471.8356	1,582.7048	1.0309	0.0874	1,634.5155

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3592					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8942					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0997	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183		5.9533	5.9533	5.7300e-003		6.0965
Total	1.3531	0.0381	3.3039	1.7000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.9533	5.9533	5.7300e-003	0.0000	6.0965

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Bevins Street Senior Apartments - Lake County AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Lake County AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Bevins Street Senior Apartments**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	1	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	5	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.06900E-002	1.40300E-001	1.99190E-001	3.30000E-004	7.43000E-003	7.43000E-003	0.00000E+000	2.80858E+001	2.80858E+001	1.65000E-003	0.00000E+000	2.81270E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Cranes	2.85300E-002	3.07540E-001	1.49950E-001	4.80000E-004	1.28300E-002	1.18000E-002	0.00000E+000	4.18233E+001	4.18233E+001	1.35300E-002	0.00000E+000	4.21615E+001
Forklifts	8.27000E-003	7.74000E-002	9.43200E-002	1.30000E-004	4.70000E-003	4.32000E-003	0.00000E+000	1.10790E+001	1.10790E+001	3.58000E-003	0.00000E+000	1.11686E+001
Generator Sets	3.30000E-002	2.93410E-001	4.03460E-001	7.20000E-004	1.35700E-002	1.35700E-002	0.00000E+000	6.21728E+001	6.21728E+001	2.67000E-003	0.00000E+000	6.22397E+001
Graders	7.67000E-003	9.30600E-002	3.38500E-002	1.30000E-004	3.02000E-003	2.77000E-003	0.00000E+000	1.16275E+001	1.16275E+001	3.76000E-003	0.00000E+000	1.17215E+001
Pavers	1.44000E-003	1.41200E-002	2.16200E-002	4.00000E-005	6.60000E-004	6.10000E-004	0.00000E+000	3.09725E+000	3.09725E+000	1.00000E-003	0.00000E+000	3.12229E+000
Paving Equipment	1.71000E-003	1.60300E-002	2.55700E-002	4.00000E-005	7.80000E-004	7.20000E-004	0.00000E+000	3.57854E+000	3.57854E+000	1.16000E-003	0.00000E+000	3.60748E+000
Rollers	1.35000E-003	1.40900E-002	1.62100E-002	2.00000E-005	7.80000E-004	7.10000E-004	0.00000E+000	2.01707E+000	2.01707E+000	6.50000E-004	0.00000E+000	2.03338E+000
Rubber Tired Dozers	1.28400E-002	1.33630E-001	5.82400E-002	1.60000E-004	6.02000E-003	5.54000E-003	0.00000E+000	1.40671E+001	1.40671E+001	4.55000E-003	0.00000E+000	1.41808E+001
Tractors/Loaders/Backhoes	1.79900E-002	1.82250E-001	2.67860E-001	3.70000E-004	8.88000E-003	8.17000E-003	0.00000E+000	3.28343E+001	3.28343E+001	1.06200E-002	0.00000E+000	3.30998E+001
Welders	8.22400E-002	4.65080E-001	5.52390E-001	8.40000E-004	1.74800E-002	1.74800E-002	0.00000E+000	6.21128E+001	6.21128E+001	6.65000E-003	0.00000E+000	6.22791E+001

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	2.06900E-002	1.40300E-001	1.99190E-001	3.30000E-004	7.43000E-003	7.43000E-003	0.00000E+000	2.80858E+001	2.80858E+001	1.65000E-003	0.00000E+000	2.81270E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Cranes	2.85300E-002	3.07540E-001	1.49950E-001	4.80000E-004	1.28300E-002	1.18000E-002	0.00000E+000	4.18233E+001	4.18233E+001	1.35300E-002	0.00000E+000	4.21614E+001
Forklifts	8.27000E-003	7.74000E-002	9.43200E-002	1.30000E-004	4.70000E-003	4.32000E-003	0.00000E+000	1.10790E+001	1.10790E+001	3.58000E-003	0.00000E+000	1.11686E+001
Generator Sets	3.30000E-002	2.93410E-001	4.03460E-001	7.20000E-004	1.35700E-002	1.35700E-002	0.00000E+000	6.21728E+001	6.21728E+001	2.67000E-003	0.00000E+000	6.22396E+001
Graders	7.67000E-003	9.30600E-002	3.38500E-002	1.30000E-004	3.02000E-003	2.77000E-003	0.00000E+000	1.16275E+001	1.16275E+001	3.76000E-003	0.00000E+000	1.17215E+001
Pavers	1.44000E-003	1.41200E-002	2.16200E-002	4.00000E-005	6.60000E-004	6.10000E-004	0.00000E+000	3.09724E+000	3.09724E+000	1.00000E-003	0.00000E+000	3.12229E+000
Paving Equipment	1.71000E-003	1.60300E-002	2.55700E-002	4.00000E-005	7.80000E-004	7.20000E-004	0.00000E+000	3.57854E+000	3.57854E+000	1.16000E-003	0.00000E+000	3.60747E+000
Rollers	1.35000E-003	1.40900E-002	1.62100E-002	2.00000E-005	7.80000E-004	7.10000E-004	0.00000E+000	2.01707E+000	2.01707E+000	6.50000E-004	0.00000E+000	2.03338E+000
Rubber Tired Dozers	1.28400E-002	1.33630E-001	5.82400E-002	1.60000E-004	6.02000E-003	5.54000E-003	0.00000E+000	1.40670E+001	1.40670E+001	4.55000E-003	0.00000E+000	1.41808E+001
Tractors/Loaders/Backhoes	1.79900E-002	1.82250E-001	2.67860E-001	3.70000E-004	8.88000E-003	8.17000E-003	0.00000E+000	3.28342E+001	3.28342E+001	1.06200E-002	0.00000E+000	3.30997E+001
Welders	8.22400E-002	4.65080E-001	5.52390E-001	8.40000E-004	1.74800E-002	1.74800E-002	0.00000E+000	6.21127E+001	6.21127E+001	6.65000E-003	0.00000E+000	6.22791E+001

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06816E-006	1.06816E-006	0.00000E+000	0.00000E+000	1.06659E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19551E-006	1.19551E-006	0.00000E+000	0.00000E+000	1.18592E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.02606E-007	9.02606E-007	0.00000E+000	0.00000E+000	8.95367E-007
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12589E-006	1.12589E-006	0.00000E+000	0.00000E+000	1.12468E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.60032E-007	8.60032E-007	0.00000E+000	0.00000E+000	8.53134E-007
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.22867E-006	3.22867E-006	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.77202E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.42176E-006	1.42176E-006	0.00000E+000	0.00000E+000	7.05180E-007
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21824E-006	1.21824E-006	0.00000E+000	0.00000E+000	1.20847E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.28798E-006	1.28798E-006	0.00000E+000	0.00000E+000	1.28454E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.04	0.01	0.04	0.01	0.00	0.00
Grading	Fugitive Dust	0.07	0.03	0.07	0.03	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.06	0.03	0.06	0.03	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.91	1.75	1.68	2.12	2.14	1.90	0.00	1.95	1.95	1.32	1.69	1.95
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.79	3.99	0.02	0.00	1.99
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.08	0.28		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.02			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00			2.00

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Commuter	Provide Ride Sharing Program			
	Commuter	Commuter Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.02		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	0.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Bevins Street Senior Apartments

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

APPENDIX C

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Vacant Land
447 Bevins Street
Lakeport, California 95453

Prepared For:

Pacific West Communities, Inc.
430 East State Street, Suite 100
Eagle, Idaho 83616

KCE-2021-223E-R1
August 6, 2021

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I. SUMMARY AND CONCLUSIONS

KCE Matrix, Inc. (KCE Matrix) has been retained by Pacific West Communities, Inc. (referred to as “the client” and/or “the user” in this report) to conduct a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing and Materials (ASTM) standard practice E1527-13 for the vacant land property located at 447 Bevins Street, Lakeport, California (referred to as “the subject property” in this report).

The following summarizes the findings of this Phase I ESA:

- The subject property is located within a residential and commercial area approximately 200 feet to the south of Martin Street and in between South Smith Street and Bevins Street, in Lakeport, California. The property consists of approximately 135,000 square feet (3.1 acres) of land area in an irregular-shaped configuration, is comprised of sloping terrain, and has an approximate elevation of 1361 feet above mean sea level. The site can be accessed along the entire western property line from South Smith Street, along the entire eastern property line from Bevins Street and from other adjacent properties along the northern property line. The property is currently vacant land with no structures and has a dirt surface.
- Based on the historic information obtained during this investigation (including research of Sanborn Maps, Aerial Photographs, regulatory records and city directories), a relatively small structure was located on the southeastern portion of the property between 1952 and 1983, the use of which was not identified but appeared to be of residential use, and the remaining areas were comprised of vacant land. As of 1993 and through the present, the property was comprised of vacant land with no structures. On July 20, 2021, a representative of KCE Matrix conducted site inspection of the subject property and confirmed that the property is currently vacant land with no structures and a dirt surface.
- As reported in the search of government and regulatory environmental databases and as presented in Section V-A2 and Section VI-D of this report, the subject property is located in a residential and commercial area where information related to environmental assessment, remediation and/or management practices is documented for other properties in the general site vicinity. These four other sites were identified as a Superfund site located substantially to the east of the property, and three other sites consisting of auto repair facilities and an office that are located sufficiently distant and/or have not been reported as having conditions that can present a detrimental impact to the subject site. Based on the information obtained during this investigation and the site vicinity reconnaissance performed, KCE Matrix did not discover or observe subsurface environmental site assessment activity that would indicate potential migration of contamination from other nearby sites towards the subject property.
- Based on the Vapor Encroachment Screen (VES) conducted during this investigation, a Vapor Encroachment Condition (VEC) originating from the subject property was not

identified. Furthermore, based on the research conducted during this investigation, a VEC originating from other nearby sites in the vicinity for the subject property is not likely.

- KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on information maintained for a property located approximately 0.48-mile east-northeast of the subject property, the depth to groundwater was reported to range between 8.3 feet and 10.8 feet below the surface as monitored in October of 2008. Based on monitoring data collected from wells located at a second site that is approximately 0.54-mile southeast of the subject site, the depth to groundwater was reported to range between 12 feet and 16 feet below the surface as monitored in November of 2014.

The ASTM standard practice E1527-13 defines the following terms:

Recognized Environmental Condition (REC) as “the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment”.

Historical Recognized Environmental Condition (HREC) as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria as established by the regulatory authority, without subjecting the property to any required controls”.

Controlled Recognized Environmental Condition (CREC) as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls”.

KCE Matrix has performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527-13 of 447 Bevens Street, Lakeport, California, the subject property. Any exceptions to, or deletions from, this practice are described in this report. This assessment has revealed no evidence of a REC, an HREC or a CREC in connection with the subject property.

II. INTRODUCTION

A. Purpose

This report presents the results of a Phase I ESA conducted by KCE Matrix for the subject property. The purpose of this investigation is to research and report existing environmental conditions for the subject property based on the American Society of Testing and Materials (ASTM) standard practice E1527-13. Performing a Phase I ESA according to the ASTM Standard E1527-13 is intended to permit a user to satisfy one of the requirements in qualifying for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations on Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability (the “*landowner liability protections*,” or “*LLPs*”). This practice constitutes “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice”.

B. Detailed Scope-of-Services

The scope of services performed during this Phase I ESA project includes:

1. Collecting available information concerning the property as it pertains to:
 - a. Past land use
 - b. Past owners
 - c. Location of buried storage tanks, hazardous waste storage, wastewater treatment facilities and/or on-site landfills, etc.
 - d. Types of chemicals used on site, past and present
 - e. Geologic and hydrogeologic features
 - f. Past geotechnical investigations (if available)
 - g. Other data pertinent to the specific site
2. Conducting a site visit to:
 - a. Identify vegetative features
 - b. Locate surface waters
 - c. Assess physical features
 - d. Observe adjacent land use
 - e. Gather evidence of indiscriminate and/or illegal waste disposal
3. Conducting a review of records maintained by regulatory agencies as follows:
 - a. Reviewing regulatory files regarding the property in question
 - b. Contacting appropriate regulatory personnel
4. Conducting a Vapor Encroachment Screen.
5. Preparing the Phase I Environmental Site Assessment Report, summarizing our findings and inclusive of supporting documentation.

C. Significant Assumptions

No significant assumptions were made during the course of this investigation.

D. Limitations and Exceptions

This type of ESA does not include air, soil or water sampling; or sampling of building materials. Site-specific conditions such as soil deposits and rock formations may vary in thickness, lithology, saturation strength, and other properties across any site beyond what available documentation indicates. Therefore, it is possible that undocumented or concealed improvements or alterations to the property could exist beyond the inquiry of the activities conducted during this site assessment. In addition, environmental changes, either naturally occurring or artificially induced, may cause changes or alterations (which can be significant) to the property as compared to the conditions found at the time that this assessment was conducted.

Based on the best available investigative technologies, no amount of assessment can guarantee that the subject property does not contain contaminants or hazardous substances. The activities conducted during this limited investigation cannot identify all potential concerns for the subject property, and do not eliminate the possibility that the subject property is completely free of environmental concerns.

KCE Matrix has analyzed and evaluated the information collected during this investigation using what we believe to be the currently applicable assessment and engineering techniques and principles. KCE Matrix assumes no liability from other parties involved in losses sustained as a result of decisions made based on interpretations of this report. KCE Matrix makes no warranty, either expressed or implied, regarding the work conducted, except that our services were performed in accordance with the generally accepted professional principles and practices existing for such work.

There are no significant data gaps to report during this investigation.

E. Special Terms and Conditions

This report and all information obtained during this site assessment are considered confidential and will not be released without written permission by the owner of the subject property, the owner authorized entity conducting this assessment, or as required by law. The owner of the subject property is typically responsible for mitigation of contamination, corrective or remedial action, and disclosure of any information related to environmental issues that may or may not be discovered during this site assessment.

F. User Reliance

This report was prepared for the exclusive use of the client and/or user. No other person or entity is entitled to rely upon this report without the specific written authorization of KCE Matrix. Any such reliance by any third party is at the sole risk of said third party, and such reliance is subject to the same limitations, terms and conditions as the original contract with the client. KCE Matrix specifically disclaims any responsibility for any unauthorized use of this report.

III. SITE DESCRIPTION

A. Location and Description

The subject property is located approximately 200 feet to the south of Martin Street and in between South Smith Street and Bevins Street, in Lakeport, California. A Location Map, Site Plan, and Site Vicinity Map are presented in Appendix A, as Figures 1, 2 and 3, respectively.

B. Site and Vicinity General Characteristics

The subject property is located within a residential and commercial area. The property consists of approximately 135,000 square feet (3.1 acres) of land area in an irregular-shaped configuration, is comprised of sloping terrain, and has an approximate elevation of 1361 feet above mean sea level.

The site can be accessed along the entire western property line from South Smith Street, along the entire eastern property line from Bevins Street and from other adjacent properties along the northern property line. The property is currently vacant land with no structures and has a dirt surface.

C. Current Use of the Property

The subject property consists of vacant land with no structures and a dirt surface.

D. Description of Structures and Other Improvements

The subject property is located within a residential and commercial area. The property consists of approximately 135,000 square feet (3.1 acres) of land area in an irregular-shaped configuration, is comprised of sloping terrain, and has an approximate elevation of 1361 feet above mean sea level.

The site can be accessed along the entire western property line from South Smith Street, along the entire eastern property line from Bevins Street and from other adjacent properties along the northern property line. The property is currently vacant land with no structures and has a dirt surface.

E. Current Uses of the Adjoining Properties

The adjoining properties are comprised of the following:

- North: A Church property, a residential property, Martin Street and residential properties along with residential streets, the Lake County Probation Department office and the Lake County Sheriff's Department office.
- East: Bevins Street, vacant land and residential properties.
- South: Multi-family residential properties, an auto repair facility and vacant land.

- West: South Smith Street, residential properties, some of which were under construction during site inspection and vacant land.

IV. USER PROVIDED INFORMATION

A user questionnaire was completed by the client and was provided to KCE Matrix during this investigation. A copy of the completed user questionnaire is presented in Appendix E of this report.

A. Title Records

The client provided KCE Matrix with a copy of a Preliminary Title Report for the subject property as prepared by First American Title Company, dated May 1, 2020. Based on review of the title report for the subject property, no environmental liens and/or Activity and Use Limitations (AUL's), which indicate a past or present release of a hazardous substance or petroleum products, were presented or recorded. A copy of the title report as prepared by First American Title Company dated May 1, 2020 is presented in Appendix E.

B. Environmental Liens or Activity and Use Limitations

The user reported that he is not aware of any environmental cleanup liens that are filed or recorded against the property under federal, tribal, state or local law. The user also reported that he is not aware of any Activity and Use Limitations (AUL's) that are filed or recorded against the property.

C. Specialized Knowledge

The user did not report any specialized knowledge related to the property or to nearby properties.

D. Commonly Known or Reasonably Ascertainable Information

The user did not report any commonly known or reasonably ascertainable information related to the property.

E. Valuation Reduction for Environmental Issues

The user reported that the purchase price of this property reasonably reflects the fair market value of the property. The user did not report any other information with regard to the value of the subject property based on environmental issues.

F. Owner, Property Manager, and Occupant Information

The user identified Mr. Don Slattery as a site contact for the subject property and "Pacific West Communities, Inc." as a party who will reply on the Phase I report. The user did not provide any other information regarding the ownership, management or occupancy of the subject property.

G. Reason for Performing Phase I

This Phase I ESA is being performed for the client as part of a due diligence investigation of the subject site for property purchase.

H. Vapor Encroachment

The user reported that the site consists of vacant land. The user reported that the future structure will consist of apartments with a slab-on-grade floor system. The user also reported that the structure on site will use a hot air circulation as the heating system type and natural gas and electricity as the fuel energy type. The user also reported that neither a gas station nor a dry cleaner operates or will operate on site.

I. Other

The user did not report any other knowledge or experience for the subject property with regard to environmental condition.

V. RECORDS REVIEW

A. Standard Environmental Record Sources

KCE Matrix retained Environmental Data Resources, Inc. (EDR) to conduct a search of government and regulatory databases in an attempt to locate and obtain information about the subject site and other sites in the vicinity of the subject property that may affect the environmental quality of the property. The environmental disclosure report prepared by EDR provides a summary of the various databases searched and is presented in Appendix B of this report. The database research presents summaries for the subject site and selected adjoining properties as follows:

A1. Subject Site

The target property was not listed in any of the databases searched by EDR.

A2. Site Vicinity

With regard to the summary report prepared by EDR, KCE Matrix has prepared the following table listing other sites located in the general vicinity of the subject property up to a reported radius of approximately 500 feet. This summary table includes the site names, the reported distances from the subject property, as well as a brief summary of the information reported by the databases searched.

Facility Name	Address	Dist. (ft)	Database	Regulatory History and/or Reported Impact and Current Status
Lake County Sheriff's Office	1220 Martin St	160 N	RCRA NonGen / NLR	Classified the facility as not being a generator of Federal RCRA waste. No violations were reported.
Lakeport Transmission	575 Bevins St	396 SSE	RCRA NonGen / NLR	Classified the facility as not being a generator of Federal RCRA waste. No violations were reported.
Lakeport Transmission	575 Bevins St	396 SSE	CUPA Listings	Reported the facility as a "CUPA Hazardous Waste Generator Program". Reported the most recent inspection date as 04/05/2020.
Lakeport Transmission	575 Bevins St	396 SSE	HWTS	Listed the facility on the Hazardous Waste Tracking System database. Reported the EPA ID number.
Lakeport Transmission	575 Bevins St	396 SSE	EDR Hist Auto	Reported the facility as "Automotive Transmission Repair Shops" between 1989 and 2014.
Lakeport Transmission	575 Bevins Street	396 SSE	CERS	Reported the CERS description as "Chemical Storage Facilities".
Lakeport Transmission	575 Bevins Street	396 SSE	CERS HAZ WASTE	Reported the CERS description as "Hazardous Waste Generator".
D & S Muffler & Automotive Repair	637 Bevins St	486 SSE	CUPA Listings	Reported the facility as a "CUPA Hazardous Waste Generator Program". Reported the most recent inspection date as 09/10/2016.
D & S Muffler & Automotive Repair	637 Bevins St	486 SSE	HWTS	Listed the facility on the Hazardous Waste Tracking System database. Reported the EPA ID number. Reported the inactive date as 06/30/2014.
Sulphur Bank Mercury Mine	Sulphur Bank Road	3513 ENE	SEMS, NPL, PRP	The databases identified the site known as Sulphur Bank Mercury Mine as a Superfund site and reported that the subject property is located within the general proximity of this Superfund site. The information as reported by EDR is presented in Appendix B, on pages nine through 17 of the referenced EDR report.

B. Additional Environmental Record Sources

Regional Water Quality Control Board

On July 7, 2021, KCE Matrix submitted a written request to the Regional Water Quality Control Board (RWQCB), Central Valley Region – File Review Department; for information regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. Based on a letter response issued by the RWQCB dated July 26, 2021, this agency does not maintain any records for the subject property. A copy of the written request made by KCE Matrix dated July 7, 2021 along with a copy of the RWQCB letter response dated July 26, 2021 are presented in Appendix C-1.

KCE Matrix also researched the records maintained by the State Water Resources Control Board (SWRCB) – Geotracker Database online for information regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. This database typically contains records that are also maintained by the various local RWQCB's. The results of this online research indicated that the SWRCB-RWQCB does not maintain such records for the subject property.

Department of Toxic Substances Control

On July 7, 2021, KCE Matrix submitted a written request to the California State Department of Toxic Substances Control (DTSC) – Berkeley Regional Office, for information regarding hazardous materials and USTs for the subject property. Based on a letter response issued by the DTSC to KCE Matrix dated July 14, 2021, this agency does not maintain any records for the subject property. A copy of the written request made by KCE Matrix dated July 7, 2021 and a copy of the DTSC letter response dated July 14, 2021 are presented in Appendix C-2.

KCE Matrix also researched the records maintained by the DTSC Envirostor Database online for information regarding environmental assessment and remediation matters for the subject property. The results of this online research indicated that the DTSC Envirostor Database does not maintain such records for the subject property.

In addition, KCE Matrix researched the records maintained by the DTSC Hazardous Waste Tracking System database online for information regarding hazardous wastes generated and/or stored at the subject property. The results of this online research indicated that the DTSC Hazardous Waste Tracking System online database does not maintain such records for the subject property.

Lake County – Department of Health Services – Environmental Health Division

On July 7, 2021, KCE Matrix submitted a written request to the Lake County – Department of Health Services – Environmental Health Division (LC-DHS/EHD) for records regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. Based on an email response issued by the LC-DHS/EHD dated July 8, 2021, this agency does not maintain any records for the subject property. A copy of the written request made by KCE Matrix dated July

7, 2021 and a copy of the LC-DHS/EHD email response dated July 8, 2021 are presented in Appendix C-3.

Lake County Fire Protection District

On July 7, 2021, KCE Matrix submitted a written request to the Lake County Fire Protection District (LCFPD) for records regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. Based on an email response issued by the LCFPD dated July 7, 2021, the subject property is located outside the Lake County's Jurisdiction. As such, this agency does not maintain any records for the subject property. Copies of the written request made by KCE Matrix and the LCFPD email response both dated July 7, 2021 are presented in Appendix C-4.

City of Lakeport Fire Protection District

On July 8, 2021, KCE Matrix submitted a written request to the City of Lakeport Fire Protection District (LFPD) for records regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. Based on an email response issued by the LFPD dated July 23, 2021, this agency does not maintain any records for the subject property. A copy of the written request made by KCE Matrix dated July 8, 2021 and a copy of the LFPD email response dated July 23, 2021 are presented in Appendix C-5.

California Geologic Energy Management Division

KCE Matrix researched the records maintained by the California Geologic Energy Management (CalGEM) Division (formerly known as the Division of Oil, Gas, and Geothermal Resources (DOGGR)) Database online for information regarding oil and natural gas wells for the subject property and the general vicinity. The results of this online research did not indicate references to any oil and/or natural gas wells as being located on the subject property.

California Environmental Protection Agency

KCE Matrix researched the records maintained by the California Environmental Protection Agency (CalEPA) Database online for information regarding environmentally regulated sites and facilities. The results of this online research indicated that the CalEPA Database does not maintain such records for the subject property.

C. Physical Setting Source(s)

C1. Topography

The site has an approximate elevation of 1361 feet above mean sea level. A Location Map that shows the physical setting of the subject property and vicinity is presented in Appendix A, as Figure 1.

C2. Geology/Hydrogeology

KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on information maintained for a property located approximately 0.48-mile east-northeast of the subject property, the depth to groundwater was reported to range between 8.3 feet and 10.8 feet below the surface as monitored in October of 2008. Based on monitoring data collected from wells located at a second site that is approximately 0.54-mile southeast of the subject site, the depth to groundwater was reported to range between 12 feet and 16 feet below the surface as monitored in November of 2014. The groundwater information obtained from the SWRCB Geotracker Database for the general site vicinity is presented in Appendix C-6.

The surface of the subject property is comprised of sloping terrain and has an approximate elevation of 1361 feet above mean sea level. With regard to the surrounding area, the general topographic gradient is reported to have a gradual slope down to the east based on information obtained from EDR. General subsurface soil and topographic gradient information for the site and vicinity is presented in the Physical Setting Source Summary Report prepared by EDR in Appendix B (pages A-1 through A-6).

The National Wetlands Inventory (NWI) was established by the United States (U.S.) Fish and Wildlife Service (Service) in 1974 to conduct a nationwide inventory of U.S. wetlands to provide its biologists and others with information on the distribution of wetlands to aid in wetland conservation efforts. Based on review of information obtained from the NWI as maintained by the Service online, the subject property does not appear to be a designated wetland area. The NWI map identifies the following wetland(s) as the closest designated wetland area(s) in the vicinity of the subject property:

Wetland	Distance
Forbes Creek	0.24 mi To the southeast of the subject site
Clear Lake	0.65 mi To the east of the subject site

The NWI wetland map for the vicinity of the subject property is presented in Appendix C-7. In addition, references to the nearest wetland areas are presented in the maps presented in the Executive Summary of the EDR report presented in Appendix B.

The Federal Emergency Management Agency (FEMA) has defined geographic areas as Flood Zones according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area. Based on review of information obtained from the FEMA's National Flood Hazard Layer (NFHL) Viewer online, the subject property is located in Zone X, an area of minimal flood hazard. The NFHL map for the general vicinity of the subject property is presented in Appendix C-8.

D. Historical Use Information - Subject Property

D1. Building Records

On July 7, 2021, KCE Matrix submitted a written request to the City of Lakeport – City Clerk’s Office; regarding any records that may be maintained by the City Departments, including the Building Department. On July 7, 2021, KCE Matrix received records from the City, which consisted of a Data Card that listed the general descriptions for the permit applications regarding the subject property, dated from 1984 through 2020. The permit descriptions included information regarding re-zoning of the property, landscaping, a permit to construct 63-units and 80-units multi-family structure(s), and a sewer permit. In addition, the email response indicated that there were only two permit applications for the subject property dated 2006, one for grading and one for the water meter lateral. The email response also indicated that there are no certificates of occupancy and code enforcement activities for the subject property. Copies of the request made by KCE Matrix, the City Clerk’s Office email response and a copy of the record as provided by the City all dated July 7, 2021 are presented in Appendix D-1.

On July 7, 2021, KCE Matrix submitted a written request to the Lakeport County Department of Community Development (LCDCD) for records related to site history, including historic and current building permits, certificates of occupancy and violations. Based on an email response issued by the LCDCD dated July 7, 2021, the subject property is located outside the Lake County’s Jurisdiction. As such, this agency does not maintain any records for the subject property. Copies of the written request made by KCE Matrix and the LCDCD email response both dated July 7, 2021 are presented in Appendix D-1.

D2. Historic Maps

KCE Matrix contacted EDR in an effort to obtain historic Sanborn® Maps of the subject site and vicinity. Based on a search of the EDR historic map collection, no such historic maps were maintained by EDR for the subject property and immediate vicinity. A copy of the Sanborn® Map Report dated July 7, 2021 indicating that there is no coverage for the subject property and vicinity is presented in Appendix D-2.

D3. Aerial Photographs

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Aerial Photographs of the subject site and vicinity. Based on the Aerial Photographs for the subject property dated from 1952 through 2016 as obtained by KCE Matrix from EDR, a relatively small structure was located on the southeastern portion of the property between 1952 and 1983, and the remaining areas were comprised of vacant land. As of 1993 and through 2016, the subject property is vacant undeveloped land with no structures. Copies of aerial photographs dated 1952, 1957, 1974, 1977, 1983, 1993, 2006, 2009, 2012 and 2016 for the subject property and site vicinity obtained by KCE Matrix from EDR are presented in Appendix D-3.

D4. Historical Topographic Maps

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Topographic Maps of the subject site and vicinity. Based on the historic and/or recent Topographic Maps dated 1938 through 2012 as obtained by KCE Matrix from EDR, it appears that the subject property was vacant land in 1938. In 1951, a structure may have been located on the southern portion of the property. As of 1958 and through 2012 the property appears to have been vacant land. Copies of the Historical Topographic Maps dated 1938, 1951, 1958, 1978, 1983, 1994 and 2012 as obtained from EDR and reviewed by KCE Matrix are presented in Appendix D-4.

D5. City Directory Abstract

The target property was not listed in any of the databases searched by EDR. A copy of the City Directory Abstract obtained from EDR and as reviewed by KCE Matrix is presented in Appendix D-5.

D6. Recorded Land Title Records

The client provided KCE Matrix with a copy of a Preliminary Title Report for the subject property as prepared by First American Title Company, dated May 1, 2020. Based on review of the title report for the subject property, no environmental liens and/or Activity and Use Limitations (AUL's), which indicate a past or present release of a hazardous substance or petroleum products, were presented or recorded. A copy of the title report as prepared by First American Title Company dated May 1, 2020 is presented in Appendix E.

E. Historical Use Information - Adjoining Properties

E1. Historic Maps

KCE Matrix contacted EDR in an effort to obtain historic Sanborn[®] Maps of the subject site and vicinity. Based on a search of the EDR historic map collection, no such historic maps were maintained by EDR for the subject property and immediate vicinity. A copy of the Sanborn[®] Map Report dated July 7, 2021 indicating that there is no coverage for the subject property and vicinity is presented in Appendix D-2.

E2. Aerial Photographs

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Aerial Photographs of the subject site and vicinity. Based on the Aerial Photographs for the subject property and vicinity dated from 1952 through 2016 as obtained by KCE Matrix from EDR, the vicinity to the northwest, west, southwest, south and southeast appears to have been comprised of essentially vacant and/or agricultural land with occasional residential structures between 1952 and 1983, while the vicinity to the north and northeast was developed and occupied by residential structures. As of 1983 and through 2016, further development of residential properties is evident in the general vicinity to the northwest, north and northeast, and of commercial properties in the vicinity to the south and

southeast. The immediate vicinity to the west of the subject property remains vacant land as of 2016. In 1974, the State Route 29 (CA-29) is first evident in the general vicinity to the west of the subject property. Copies of aerial photographs dated 1952, 1957, 1974, 1977, 1983, 1993, 2006, 2009, 2012 and 2016 for the subject property and site vicinity obtained by KCE Matrix from EDR are presented in Appendix D-3.

E3. Historical Topographic Maps

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Topographic Maps of the subject site and vicinity. Based on the historic and/or recent Topographic Maps for the subject property and the general vicinity dated from 1938 through 2012 as obtained by KCE Matrix from EDR, the general vicinity to the northeast appears to have developed as of 1938, while the vicinity to the northwest, west, south and east appears to be essentially vacant and/or agricultural land between 1938 and 1983. In 1994 and 2012, further development of residential and/or commercial properties is evident in the general vicinity, in particular in areas to the southeast of the subject property. In 1994, the State Route 29 (CA-29) is first evident in the general vicinity to the west of the subject property. Copies of the Historical Topographic Maps dated 1938, 1951, 1958, 1978, 1983, 1994 and 2012 as obtained from EDR and reviewed by KCE Matrix are presented in Appendix D-4.

E4. City Directory Abstract

Based on review of the City Directory Abstract report obtained by KCE Matrix from EDR; additional information with regard to addresses in the site vicinity is presented. Information with regard to listings that are or were located in the immediate vicinity of the subject property is presented on pages A1 through A26 of the referenced EDR City Directory Abstract report. A copy of the City Directory Abstract report obtained from EDR and reviewed by KCE Matrix is presented in Appendix D-5.

VI. SITE RECONNAISSANCE

A. Non-ASTM Scope Considerations

Site reconnaissance is limited to the areas accessible and inspected during this investigation. There were no buildings or structures observed on site during this investigation. As such, KCE Matrix did not observe any suspect Asbestos Containing Material (ACM) or Lead-Based Paint (LBP) in association with the subject property. No sampling or analysis of any building materials for asbestos content or paint for lead content was conducted during this assessment.

Exposure to asbestos is a health concern when building materials are friable. In working near, repairing or replacing materials such as these, a licensed asbestos abatement contractor, or personnel specially trained in working with or near asbestos should be employed. With regard to LBP, exposure to lead from LBP is a health concern when lead dust is created and can be inhaled or LBP chips are accessible for ingestion. In working near, assessing, repairing or replacing

materials that contain LBP, certified lead professionals specially trained in working with or near LBP should be employed.

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The United States Environmental Protection Agency (EPA) and the California EPA have prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. It is important to note that the EPA has found homes with elevated levels of radon in all three designated zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. The map divides the country into three Radon Zones as follows:

- Zone 1: Highest Potential - Counties that have a predicted average indoor radon screening level greater than 4 picocuries per liter (pCi/L), the US EPA Action Limit.
- Zone 2: Moderate Potential - Counties that have a predicted average indoor radon screening level between 2 and 4 pCi/L.
- Zone 3: Low Potential - Counties that have a predicted average indoor radon screening level less than 2 pCi/L.

Radon sampling was not conducted as part of this assessment. Review of the California EPA Map of Radon Zones places the subject property in Zone 3, where average predicted radon levels are less than 2.0 pCi/L. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

B. General Site Setting

The subject property is located within a residential and commercial area approximately 200 feet to the south of Martin Street and in between South Smith Street and Bevins Street, in Lakeport, California. The property consists of approximately 135,000 square feet (3.1 acres) of land area in an irregular-shaped configuration, is comprised of sloping terrain, and has an approximate elevation of 1361 feet above mean sea level.

The site can be accessed along the entire western property line from South Smith Street, along the entire eastern property line from Bevins Street and from other adjacent properties along the northern property line. The property is currently vacant land with no structures and has a dirt surface.

A Location Map, a Site Plan and a Site Vicinity Map are presented in Appendix A, as Figures 1, 2 and 3, respectively. During site reconnaissance, KCE Matrix also obtained photographs of the subject property and vicinity. Selected photographs are presented in Appendix F.

C. Observations

On July 20, 2021, a representative of KCE Matrix inspected the subject property and recorded the following observations:

	Description	Comments
1	Industrial Use	None observed
2	Gas Station	None observed
3	Motor Repair Facility	None observed
4	Commercial Printing Facility	None observed
5	Dry Cleaning	None observed
6	Photo Development Laboratory	None observed
7	Junkyard	None observed
8	Landfill	None observed
9	Waste Treatment	None observed
10	Storage Facility	None observed
11	Disposal Facility	None observed
12	Processing Facility	None observed
13	Recycling Facility	None observed
14	Batteries	None observed
15	Pesticides or agricultural activity	None observed
16	Paints	None observed
17	HazMat storage or use	None observed
18	Potential HazMat storage or use	None observed
19	Dumping or Improper Disposal of HazMat	None observed
20	Drums and Other Containers	None observed
21	PCB's, Transformers, Capacitors or Hydraulic equipment, other equipment	None observed
22	Chemical Products	None observed
23	Asbestos, Age of Building, Blueprints	The site is vacant land with no structures
24	Paint Condition, LBP	The site is vacant land with no structures
25	Building Demolition or Renovation	None observed
26	Fill Dirt From Other Locations	None observed
27	Stained Soil or Spills	None observed
28	Oil or Gas Wells	None observed
29	Underground Storage Tanks (USTs)	None observed
30	Above-ground Storage Tanks (AST's)	None observed
31	Hydraulic Hoists	None observed
32	Clarifier/Wastewater Interceptor	None observed
33	Subsurface or Underground Pipes	The site is vacant land with no structures
34	Above Ground Pipes	None observed
35	Flooring, Drains or Walls Emitting Foul Odors	None observed
36	Pits, Ponds, Lagoons or Cesspools	None observed
37	Distressed Vegetation	Some distressed vegetation observed, most likely due to lack of care
38	Pools of Liquid, Drains, Sumps, Stains, Septic Tanks	None observed
39	Environmental Liens	None observed
40	Government Notifications Regarding Environmental Violation	None observed
41	HazMat Inventory	None

	Description	Comments
42	Disclosure of Hazardous Substances or Petroleum Products	None observed
43	Previously Conducted Environmental Site Assessments	None observed
44	Wastewater Generation or Disposal	None observed
45	Water Supply System, Water Usage	None observed
46	Regulated Air Emissions	None observed
47	Heating/Cooling	The site is vacant land with no structures
48	Potable, Irrigation, or Monitoring Wells	None observed
49	Storm water drainage	Dirt surface
50	Odors	Not perceived
51	Solid Waste	None observed

D. Site Vicinity Reconnaissance

KCE Matrix conducted a brief inspection of the immediate vicinity of the subject property. The adjoining properties are comprised of the following:

- North: A Church property, a residential property, Martin Street and residential properties along with residential streets, the Lake County Probation Department office and the Lake County Sheriff's Department office.
- East: Bevins Street, vacant land and residential properties.
- South: Multi-family residential properties, an auto repair facility and vacant land.
- West: South Smith Street, residential properties, some of which were under construction during site inspection and vacant land.

VII. INTERVIEWS

A. Interview with Owner

KCE Matrix did not conduct an interview with the current owner of the subject property during this investigation.

B. Interview with Site Manager

KCE Matrix did not conduct an interview with the current occupant of the property during this investigation. The property is vacant land with a dirt surface and no structures.

C. Interviews with Occupants

KCE Matrix did not conduct an interview with the current occupant of the property during this investigation. The property is vacant land with a dirt surface and no structures.

D. Interviews with Local Government Officials

KCE Matrix did not interview any local government officials regarding the subject property during this investigation.

E. Interviews with Others

KCE Matrix did not conduct any other interviews regarding the subject property during this investigation.

VIII. VAPOR ENCROACHMENT SCREEN

During this investigation, KCE Matrix conducted a Vapor Encroachment Screen (VES) for the subject property based on the ASTM E2600-10 guideline. The goal of conducting a VES as established by the ASTM, is to identify a potential Vapor Encroachment Condition (VEC) for the subject property, which is defined as the presence or likely presence of Chemicals of Concern (COC) vapors in the subsurface of the subject property caused by the release of vapors from contaminated soil or groundwater either on or near the subject site. Detailed information with regard to the VES evaluation conducted, the methodology used, and the information for other sites located in the immediate vicinity of the subject property as provided to KCE Matrix by EDR is presented in a VES summary report presented in Appendix G of this report.

A. Subject Property - VES

Based on the research conducted during this investigation, a relatively small structure was located on the southeastern portion of the property between 1952 and 1983, the use of which was not identified but appeared to be of residential use, and the remaining areas were comprised of vacant land. As of 1993 and through the present, the property was comprised of vacant land with no structures. On July 20, 2021, a representative of KCE Matrix conducted site inspection of the subject property and confirmed that the property is currently vacant land with no structures and a dirt surface. Based on the site history of the subject property as described above, a VEC originating from the subject site was not identified.

B. Site Vicinity - VES

Based on the research conducted during this investigation for other sites located in the general vicinity of the subject property, four other sites were evaluated during this VES. The evaluation of these other sites located closest to the subject property includes the following:

Facility Name	Facility Address	Database
Lake County Sheriff's Office	1220 Martin Street	RCRA NONGEN / NLR
Lakeport Transmission	575 Bevins Street	RCRA NONGEN / NLR
Lakeport Transmission	575 Bevins Street	HWTS, CUPA LISTINGS
Lakeport Transmission	575 Bevins Street	EDR HIST AUTO
Lakeport Transmission	575 Bevins Street	CERS HAZ WASTE, CERS

Facility Name	Facility Address	Database
D & S Muffler & Automotive Repair	637 Bevins Street	HWTS, CUPA LISTINGS
Sulphur Bank Mercury Mine	Sulphur Bank Road	NPL, SEMS, PRP

One of the four other sites identified as “Sulphur Bank Mercury Mine” was reported as a Superfund site and is located in excess of 3,500 feet to the east of the subject site. Two other facilities with the addresses of 575 Bevins Street and 637 Bevins Street were identified as auto repair facilities that are located substantially to the south of the site and have not been reported as having conditions that can present a detrimental impact to the subject site. The one other facility with the address of 1220 Marin Street was classified as not being a generator of Federal RCRA waste, with no violations to report. Furthermore, the general site vicinity appears to have been essentially vacant land, agricultural land, and with occasional dispersed residential structures. The agricultural use appears to have been located in relatively close proximity to the subject site in 1952 and 1957, and gradually further and further distant from the site through the years.

Based on the information obtained during this investigation with regard to the past agricultural use in the general site vicinity as presented above, a VEC originating from other nearby sites for the subject property is not likely. Detailed information with regard to the VES evaluation conducted is presented in a VES summary report presented in Appendix G of this report.

IX. FINDINGS

The following presents our findings based on the work performed during this Phase I ESA:

- The subject property is located within a residential and commercial area approximately 200 feet to the south of Martin Street and in between South Smith Street and Bevins Street, in Lakeport, California. The property consists of approximately 135,000 square feet (3.1 acres) of land area in an irregular-shaped configuration, is comprised of sloping terrain, and has an approximate elevation of 1361 feet above mean sea level. The site can be accessed along the entire western property line from South Smith Street, along the entire eastern property line from Bevins Street and from other adjacent properties along the northern property line. The property is currently vacant land with no structures and has a dirt surface.
- Based on the historic information obtained during this investigation (including research of Sanborn Maps, Aerial Photographs, regulatory records and city directories), a relatively small structure was located on the southeastern portion of the property between 1952 and 1983, the use of which was not identified but appeared to be of residential use, and the remaining areas were comprised of vacant land. As of 1993 and through the present, the property was comprised of vacant land with no structures. On July 20, 2021, a representative of KCE Matrix conducted site inspection of the subject property and confirmed that the property is currently vacant land with no structures and a dirt surface.

- As reported in the search of government and regulatory environmental databases and as presented in Section V-A2 and Section VI-D of this report, the subject property is located in a residential and commercial area where information related to environmental assessment, remediation and/or management practices is documented for other properties in the general site vicinity. These four other sites were identified as a Superfund site located substantially to the east of the property, and three other sites consisting of auto repair facilities and an office that are located sufficiently distant and/or have not been reported as having conditions that can present a detrimental impact to the subject site. Based on the information obtained during this investigation and the site vicinity reconnaissance performed, KCE Matrix did not discover or observe subsurface environmental site assessment activity that would indicate potential migration of contamination from other nearby sites towards the subject property.
- Based on the VES conducted during this investigation, a VEC originating from the subject property was not identified. Furthermore, based on the research conducted during this investigation, a VEC originating from other nearby sites in the vicinity for the subject property is not likely.
- KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on information maintained for a property located approximately 0.48-mile east-northeast of the subject property, the depth to groundwater was reported to range between 8.3 feet and 10.8 feet below the surface as monitored in October of 2008. Based on monitoring data collected from wells located at a second site that is approximately 0.54-mile southeast of the subject site, the depth to groundwater was reported to range between 12 feet and 16 feet below the surface as monitored in November of 2014.

X. SIGNATURE

KCE Matrix appreciates the opportunity to have provided services for this project. Should you have any questions regarding this report and the assessment work performed, please do not hesitate to contact our office at 818-559-5500.

Sincerely,

KCE Matrix, Inc.



Aram B. Kaloustian, P.E.
Project Manager



License No. C52428
Expiration Date: 12/31/22

XI. QUALIFICATIONS

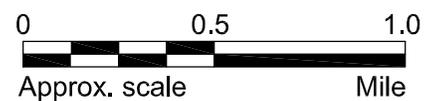
KCE Matrix declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 Code of Federal Regulations (CFR) 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Detailed information with regard to the qualifications of the personnel who have worked on this project is presented in Appendix H of this report.

APPENDIX A

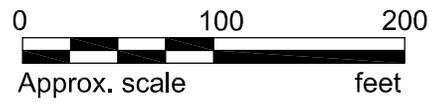
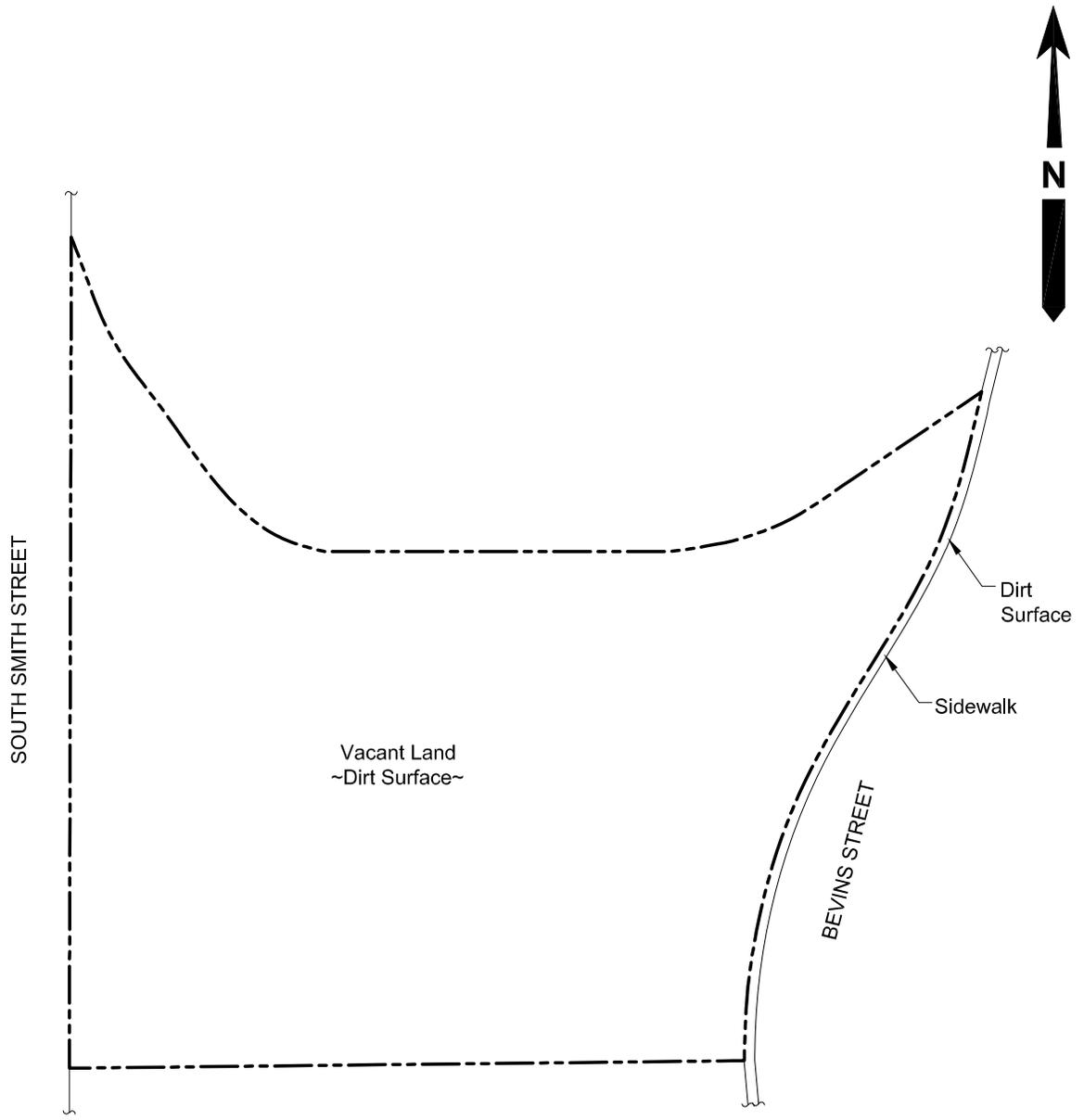
(FIGURES 1 THROUGH 3)



Map Center: Latitude 39.0393, Longitude -122.9256
 Subject site is located on the USGS Lakeport quadrangle (Map Source Year: 2018)



LOCATION MAP

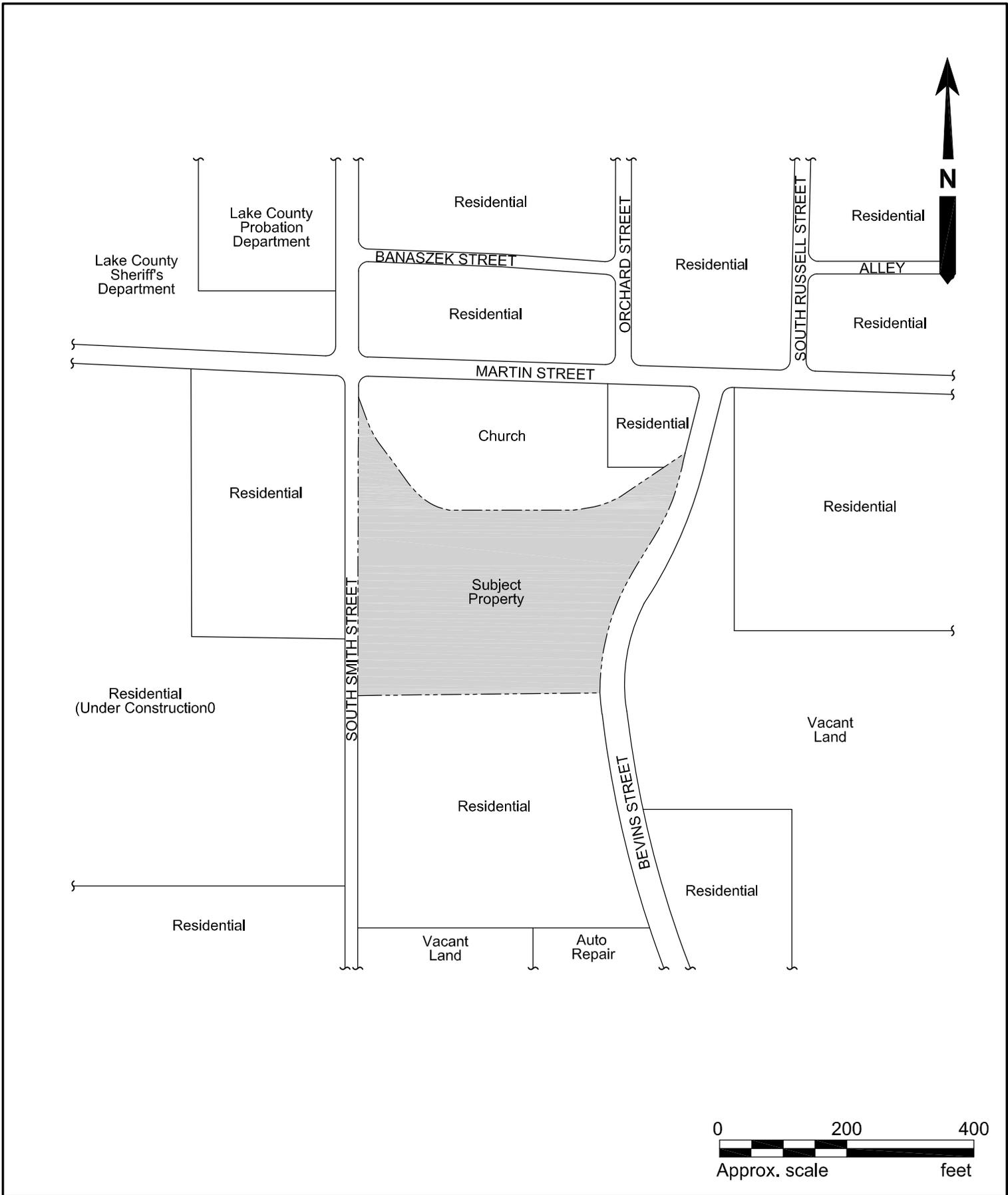


SITE PLAN

VACANT LAND
447 BEVINS STREET
LAKEPORT, CALIFORNIA

PROJECT ID: KCE-2021-223E

FIGURE 2



SITE VICINITY MAP

KCE | M | A | T | R | I | X
 CONSULTING ENGINEERS
 STRUCTURAL, CIVIL & ENVIRONMENTAL

VACANT LAND
 447 BEVINS STREET
 LAKEPORT, CALIFORNIA

PROJECT ID: KCE-2021-223E
 FIGURE 3

APPENDIX B

ENVIRONMENTAL DATA RESOURCES, INC. (EDR)
RADIUS MAP REPORT

Vacant Land

447 Bevins Street
Lakeport, CA 95453

Inquiry Number: 6566821.2s
July 07, 2021

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

447 BEVINS STREET
LAKEPORT, CA 95453

COORDINATES

Latitude (North): 39.0393900 - 39° 2' 21.80"
Longitude (West): 122.9256270 - 122° 55' 32.25"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 506436.7
UTM Y (Meters): 4320942.5
Elevation: 1361 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5604780 LAKEPORT, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140605
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
447 BEVINS STREET
LAKEPORT, CA 95453

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	SULPHUR BANK MERCURY	SULPHUR BANK ROAD	NPL, SEMS, PRP	Same	3513, 0.665, ENE
1	LAKE COUNTY SHERIFFS	1220 MARTIN ST	RCRA NonGen / NLR	Higher	160, 0.030, North
A2	LAKEPORT TRANSMISSIO	575 BEVINS ST	RCRA NonGen / NLR	Higher	396, 0.075, SSE
A3	LAKEPORT TRANSMISSIO	575 BEVINS ST	CUPA Listings, HWTS	Higher	396, 0.075, SSE
A4	LAKEPORT TRANSMISSIO	575 BEVINS ST	EDR Hist Auto	Higher	396, 0.075, SSE
A5	LAKEPORT TRANSMISSIO	575 BEVINS STREET	CERS HAZ WASTE, CERS	Higher	396, 0.075, SSE
A6	D & S MUFFLER & AUTO	637 BEVINS ST	CUPA Listings, HWTS	Higher	486, 0.092, SSE
B7	PUETT'S GARAGE	1403 MARTIN ST E	CUPA Listings	Higher	544, 0.103, WNW
B8	PUETTS GARAGE	1403 MARTIN ST	RCRA NonGen / NLR	Higher	544, 0.103, WNW
B9	PUETT'S GARAGE	1403 MARTIN STREET	CERS HAZ WASTE, CERS	Higher	544, 0.103, WNW
B10	PUETTS GARAGE	1403 MARTIN ST	RCRA NonGen / NLR	Higher	544, 0.103, WNW
A11	VIRGIN VAPOR	801 BEVINS ST	CUPA Listings	Higher	615, 0.116, SSE
A12	LAKE COUNTY WELDERS/	727 BEVINS ST	CUPA Listings	Higher	615, 0.116, SSE
A13	AAMCO TRANSMISSION A	861 BEVINS ST	CERS HAZ WASTE, CERS	Higher	615, 0.116, SSE
A14	APRIA HEALTHCARE	751-755 BEVINS ST	CUPA Listings	Higher	615, 0.116, SSE
C15	KNIGHTS AUTO & TIRE	748 BEVINS ST	CUPA Listings	Higher	763, 0.145, SSE
D16	JONES AUTOMOTIVE	924 PARALLEL DR	LUST, Cortese, HIST CORTESE, WDS, CERS	Higher	788, 0.149, SSW
D17	ENGLISH BEST	923 PARALLEL RD # 20	CUPA Listings	Higher	819, 0.155, SSW
18	MENDO-LAKE HOME RESP	843 PARALLEL ST	CUPA Listings	Higher	849, 0.161, WSW
D19	UPS - LAKEPORT	966 PARALLEL DR	RCRA-SQG, FINDS, ECHO	Higher	881, 0.167, SSW
D20	SHAWN ROGERS INDUSTR	923 PARALLEL DR SPAC	RCRA NonGen / NLR	Higher	912, 0.173, SSW
C21	PERFORMANCE PLUS AUT	808 BEVINS ST STE 2	CERS HAZ WASTE, HWTS	Higher	922, 0.175, SSE
C22	PERFORMANCE PLUS	808 BEVINS ST # 2	CUPA Listings	Higher	922, 0.175, SSE
23	LAKE COUNTY TRIBAL H	925 BEVINS CT	RCRA NonGen / NLR	Higher	936, 0.177, SE
E24	UPS LAKEPORT CENTER	1275 CRAIG AVE	CUPA Listings, NPDES, CIWQS, CERS	Higher	1012, 0.192, SW
E25	UPS - LAKEPORT	1275 CRAIG AVENUE	CERS HAZ WASTE, CERS	Higher	1012, 0.192, SW
F26	LAKEPORT TRANSFER ST	910 BEVINS STREET	RCRA NonGen / NLR	Higher	1041, 0.197, SSE
F27	LAKEPORT TRANSFER ST	910 BEVINS STREET	SWF/LF, HAZNET, HWTS	Higher	1041, 0.197, SSE
E28	QUAIL RUN FITNESS CE	1279 CRAIG AVE	CUPA Listings, CERS	Higher	1082, 0.205, SW
29	PARKSIDE SUBDIVISION	1453 MARTIN STREET	ENVIROSTOR, VCP, LIENS	Higher	1692, 0.320, West
G30	PACIFIC BELL	555 LAKEPORT BOULEVA	RCRA-LQG, LUST, SWEEPS UST, HIST UST, FINDS, ECHO,...	Lower	2230, 0.422, SE
G31	AT&T	555 LAKEPORT BOULEVA	LUST, Cortese, CERS	Lower	2230, 0.422, SE
H32	SOPER-REESE COMMUNIT	275 SOUTH MAIN STREE	LUST, Cortese, CERS	Lower	2532, 0.480, East
33	CO OF LAKE (AGRICULT	883 LAKEPORT BLVD	HIST UST, EMI, HWP, PEST LIC, CERS, HWTS	Higher	2588, 0.490, SSE
H34	AN-LEE EXXON	201 S MAIN ST	ENVIROSTOR, SWEEPS UST, HIST UST	Lower	2616, 0.495, ENE
H35	LAKEPORT SHELL	301 MAIN	LUST, Cortese, HIST CORTESE, CERS	Lower	2633, 0.499, East
36	TIME OIL CO	202 S MAIN ST	ENVIROSTOR, CUPA Listings	Lower	2769, 0.524, ENE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity
Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

EXECUTIVE SUMMARY

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
CDL..... Clandestine Drug Labs
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... National Clandestine Laboratory Register
PFAS..... PFAS Contamination Site Location Listing

EXECUTIVE SUMMARY

Local Lists of Registered Storage Tanks

SWEEPS UST.....	SWEEPS UST Listing
HIST UST.....	Hazardous Substance Storage Container Database
CERS TANKS.....	California Environmental Reporting System (CERS) Tanks
CA FID UST.....	Facility Inventory Database

Local Land Records

LIENS.....	Environmental Liens Listing
LIENS 2.....	CERCLA Lien Information
DEED.....	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS.....	Hazardous Materials Information Reporting System
CHMIRS.....	California Hazardous Material Incident Report System
LDS.....	Land Disposal Sites Listing
MCS.....	Military Cleanup Sites Listing
SPILLS 90.....	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File

EXECUTIVE SUMMARY

ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
HWTS.....	Hazardous Waste Tracking System
MINES MRDS.....	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 04/27/2021 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>SULPHUR BANK MERCURY</i> Cerclis ID:: 902228 EPA Id: CAD980893275	<i>SULPHUR BANK ROAD</i>	<i>ENE 1/2 - 1 (0.665 mi.)</i>	<i>0</i>	<i>9</i>

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>UPS - LAKEPORT</i> EPA ID:: CAD982502544	<i>966 PARALLEL DR</i>	<i>SSW 1/8 - 1/4 (0.167 mi.)</i>	<i>D19</i>	<i>54</i>

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State

EXECUTIVE SUMMARY

Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/25/2021 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PARKSIDE SUBDIVISION Facility Id: 60000339 Status: No Further Action	1453 MARTIN STREET	W 1/4 - 1/2 (0.320 mi.)	29	90

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AN-LEE EXXON Facility Id: 17510005 Status: Refer: RWQCB	201 S MAIN ST	ENE 1/4 - 1/2 (0.495 mi.)	H34	123
TIME OIL CO Facility Id: 17510002 Facility Id: 17510010 Status: Refer: RWQCB	202 S MAIN ST	ENE 1/2 - 1 (0.524 mi.)	36	135

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAKEPORT TRANSFER ST Database: SWF/LF (SWIS), Date of Government Version: 02/08/2021 Facility ID: 17-AA-0002 Operational Status: Closed Regulation Status: Surrendered	910 BEVINS STREET	SSE 1/8 - 1/4 (0.197 mi.)	F27	82

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 5 LUST sites within

EXECUTIVE SUMMARY

approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JONES AUTOMOTIVE Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 03/08/2021 Status: Completed - Case Closed Status: Case Closed Global Id: T0603300017	924 PARALLEL DR	SSW 1/8 - 1/4 (0.149 mi.)	D16	49
Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL Database: LUST, Date of Government Version: 03/08/2021 Status: Completed - Case Closed Global Id: T0603315849	555 LAKEPORT BOULEVA	SE 1/4 - 1/2 (0.422 mi.)	G30	93
AT&T Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Case Closed	555 LAKEPORT BOULEVA	SE 1/4 - 1/2 (0.422 mi.)	G31	107
SOPER-REESE COMMUNIT Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 03/08/2021 Status: Completed - Case Closed Status: Post remedial action monitoring Global Id: T0603346446	275 SOUTH MAIN STREE	E 1/4 - 1/2 (0.480 mi.)	H32	108
LAKEPORT SHELL Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 03/08/2021 Status: Completed - Case Closed Status: Post remedial action monitoring Global Id: T0603300069	301 MAIN	E 1/4 - 1/2 (0.499 mi.)	H35	127

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 01/25/2021 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PARKSIDE SUBDIVISION Status: No Further Action Facility Id: 60000339	1453 MARTIN STREET	W 1/4 - 1/2 (0.320 mi.)	29	90

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/20/2021 has revealed that there are 5 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAKEPORT TRANSMISSIO	575 BEVINS STREET	SSE 0 - 1/8 (0.075 mi.)	A5	25
PUETT'S GARAGE	1403 MARTIN STREET	WNW 0 - 1/8 (0.103 mi.)	B9	34
AAMCO TRANSMISSION A	861 BEVINS ST	SSE 0 - 1/8 (0.116 mi.)	A13	42
PERFORMANCE PLUS AUT	808 BEVINS ST STE 2	SSE 1/8 - 1/4 (0.175 mi.)	C21	61
UPS - LAKEPORT	1275 CRAIG AVENUE	SW 1/8 - 1/4 (0.192 mi.)	E25	77

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/22/2021 has revealed that there are 7 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAKE COUNTY SHERIFFS EPA ID:: CAL000415829	1220 MARTIN ST	N 0 - 1/8 (0.030 mi.)	1	17
LAKEPORT TRANSMISSIO EPA ID:: CAL000229781	575 BEVINS ST	SSE 0 - 1/8 (0.075 mi.)	A2	20
PUETT'S GARAGE EPA ID:: CAL000060354	1403 MARTIN ST	WNW 0 - 1/8 (0.103 mi.)	B8	31
PUETT'S GARAGE EPA ID:: CAL000452558	1403 MARTIN ST	WNW 0 - 1/8 (0.103 mi.)	B10	38
SHAWN ROGERS INDUSTR EPA ID:: CAL000432045	923 PARALLEL DR SPAC	SSW 1/8 - 1/4 (0.173 mi.)	D20	58
LAKE COUNTY TRIBAL H EPA ID:: CAL000105245	925 BEVINS CT	SE 1/8 - 1/4 (0.177 mi.)	23	66
LAKEPORT TRANSFER ST EPA ID:: CAH111000086	910 BEVINS STREET	SSE 1/8 - 1/4 (0.197 mi.)	F26	80

EXECUTIVE SUMMARY

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 03/22/2021 has revealed that there are 4 Cortese sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JONES AUTOMOTIVE Cleanup Status: COMPLETED - CASE CLOSED	924 PARALLEL DR	SSW 1/8 - 1/4 (0.149 mi.)	D16	49

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AT&T Cleanup Status: COMPLETED - CASE CLOSED	555 LAKEPORT BOULEVA	SE 1/4 - 1/2 (0.422 mi.)	G31	107
SOPER-REESE COMMUNIT Cleanup Status: COMPLETED - CASE CLOSED	275 SOUTH MAIN STREE	E 1/4 - 1/2 (0.480 mi.)	H32	108
LAKEPORT SHELL Cleanup Status: COMPLETED - CASE CLOSED	301 MAIN	E 1/4 - 1/2 (0.499 mi.)	H35	127

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 12 CUPA Listings sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAKEPORT TRANSMISSIO Database: CUPA LAKE, Date of Government Version: 02/10/2021 Facility: FA0000103	575 BEVINS ST	SSE 0 - 1/8 (0.075 mi.)	A3	22
D & S MUFFLER & AUTO Database: CUPA LAKE, Date of Government Version: 02/10/2021 Facility: FA0001014 Facility: FA0000053	637 BEVINS ST	SSE 0 - 1/8 (0.092 mi.)	A6	29
PUETT'S GARAGE Database: CUPA LAKE, Date of Government Version: 02/10/2021 Facility: FA0000204	1403 MARTIN ST E	WNW 0 - 1/8 (0.103 mi.)	B7	31
VIRGIN VAPOR Database: CUPA LAKE, Date of Government Version: 02/10/2021 Facility: FA0000906	801 BEVINS ST	SSE 0 - 1/8 (0.116 mi.)	A11	41
LAKE COUNTY WELDERS/ Database: CUPA LAKE, Date of Government Version: 02/10/2021 Facility: FA0000063	727 BEVINS ST	SSE 0 - 1/8 (0.116 mi.)	A12	41
APRIA HEALTHCARE Database: CUPA LAKE, Date of Government Version: 02/10/2021 Facility: FA0000011	751-755 BEVINS ST	SSE 0 - 1/8 (0.116 mi.)	A14	47
KNIGHTS AUTO & TIRE Database: CUPA LAKE, Date of Government Version: 02/10/2021 Facility: FA0001000	748 BEVINS ST	SSE 1/8 - 1/4 (0.145 mi.)	C15	48
ENGLISH BEST Database: CUPA LAKE, Date of Government Version: 02/10/2021	923 PARALLEL RD # 20	SSW 1/8 - 1/4 (0.155 mi.)	D17	53

EXECUTIVE SUMMARY

Facility: FA0000060				
MENDO-LAKE HOME RESP	843 PARALLEL ST	WSW 1/8 - 1/4 (0.161 mi.)	18	53
Database: CUPA LAKE, Date of Government Version: 02/10/2021				
Facility: FA0000183				
PERFORMANCE PLUS	808 BEVINS ST # 2	SSE 1/8 - 1/4 (0.175 mi.)	C22	66
Database: CUPA LAKE, Date of Government Version: 02/10/2021				
Facility: FA0000861				
UPS LAKEPORT CENTER	1275 CRAIG AVE	SW 1/8 - 1/4 (0.192 mi.)	E24	69
Database: CUPA LAKE, Date of Government Version: 02/10/2021				
Facility: FA0000114				
QUAIL RUN FITNESS CE	1279 CRAIG AVE	SW 1/8 - 1/4 (0.205 mi.)	E28	85
Database: CUPA LAKE, Date of Government Version: 02/10/2021				
Facility: FA0000718				
Facility: FA0001136				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JONES AUTOMOTIVE Reg Id: 170033	924 PARALLEL DR	SSW 1/8 - 1/4 (0.149 mi.)	D16	49
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAKEPORT SHELL Reg Id: 170090	301 MAIN	E 1/4 - 1/2 (0.499 mi.)	H35	127

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 02/16/2021 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CO OF LAKE (AGRICULT EPA ID: CAD980816425 Cleanup Status: CLOSED	883 LAKEPORT BLVD	SSE 1/4 - 1/2 (0.490 mi.)	33	113

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EXECUTIVE SUMMARY

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

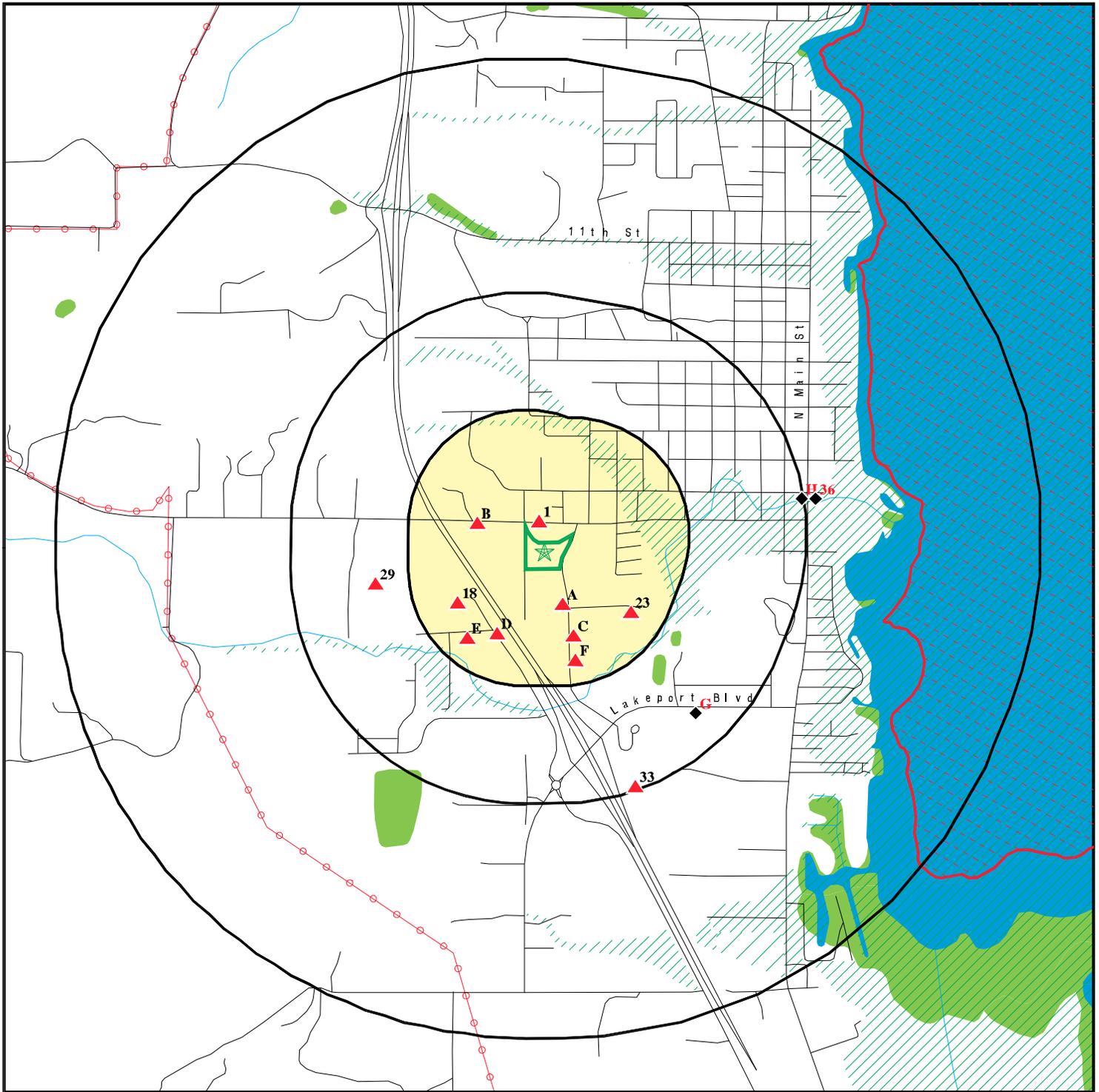
A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAKEPORT TRANSMISSIO	575 BEVINS ST	SSE 0 - 1/8 (0.075 mi.)	A4	24

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 6566821.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

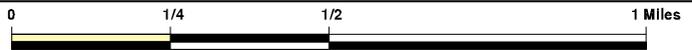
Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

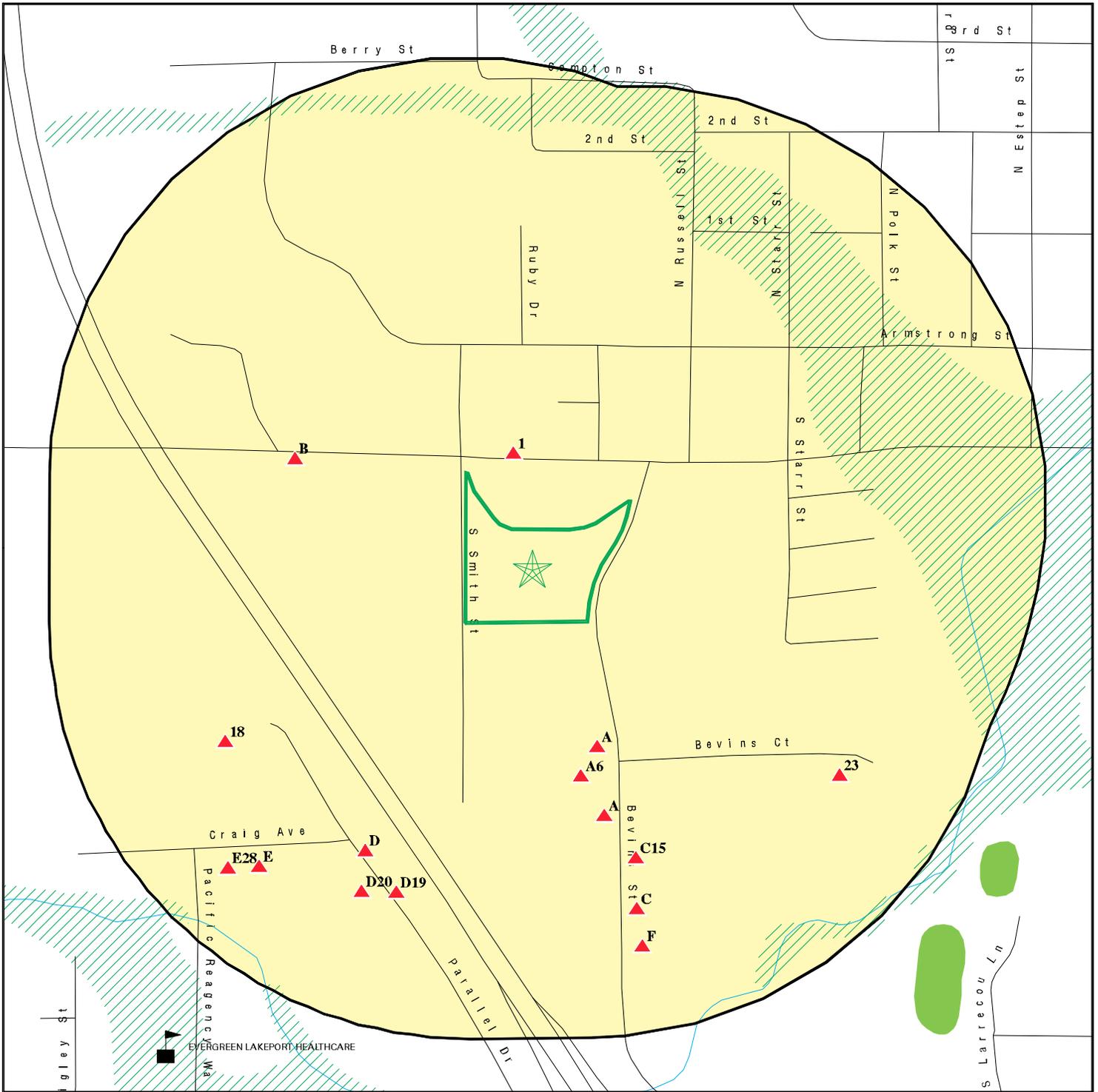


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport CA 95453
 LAT/LONG: 39.03939 / 122.925627

CLIENT: KCE Matrix
 CONTACT: Aram Kaloustian
 INQUIRY #: 6566821.2s
 DATE: July 07, 2021 1:33 pm

DETAIL MAP - 6566821.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land
 ADDRESS: 447 Beavins Street
 Lakeport CA 95453
 LAT/LONG: 39.03939 / 122.925627

CLIENT: KCE Matrix
 CONTACT: Aram Kaloustian
 INQUIRY #: 6566821.2s
 DATE: July 07, 2021 1:37 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		0	0	2	1	NR	3
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	1	0	NR	NR	1
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	1	4	NR	NR	5

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
VCP	0.500		0	0	1	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		3	2	NR	NR	NR	5
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		4	3	NR	NR	NR	7
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	1	3	NR	NR	4
CUPA Listings	0.250		6	6	NR	NR	NR	12

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NPL
Region
ENE
1/2-1
3513 ft.

SULPHUR BANK MERCURY MINE
SULPHUR BANK ROAD
CLEARLAKE OAKS, CA 95422

NPL 1000707971
SEMS CAD980893275
PRP

NPL:

EPA Region: 9
EPA ID: CAD980893275
Site ID: 902228
Name: SULPHUR BANK MERCURY MINE
Address: SULPHUR BANK ROAD
City,State,Zip: CLEARLAKE OAKS, CA 95422
Federal: N
Final Date: 1990-08-30 00:00:00
Latitude: 39.00555
Longitude: -122.6703
Site Score: 44.420000000000002

NPL:

NPL Status: Currently on the Final NPL
Substance ID: Not reported
CAS Number: Not reported
Substance: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: C460
CAS Number: 7439-97-6
Substance: MERCURY
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: C460
CAS Number: 7439-97-6
Substance: MERCURY
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: D004
CAS Number: 7440-38-2
Substance: ARSENIC
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: D004
CAS Number: 7440-38-2
Substance: ARSENIC
Pathway: SURFACE WATER PATHWAY
Scoring: 3

Summary Details:

Conditions at proposal June 24, 1988): The Sulphur Bank Mercury (SBM) Mine is on the east shore of the Oaks Arm of Clear Lake, in Clear Lake, Lake County, California. The area was initially mined for sulfur during 1865-68.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

Mercury ore was mined by underground methods during 1899-1902 and 1915-18. The majority of the mercury ore was mined using open pit methods during 1922-47 and 1955-57. The mine, once one of the largest producers of mercury in California, has been inactive since 1957 and is presently owned by Bradley Mining Co. (BMC) of San Francisco. Approximately 120 acres of tailings and an open, unlined mine pit called the Herman Pit) are on the property. The mine tailings extend into the Oaks Arm of Clear Lake along 1,320 feet of shoreline. The Herman Pit covers approximately 23 acres and is 750 feet upgradient of the lake. The pit is filled with water to a depth of 150 feet. The California Regional Water Quality Control Board (CRWQCB) is coordinating an ongoing investigation of SBM. Department of Health Services, Department of Fish and Game, and CRWQCB analyses indicate that mercury is present in the tailings and in the biota and bottom sediments in the Oaks Arm of Clear Lake. The levels of mercury in fish from Clear Lake led the State to issue an advisory on May 14, 1986 against consumption of the fish. The lake is a major recreational area. On March 13, 1987, CRWQCB informed BMC that the Herman Pit is regulated under the Toxic Pits Cleanup Act (TPCA). Under the act, BMC is required to submit a Hydrogeologic Assessment Report (HAR). The property owners are conducting a waste characterization study of the site prior to submitting a HAR to determine if the site may be exempt from the TPCA. On November 4, 1987, CRWQCB awarded a contract for a pollution abatement study of the Oaks Arm of Clear Lake and the adjacent mine site. The study is scheduled to be completed in early 1989. An estimated 4,700 people obtain drinking water from Clear Lake Oaks Water District wells about 1 mile from the site. Status August 30, 1990): The property owners submitted their HAR to CRWQCB in July 1988. CRWQCB exempted the Herman Pit from TPCA in April 1990. CRWQCB's study of Clear Lake was completed in late 1989. It indicated that the largest continued input of mercury to Clear Lake is probably from erosion of waste rock and tailings into the lake.

NPL:

NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-<= 10 Feet
Category Value: 6

NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 100

NPL:

NPL Name: SULPHUR BANK MERCURY MINE

NPL:

EPA Region: 09
Site ID: 0902228
Site Status: F
Federal Site: N
Date Deleted: Not reported
Date Finalized: 08/30/90
Date Proposed: 06/24/88

NPL:

Proposed Date: 06/24/1988
Final Date: 08/30/1990
Deleted Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

NPL Status: Final

SEMS:

Site ID: 0902228
EPA ID: CAD980893275
Name: SULPHUR BANK MERCURY MINE
Address: SULPHUR BANK ROAD
Address 2: Not reported
City,State,Zip: CLEARLAKE OAKS, CA 95422
Cong District: 01,03
FIPS Code: 06033
Latitude: +39.005550
Longitude: -122.670300
FF: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1985-04-01 06:00:00
Finish Date: 4/1/1985 6:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: L
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: RC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

Action Name:	RVL CRP
SEQ:	1
Start Date:	1992-05-14 04:00:00
Finish Date:	12/29/1992 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1990-07-20 04:00:00
Finish Date:	7/20/1990 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	1990-08-30 04:00:00
Finish Date:	8/30/1990 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	EE
Action Name:	EE/CA
SEQ:	1
Start Date:	1999-09-21 04:00:00
Finish Date:	9/21/1999 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1992-05-27 04:00:00
Finish Date:	5/27/1992 4:00:00 AM
Qual:	V
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	EE
Action Name:	EE/CA
SEQ:	2
Start Date:	2005-07-21 04:00:00
Finish Date:	4/6/2006 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	EE
Action Name:	EE/CA
SEQ:	3
Start Date:	2009-05-19 04:00:00
Finish Date:	8/30/2009 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	AS
Action Name:	AIR SRVY
SEQ:	1
Start Date:	1998-04-07 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: RS
Action Name: RV ASSESS
SEQ: 3
Start Date: 1991-01-31 05:00:00
Finish Date: 1/31/1991 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: H
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: RV
Action Name: RMVL
SEQ: 1
Start Date: 1992-05-14 04:00:00
Finish Date: 6/21/1993 4:00:00 AM
Qual: S
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: RV
Action Name: RMVL
SEQ: 11
Start Date: 2017-02-27 05:00:00
Finish Date: 5/24/2017 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: RV
Action Name: RMVL
SEQ: 12
Start Date: 2017-02-21 05:00:00
Finish Date: 2/21/2017 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: RS
Action Name: RV ASSESS
SEQ: 1
Start Date: 1989-08-23 04:00:00
Finish Date: 8/23/1989 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: NP
Action Name: PROPOSED
SEQ: 1
Start Date: 1988-06-24 04:00:00
Finish Date: 6/24/1988 4:00:00 AM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	MA
Action Name:	ST COOP
SEQ:	2
Start Date:	2010-10-07 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	MA
Action Name:	ST COOP
SEQ:	1
Start Date:	1990-09-27 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	01
Action Code:	EE
Action Name:	EE/CA
SEQ:	5
Start Date:	2018-06-27 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	01
Action Code:	CO
Action Name:	RI/FS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SULPHUR BANK MERCURY MINE (Continued)

1000707971

SEQ: 1
Start Date: 1990-09-28 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: TG
Action Name: TA GRANT
SEQ: 1
Start Date: 2004-03-08 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902228
EPA ID: CAD980893275
Site Name: SULPHUR BANK MERCURY MINE
NPL: F
FF: N
OU: 00
Action Code: CR
Action Name: CI
SEQ: 1
Start Date: 2003-08-20 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

PRP:
PRP Name: BRADLEY MINING COMPANY
BRADLEY MINING COMPANY
FREDERICK W. BRADLEY
NEC ACQUISITION
WORTHEN BRADLEY TRUST

1
North
< 1/8
0.030 mi.
160 ft.

LAKE COUNTY SHERIFFS OFFICE
1220 MARTIN ST
LAKEPORT, CA 95453

RCRA NonGen / NLR 1025869740
CAL000415829

Relative:
Higher
Actual:
1386 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 2016-04-01 00:00:00.0
Handler Name: LAKE COUNTY SHERIFFS OFFICE
Handler Address: 1220 MARTIN ST
Handler City,State,Zip: LAKEPORT, CA 95453
EPA ID: CAL000415829
Contact Name: ELONA PORTER
Contact Address: PO BOX 489

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKE COUNTY SHERIFFS OFFICE (Continued)

1025869740

Contact City,State,Zip:	LAKEPORT, CA 95453
Contact Telephone:	707-245-4246
Contact Fax:	707-262-4235
Contact Email:	ELONA.PORTER@LAKECOUNTYCA.GOV
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 489
Mailing City,State,Zip:	LAKEPORT, CA 95453
Owner Name:	LAKE COUNTY SHERIFFS OFFICE
Owner Type:	Other
Operator Name:	ELONA PORTER
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKE COUNTY SHERIFFS OFFICE (Continued)

1025869740

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-06-28 17:07:05.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	LAKE COUNTY SHERIFFS OFFICE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1220 MARTIN ST
Owner/Operator City,State,Zip:	LAKEPORT, CA 95453
Owner/Operator Telephone:	707-262-4200
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ELONA PORTER
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 489
Owner/Operator City,State,Zip:	LAKEPORT, CA 95453
Owner/Operator Telephone:	707-245-4246
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2016-04-01 00:00:00.0
Handler Name:	LAKE COUNTY SHERIFFS OFFICE
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	Not reported
Recognized Trader Exporter:	Not reported
Spent Lead Acid Battery Importer:	Not reported
Spent Lead Acid Battery Exporter:	Not reported
Current Record:	Yes

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKE COUNTY SHERIFFS OFFICE (Continued)

1025869740

Non Storage Recycler Activity: Not reported
 Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
 NAICS Code: 92219
 NAICS Description: OTHER JUSTICE, PUBLIC ORDER, AND SAFETY ACTIVITIES

Facility Has Received Notices of Violations:
 Violations: No Violations Found

Evaluation Action Summary:
 Evaluations: No Evaluations Found

A2
SSE
< 1/8
0.075 mi.
396 ft.

LAKEPORT TRANSMISSION
575 BEVINS ST
LAKEPORT, CA 95453

RCRA NonGen / NLR

1024801362
CAL000229781

Site 1 of 9 in cluster A

Relative:
Higher
Actual:
1375 ft.

RCRA NonGen / NLR:
 Date Form Received by Agency: 2001-08-22 00:00:00.0
 Handler Name: LAKEPORT TRANSMISSION
 Handler Address: 575 BEVINS ST
 Handler City,State,Zip: LAKEPORT, CA 95453-0000
 EPA ID: CAL000229781
 Contact Name: SHIRLEY DEVILBISS
 Contact Address: 575 BEVINS ST
 Contact City,State,Zip: LAKEPORT, CA 95453
 Contact Telephone: 707-263-4922
 Contact Fax: 707-263-6088
 Contact Email: LAKEPORT_TRANS@MEDIACOMBB.NET
 Contact Title: Not reported
 EPA Region: 09
 Land Type: Not reported
 Federal Waste Generator Description: Not a generator, verified
 Non-Notifier: Not reported
 Biennial Report Cycle: Not reported
 Accessibility: Not reported
 Active Site Indicator: Handler Activities
 State District Owner: Not reported
 State District: Not reported
 Mailing Address: 575 BEVINS ST
 Mailing City,State,Zip: LAKEPORT, CA 95453-0000
 Owner Name: BRUCE DEVILBISS
 Owner Type: Other
 Operator Name: SHIRLEY DEVILBISS
 Operator Type: Other
 Short-Term Generator Activity: No
 Importer Activity: No
 Mixed Waste Generator: No
 Transporter Activity: No
 Transfer Facility Activity: No
 Recycler Activity with Storage: No
 Small Quantity On-Site Burner Exemption: No
 Smelting Melting and Refining Furnace Exemption: No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKEPORT TRANSMISSION (Continued)

1024801362

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRC Permit Baseline:	Not on the Baseline
2018 GPRC Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRC Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:45:31.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SHIRLEY DEVILBISS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	575 BEVINS ST
Owner/Operator City,State,Zip:	LAKEPORT, CA 95453

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKEPORT TRANSMISSION (Continued)

1024801362

Owner/Operator Telephone:	707-263-4922
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	BRUCE DEVILBISS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	575 BEVINS ST
Owner/Operator City,State,Zip:	LAKEPORT, CA 95453-0000
Owner/Operator Telephone:	707-263-4922
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2001-08-22 00:00:00.0
Handler Name:	LAKEPORT TRANSMISSION
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	23492
NAICS Description:	POWER AND COMMUNICATION TRANSMISSION LINE CONSTRUCTION
NAICS Code:	811113
NAICS Description:	AUTOMOTIVE TRANSMISSION REPAIR

Facility Has Received Notices of Violations:

Violations:	No Violations Found
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Evaluation Action Summary:

Evaluations:	No Evaluations Found
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A3
SSE
 < 1/8
 0.075 mi.
 396 ft.

LAKEPORT TRANSMISSION
575 BEVINS ST
LAKEPORT, CA 95453
Site 2 of 9 in cluster A

CUPA Listings **S112444493**
HWTS **N/A**

Relative:
Higher
Actual:
 1375 ft.

CUPA LAKE:	
Name:	LAKEPORT TRANSMISSION
Address:	575 BEVINS ST
City,State,Zip:	LAKEPORT, CA 95453
Facility:	FA0000103

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSMISSION (Continued)

S112444493

Business Type: 1 - CUPA
Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb
Mailing Address: 575 Bevins Street
Mailing Telephone: 7072634922
Entered Date: 11/16/2012
Program Identifier: CUPA-575 BEVINS ST., LAKEPORT
Record ID: PR0000505
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 501
Current Inspection Date: 04/12/2020
Contact Name: Bruce DeVilbiss-LAKEPORT TRANSMISSION
Mailing Address: Lakeport, CA 95453
APN: Not reported
Program/Element Code: 2002

Name: LAKEPORT TRANSMISSION
Address: 575 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000103
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 575 Bevins Street
Mailing Telephone: 7072634922
Entered Date: 11/16/2012
Program Identifier: CUPA
Record ID: PR0000506
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 04/05/2020
Contact Name: Bruce DeVilbiss
Mailing Address: Lakeport, CA 95453
APN: Not reported
Program/Element Code: 2800

HWTS:

Name: LAKEPORT TRANSMISSION
Address: 575 BEVINS ST
Address 2: Not reported
City,State,Zip: LAKEPORT, CA 954530000
EPA ID: CAL000229781
Inactive Date: Not reported
Create Date: 08/22/2001
Last Act Date: 07/22/2020
Mailing Name: Not reported
Mailing Address: 575 BEVINS ST
Mailing Address 2: Not reported
Mailing City,State,Zip: LAKEPORT, CA 954530000
Owner Name: BRUCE DEVILBISS
Owner Address: 575 BEVINS ST
Owner Address 2: Not reported
Owner City,State,Zip: LAKEPORT, CA 954530000
Contact Name: BRUCE DEVILBISS
Contact Address: 575 BEVINS ST
Contact Address 2: Not reported
City,State,Zip: LAKEPORT, CA 95453

NAICS:

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKEPORT TRANSMISSION (Continued)

S112444493

EPA ID: CAL000229781
 Create Date: 2002-03-14 16:36:29.000
 NAICS Code: 23492
 NAICS Description: Power and Communication Transmission Line Construction
 Issued EPA ID Date: 2001-08-22 00:00:00
 Inactive Date: Not reported
 Facility Name: LAKEPORT TRANSMISSION
 Facility Address: 575 BEVINS ST
 Facility Address 2: Not reported
 Facility City: LAKEPORT
 Facility County: Not reported
 Facility State: CA
 Facility Zip: 954530000

EPA ID: CAL000229781
 Create Date: 2013-10-15 15:45:40.993
 NAICS Code: 811113
 NAICS Description: Automotive Transmission Repair
 Issued EPA ID Date: 2001-08-22 00:00:00
 Inactive Date: Not reported
 Facility Name: LAKEPORT TRANSMISSION
 Facility Address: 575 BEVINS ST
 Facility Address 2: Not reported
 Facility City: LAKEPORT
 Facility County: Not reported
 Facility State: CA
 Facility Zip: 954530000

A4
SSE
 < 1/8
 0.075 mi.
 396 ft.

LAKEPORT TRANSMISSION
575 BEVINS ST
LAKEPORT, CA 95453

EDR Hist Auto 1020126419
N/A

Site 3 of 9 in cluster A

Relative:
Higher

EDR Hist Auto

Actual:
 1375 ft.

Year:	Name:	Type:
1989	LAKEPORT TRANSMISSION	General Automotive Repair Shops
1990	LAKE PORT TRANSMISSION	Automotive Transmission Repair Shops
1991	LAKE PORT TRANSMISSION	Automotive Transmission Repair Shops
1991	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1992	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1992	LAKE PORT TRANSMISSION	Automotive Transmission Repair Shops
1993	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1994	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1995	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1996	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1997	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1998	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
1999	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2000	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2001	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2002	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2003	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2004	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2005	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2006	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKEPORT TRANSMISSION (Continued)

1020126419

2007	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2008	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2009	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2010	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2011	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2012	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2013	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops
2014	LAKEPORT TRANSMISSION	Automotive Transmission Repair Shops

A5
SSE
 < 1/8
 0.075 mi.
 396 ft.
Relative:
Higher
Actual:
 1375 ft.

LAKEPORT TRANSMISSION
575 BEVINS STREET
LAKEPORT, CA 95453
Site 4 of 9 in cluster A

CERS HAZ WASTE **S121742338**
CERS **N/A**

CERS HAZ WASTE:
 Name: LAKEPORT TRANSMISSION
 Address: 575 BEVINS STREET
 City,State,Zip: LAKEPORT, CA 95453
 Site ID: 129491
 CERS ID: 10135126
 CERS Description: Hazardous Waste Generator

CERS:
 Name: LAKEPORT TRANSMISSION
 Address: 575 BEVINS STREET
 City,State,Zip: LAKEPORT, CA 95453
 Site ID: 129491
 CERS ID: 10135126
 CERS Description: Chemical Storage Facilities

Violations:
 Site ID: 129491
 Site Name: Lakeport Transmission
 Violation Date: 03-02-2018
 Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
 Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
 Violation Notes: Returned to compliance on 05/04/2018. OBSERVATION: Owner/Operator failed to submit inventory reports by March 1 to CERS. (Activities, Inventory, Map, Emergency Response and Contingency) CORRECTIVE ACTION: Owner/Operator shall submit inventory reports in CERS within 30 Days of this notice.
 Violation Division: Lake County Environmental Health
 Violation Program: HMRRP
 Violation Source: CERS

Site ID: 129491
 Site Name: Lakeport Transmission
 Violation Date: 04-05-2017
 Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
 Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSMISSION (Continued)

S121742338

Violation Notes: stored in a manner which may rupture the container or cause it to leak.
Returned to compliance on 04/05/2017. Excess used transmission oil in unmarked and open drums outside rear of shop. Open bung sealed and drum labeled during inspection. Business owner promised to provide education about hazardous waste storage requirements to employees. Some training materials left.

Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 129491
Site Name: Lakeport Transmission
Violation Date: 04-05-2017
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: Returned to compliance on 04/05/2017.

Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-05-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Business owner requested some information about proper handling of plastic used transmission filters.

Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-11-2018
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: NOV
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-12-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: no violations noted
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSMISSION (Continued)

S121742338

Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspection complete - Accepted CERS - No change to Fee Calc
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:
Site ID: 129491
Site Name: Lakeport Transmission
Site Address: 575 BEVINS STREET
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 04-05-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS

Site ID: 129491
Site Name: Lakeport Transmission
Site Address: 575 BEVINS STREET
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 04-11-2018
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Bruce DeVilbiss
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Bruce DeVilbiss
Entity Title: Not reported
Affiliation Address: 575 Bevins Street
Affiliation City: Lakeport

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSMISSION (Continued)

S121742338

Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95453
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	Bruce DeVilbiss
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 540-1669
Affiliation Type Desc:	Parent Corporation
Entity Name:	Lakeport Transmission
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	Lake County Environmental Health
Entity Title:	Not reported
Affiliation Address:	922 Bevins Court
Affiliation City:	Lakeport
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95453
Affiliation Phone:	(707) 263-1164
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	575 Bevins Street
Affiliation City:	Lakeport
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95453
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Bruce DeVilbiss
Entity Title:	Owner-Operator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Bruce DeVilbiss

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSMISSION (Continued)

S121742338

Entity Title: Not reported
Affiliation Address: 575 Bevins Street
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95453
Affiliation Phone: (707) 263-4922

A6
SSE
< 1/8
0.092 mi.
486 ft.

D & S MUFFLER & AUTOMOTIVE REPAIR
637 BEVINS ST
LAKEPORT, CA 95453
Site 5 of 9 in cluster A

CUPA Listings **S112444506**
HWTS **N/A**

Relative:
Higher
Actual:
1374 ft.

CUPA LAKE:
Name: AAA WELDING & FABRICATION
Address: 637 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0001014
Business Type: 1 - CUPA
Program Element: 2001 - HMRRP Category 1 (55-110 gal, 500-1,000 lbs)
Mailing Address: 637 BEVINS ST
Mailing Telephone: Not reported
Entered Date: 12/30/2013
Program Identifier: CUPA-637 BEVINS STREET, LAKEPORT
Record ID: PR0002098
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 415
Current Inspection Date: 07/07/2020
Contact Name: CHRIS CAUDLE-AAA WELDING & FABRICATION
Mailing Address: LAKEPORT, CA 95453
APN: 025-431-24
Program/Element Code: 2001

Name: D & S MUFFLER & AUTOMOTIVE REPAIR
Address: 637 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000053
Business Type: 1 - CUPA
Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb)
Mailing Address: 637 Bevins Street
Mailing Telephone: 7072635133
Entered Date: 11/13/2012
Program Identifier: CUPA-637 BEVINS ST., LAKEPORT
Record ID: PR0000139
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 391
Current Inspection Date: 09/10/2016
Contact Name: Tim Compton
Mailing Address: Lakeport, CA 95453
APN: Not reported
Program/Element Code: 2002

Name: D & S MUFFLER & AUTOMOTIVE REPAIR
Address: 637 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000053

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

D & S MUFFLER & AUTOMOTIVE REPAIR (Continued)

S112444506

Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 637 Bevins Street
Mailing Telephone: 7072635133
Entered Date: 11/13/2012
Program Identifier: CUPA
Record ID: PR0000140
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 0
Current Inspection Date: 09/10/2016
Contact Name: Tim Compton
Mailing Address: Lakeport, CA 95453
APN: Not reported
Program/Element Code: 2800

HWTS:

Name: D & S MUFFLER & AUTOMOTIVE REPAIR
Address: 637 BEVINS ST
Address 2: Not reported
City,State,Zip: LAKEPORT, CA 954538731
EPA ID: CAL000325062
Inactive Date: 06/30/2014
Create Date: 09/20/2007
Last Act Date: 11/14/2014
Mailing Name: Not reported
Mailing Address: PO BOX 654
Mailing Address 2: Not reported
Mailing City,State,Zip: LAKEPORT, CA 954530000
Owner Name: TIM COMPTON
Owner Address: 637 BEVINS ST
Owner Address 2: Not reported
Owner City,State,Zip: LAKEPORT, CA 954538731
Contact Name: TIM COMPTON
Contact Address: 637 BEVINS ST
Contact Address 2: Not reported
City,State,Zip: LAKEPORT, CA 954538731

NAICS:

EPA ID: CAL000325062
Create Date: 2007-09-20 14:07:32.347
NAICS Code: 99999
NAICS Description: Not Otherwise Specified
Issued EPA ID Date: 2007-09-20 14:07:32.31700
Inactive Date: 2014-06-30 00:00:00
Facility Name: D & S MUFFLER & AUTOMOTIVE REPAIR
Facility Address: 637 BEVINS ST
Facility Address 2: Not reported
Facility City: LAKEPORT
Facility County: Not reported
Facility State: CA
Facility Zip: 954538731

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

Site

Database(s)

B7
WNW
< 1/8
0.103 mi.
544 ft.

PUETT'S GARAGE
1403 MARTIN ST E
LAKEPORT, CA 95453

Site 1 of 4 in cluster B

CUPA Listings **S112444393**
N/A

Relative:
Higher

Actual:
1397 ft.

CUPA LAKE:
Name: PUETT'S GARAGE
Address: 1403 MARTIN ST E
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000204
Business Type: 1 - CUPA
Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb)
Mailing Address: PO Box 12
Mailing Telephone: 7072634391
Entered Date: 11/19/2012
Program Identifier: CUPA-1403 E MARTIN ST., LAKEPORT
Record ID: PR0000573
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 501
Current Inspection Date: 08/03/2020
Contact Name: NICHOLAS G MEANS
Mailing Address: Lakeport, CA 95453
APN: 005-030-23
Program/Element Code: 2002

Name: PUETT'S GARAGE
Address: 1403 MARTIN ST E
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000204
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: PO Box 12
Mailing Telephone: 7072634391
Entered Date: 11/19/2012
Program Identifier: CUPA
Record ID: PR0000574
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 08/03/2020
Contact Name: NICHOLAS G MEANS
Mailing Address: Lakeport, CA 95453
APN: 005-030-23
Program/Element Code: 2800

B8
WNW
< 1/8
0.103 mi.
544 ft.

PUETTS GARAGE
1403 MARTIN ST
LAKEPORT, CA 95453

Site 2 of 4 in cluster B

RCRA NonGen / NLR **1024789152**
CAL000060354

Relative:
Higher

Actual:
1397 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 1992-03-10 00:00:00
Handler Name: PUETTS GARAGE
Handler Address: 1403 MARTIN ST
Handler City,State,Zip: LAKEPORT, CA 95453-0000
EPA ID: CAL000060354
Contact Name: JERRY PUETT JR
Contact Address: 1403 MARTIN ST
Contact City,State,Zip: LAKEPORT, CA 95453-0000

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PUETTS GARAGE (Continued)

1024789152

Contact Telephone:	707-263-3493
Contact Fax:	707-263-3613
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 12
Mailing City, State, Zip:	LAKEPORT, CA 95453-0000
Owner Name:	JERRY PUETT
Owner Type:	Other
Operator Name:	JERRY PUETT JR
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PUETTS GARAGE (Continued)

1024789152

Human Exposure Controls Indicator: N/A
Groundwater Controls Indicator: N/A
Operating TSDF Universe: Not reported
Full Enforcement Universe: Not reported
Significant Non-Complier Universe: No
Unaddressed Significant Non-Complier Universe: No
Addressed Significant Non-Complier Universe: No
Significant Non-Complier With a Compliance Schedule Universe: No
Financial Assurance Required: Not reported
Handler Date of Last Change: 2018-09-05 15:41:49.0
Recognized Trader-Importer: No
Recognized Trader-Exporter: No
Importer of Spent Lead Acid Batteries: No
Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Operator
Owner/Operator Name: JERRY PUETT JR
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1403 MARTIN ST
Owner/Operator City,State,Zip: LAKEPORT, CA 95453-0000
Owner/Operator Telephone: 707-263-3493
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: JERRY PUETT
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1403 MARTIN ST
Owner/Operator City,State,Zip: LAKEPORT, CA 95453-0000
Owner/Operator Telephone: 707-263-4391
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 1992-03-10 00:00:00.0
Handler Name: PUETTS GARAGE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PUETTS GARAGE (Continued)

1024789152

Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

**B9
WNW
< 1/8
0.103 mi.
544 ft.**

**PUETT'S GARAGE
1403 MARTIN STREET
LAKEPORT, CA 95453**

**CERS HAZ WASTE S121775190
CERS N/A**

Site 3 of 4 in cluster B

**Relative:
Higher**

CERS HAZ WASTE:

**Actual:
1397 ft.**

Name: PUETT'S GARAGE
Address: 1403 MARTIN STREET
City,State,Zip: LAKEPORT, CA 95453
Site ID: 400007
CERS ID: 10135315
CERS Description: Hazardous Waste Generator

CERS:

Name: PUETT'S GARAGE
Address: 1403 MARTIN STREET
City,State,Zip: LAKEPORT, CA 95453
Site ID: 400007
CERS ID: 10135315
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 400007
Site Name: Puett's Garage
Violation Date: 03-09-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: Returned to compliance on 03/15/2017.

Violation Division: Lake County Environmental Health

Violation Program: HMRRP

Violation Source: CERS

Site ID: 400007

Site Name: Puett's Garage

Violation Date: 08-03-2017

Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PUETT'S GARAGE (Continued)

S121775190

Violation Notes: hazardous waste.
Returned to compliance on 09/20/2017. OBSERVATION: This facility's EPA ID number is inactive. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an EPA ID number. CORRECTIVE ACTION: Immediately call the Department of Toxic Substance Control at 800-618-6942 or visit <http://www.dtsc.ca.gov/IDManifest/ReactivateID.cfm> to update your number by [date, 30 days from now].

Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 400007
Site Name: Puett's Garage
Violation Date: 08-03-2017
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Violation Notes: OBSERVATION: This facility is not maintained and operated to minimize the possibility of a release of a HW. There was found a collection of waste oil in the secondary containment of the waste oil tank. Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of HW or HW constituents to air, soil, or surface water which could threaten human health or the environment. CORRECTIVE ACTIONS: Immediately remove and clean secondary containment around Waste Oil tank to prevent accidental release of Hazardous waste to the environment. Provide supporting documentation that demonstrates compliance with this requirement to the CUPA.

Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Other/Unknown
Eval Date: 03-09-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 03-15-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PUETT'S GARAGE (Continued)

S121775190

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-17-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: no violations noted
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-17-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: no violations noted
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-03-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No violations observed during inspection.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-03-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Enforcement Action:

Site ID: 400007
Site Name: Puett's Garage
Site Address: 1403 MARTIN STREET
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 03-09-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 400007
Site Name: Puett's Garage
Site Address: 1403 MARTIN STREET
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 08-03-2017
Enf Action Type: Notice of Violation (Unified Program)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PUETT'S GARAGE (Continued)

S121775190

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Environmental Contact
Entity Name: Nicholas G Means
Entity Title: Not reported
Affiliation Address: P O Box 12
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95451
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Nicholas G Means
Entity Title: Owner/Operator
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: Nicholas G Means
Entity Title: Not reported
Affiliation Address: P O Box 12
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95453
Affiliation Phone: (707) 263-4391

Affiliation Type Desc: Parent Corporation
Entity Name: Puett's Garage
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer
Entity Name: Nicholas G Means
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PUETT'S GARAGE (Continued)

S121775190

Affiliation Type Desc: Facility Mailing Address
 Entity Name: Mailing Address
 Entity Title: Not reported
 Affiliation Address: P O Box 12
 Affiliation City: Lakeport
 Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: 95453
 Affiliation Phone: Not reported

Affiliation Type Desc: Operator
 Entity Name: Nicholas G Means
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: (707) 263-4391

Affiliation Type Desc: CUPA District
 Entity Name: Lake County Environmental Health
 Entity Title: Not reported
 Affiliation Address: 922 Bevins Court
 Affiliation City: Lakeport
 Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: 95453
 Affiliation Phone: (707) 263-1164

B10
WNW
 < 1/8
 0.103 mi.
 544 ft.

PUETTS GARAGE
1403 MARTIN ST
LAKEPORT, CA 95453

RCRA NonGen / NLR

1026056371
CAL000452558

Site 4 of 4 in cluster B

Relative:
Higher
Actual:
1397 ft.

RCRA NonGen / NLR:
 Date Form Received by Agency: 2020-02-05 00:00:00
 Handler Name: PUETTS GARAGE
 Handler Address: 1403 MARTIN ST
 Handler City,State,Zip: LAKEPORT, CA 95453-0000
 EPA ID: CAL000452558
 Contact Name: NICK MEANS
 Contact Address: 1403 MARTIN ST
 Contact City,State,Zip: LAKEPORT, CA 95453-0000
 Contact Telephone: 707-349-3749
 Contact Fax: 707-263-3613
 Contact Email: Not reported
 Contact Title: Not reported
 EPA Region: 09
 Land Type: Not reported
 Federal Waste Generator Description: Not a generator, verified
 Non-Notifier: Not reported
 Biennial Report Cycle: Not reported
 Accessibility: Not reported
 Active Site Indicator: Not reported
 State District Owner: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PUETTS GARAGE (Continued)

1026056371

State District:	Not reported
Mailing Address:	PO BOX 12
Mailing City, State, Zip:	LAKEPORT, CA 95453-0000
Owner Name:	NICOLAS G MEANS
Owner Type:	Other
Operator Name:	NICK MEANS
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2020-02-10 17:54:24.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PUETTS GARAGE (Continued)

1026056371

Importer of Spent Lead Acid Batteries: No
Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Operator
Owner/Operator Name: NICK MEANS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1403 MARTIN ST
Owner/Operator City,State,Zip: LAKEPORT, CA 95453-0000
Owner/Operator Telephone: 707-349-3749
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: NICOLAS G MEANS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1403 MARTIN ST
Owner/Operator City,State,Zip: LAKEPORT, CA 95453-0000
Owner/Operator Telephone: 707-263-4391
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 2020-02-05 00:00:00.0
Handler Name: PUETTS GARAGE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

A11 **VIRGIN VAPOR**
SSE **801 BEVINS ST**
< 1/8 **LAKEPORT, CA 95453**
0.116 mi.
615 ft. **Site 6 of 9 in cluster A**

CUPA Listings **S126349480**
 N/A

Relative:
Higher
Actual:
1368 ft.

CUPA LAKE:
Name: VIRGIN VAPOR
Address: 801 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000906
Business Type: 1 - CUPA
Program Element: 2003 - HMRRP Category 3 (501-1000 gal, 5,001-10,000
Mailing Address: 801 BEVINS ST
Mailing Telephone: Not reported
Entered Date: 04/09/2015
Program Identifier: CUPA
Record ID: PR0002356
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 0
Current Inspection Date: 05/08/2018
Contact Name: Not reported
Mailing Address: LAKEPORT, CA 95453
APN: Not reported
Program/Element Code: 2003

Name: VIRGIN VAPOR
Address: 801 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000906
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 801 BEVINS ST
Mailing Telephone: Not reported
Entered Date: 04/09/2015
Program Identifier: CUPA
Record ID: PR0002357
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 0
Current Inspection Date: 05/20/2018
Contact Name: Not reported
Mailing Address: LAKEPORT, CA 95453
APN: Not reported
Program/Element Code: 2800

A12 **LAKE COUNTY WELDERS/EUREKA OXYGEN CO**
SSE **727 BEVINS ST**
< 1/8 **LAKEPORT, CA 95453**
0.116 mi.
615 ft. **Site 7 of 9 in cluster A**

CUPA Listings **S112444511**
 N/A

Relative:
Higher
Actual:
1368 ft.

CUPA LAKE:
Name: LAKE COUNTY WELDERS/EUREKA OXYGEN CO
Address: 727 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000063
Business Type: 1 - CUPA
Program Element: 2005 - HMRRP Category 5 (5001-20,000 gal, 100,001-20
Mailing Address: 2810 JACOBS AVE
Mailing Telephone: 7072630788

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKE COUNTY WELDERS/EUREKA OXYGEN CO (Continued)

S112444511

Entered Date: 11/19/2012
Program Identifier: CUPA-727 BEVIN ST.,LAKEPORT
Record ID: PR0000684
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 1088
Current Inspection Date: 06/07/2020
Contact Name: KEITH LINVILLE
Mailing Address: EUREKA, CA 95501
APN: Not reported
Program/Element Code: 2005

Name: LAKE COUNTY WELDERS/EUREKA OXYGEN CO
Address: 727 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000063
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 2810 JACOBS AVE
Mailing Telephone: 7072630788
Entered Date: 11/19/2012
Program Identifier: CUPA
Record ID: PR0000685
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 06/06/2020
Contact Name: KEITH LINVILLE
Mailing Address: EUREKA, CA 95501
APN: Not reported
Program/Element Code: 2800

A13
SSE
< 1/8
0.116 mi.
615 ft.

AAMCO TRANSMISSION AND TOTAL CAR CARE
861 BEVINS ST
LAKEPORT, CA 95453

CERS HAZ WASTE **S121780069**
CERS **N/A**

Site 8 of 9 in cluster A

Relative:
Higher
Actual:
1368 ft.

CERS HAZ WASTE:
Name: AAMCO TRANSMISSION AND TOTAL CAR CARE
Address: 861 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Site ID: 418476
CERS ID: 10714636
CERS Description: Hazardous Waste Generator

CERS:
Name: AAMCO TRANSMISSION AND TOTAL CAR CARE
Address: 861 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Site ID: 418476
CERS ID: 10714636
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 418476
Site Name: AAMCO Transmission and Total Car Care
Violation Date: 01-25-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AAMCO TRANSMISSION AND TOTAL CAR CARE (Continued)

S121780069

Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 07/25/2017. Business stores >55 gallons/200 cu ft/500 lbs of hazmat/hazwaste onsite and is subject to the Hazardous Materials Business Plan program as well as the Hazardous Waste generator program. Please work with our office to complete CERS-discussed during inspection.

Violation Division: Lake County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 418476
Site Name: AAMCO Transmission and Total Car Care
Violation Date: 06-23-2020
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173

Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Violation Notes: Returned to compliance on 06/23/2020. OBSERVATION: Hazardous Waste Tank did not have a cap installed on volume stick port. All hazardous waste containers shall be closed at all times except when adding or removing waste. CORRECTIVE ACTION: Corrected on site.

Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 418476
Site Name: AAMCO Transmission and Total Car Care
Violation Date: 03-01-2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: Returned to compliance on 05/04/2018. OBSERVATION: Owner/Operator failed to submit inventory reports by March 1 to CERS. (Activities, Inventory, Map, Emergency Response and Contingency) CORRECTIVE ACTION: Owner/Operator shall submit inventory reports in CERS within 30 Days of this notice.

Violation Division: Lake County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 418476
Site Name: AAMCO Transmission and Total Car Care
Violation Date: 06-23-2020
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.

Violation Notes: OBSERVATION: This facility's EPA ID number is inactive. A hazardous

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AAMCO TRANSMISSION AND TOTAL CAR CARE (Continued)

S121780069

waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an EPA ID number.
CORRECTIVE ACTION: Please call the Department of Toxic Substance Control at 800-618-6942 or visit <https://dtsc.ca.gov/reactivate-epa-id-number/> to update your number. Notify CUPA within 30 days of violation to report reactivation of the EPA ID number.

Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-25-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-25-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-16-2018
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: NOV
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-09-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: HMBP Assist. Field Consultation.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-23-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection. No violations noted at time of inspection.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AAMCO TRANSMISSION AND TOTAL CAR CARE (Continued)

S121780069

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-23-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection.
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 10-11-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: AAMCO Lakeport Field Consult W/ C. Gearhart
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:

Site ID: 418476
Site Name: AAMCO Transmission and Total Car Care
Site Address: 861 BEVINS ST
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 01-25-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 418476
Site Name: AAMCO Transmission and Total Car Care
Site Address: 861 BEVINS ST
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 04-16-2018
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 418476
Site Name: AAMCO Transmission and Total Car Care
Site Address: 861 BEVINS ST
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 06-23-2020
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AAMCO TRANSMISSION AND TOTAL CAR CARE (Continued)

S121780069

Coordinates:

Site ID: 418476
Facility Name: AAMCO Transmission and Total Car Care
Env Int Type Code: HMBP
Program ID: 10714636
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 39.035510
Longitude: -122.924680

Affiliation:

Affiliation Type Desc: Document Preparer
Entity Name: Joseph Szupello
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Joseph Szupello
Entity Title: Not reported
Affiliation Address: PO Box 1292
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95453
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Joseph Szupello
Entity Title: CEO
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: Zapman Distribution Inc. DBA Lake Fleet Repair and Transmission.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Lake County Environmental Health
Entity Title: Not reported
Affiliation Address: 922 Bevins Court
Affiliation City: Lakeport

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AAMCO TRANSMISSION AND TOTAL CAR CARE (Continued)

S121780069

Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: 95453
 Affiliation Phone: (707) 263-1164

Affiliation Type Desc: Facility Mailing Address
 Entity Name: Mailing Address
 Entity Title: Not reported
 Affiliation Address: PO Box 1292
 Affiliation City: Lakeport
 Affiliation State: CA
 Affiliation Country: Not reported
 Affiliation Zip: 95453
 Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
 Entity Name: Joseph Szupello
 Entity Title: Not reported
 Affiliation Address: PO Box 1292
 Affiliation City: Lakeport
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 95453
 Affiliation Phone: (707) 413-3429

Affiliation Type Desc: Operator
 Entity Name: Joseph Szupello
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: (707) 349-2652

Affiliation Type Desc: Property Owner
 Entity Name: Robert Schall
 Entity Title: Not reported
 Affiliation Address: 975 Bevins St
 Affiliation City: Lakeport
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 95453
 Affiliation Phone: (707) 367-7368

A14
SSE
 < 1/8
 0.116 mi.
 615 ft.

APRIA HEALTHCARE
751-755 BEVINS ST
LAKEPORT, CA 95453
 Site 9 of 9 in cluster A

CUPA Listings S117742422
N/A

Relative:
Higher
Actual:
1368 ft.

CUPA LAKE:
 Name: APRIA HEALTHCARE
 Address: 751-755 BEVINS ST
 City,State,Zip: LAKEPORT, CA 95453
 Facility: FA0000011
 Business Type: 1 - CUPA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

APRIA HEALTHCARE (Continued)

S117742422

Program Element: 2003 - HMRRP Category 3 (501-1000 gal, 5,001-10,000)
Mailing Address: 26220 Enterprise Ct
Mailing Telephone: 7079941236
Entered Date: 11/13/2012
Program Identifier: CUPA-751 & 755 BEVINS ST, LAKEPORT
Record ID: PR0000051
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 751
Current Inspection Date: 10/30/2020
Contact Name: Apria Healthcare
Mailing Address: Lake Forest, CA 92630
APN: 025-441-16
Program/Element Code: 2003

Name: APRIA HEALTHCARE
Address: 751-755 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000011
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 26220 Enterprise Ct
Mailing Telephone: 7079941236
Entered Date: 11/13/2012
Program Identifier: CUPA
Record ID: PR0000052
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 0
Current Inspection Date: 08/08/2017
Contact Name: Apria Healthcare
Mailing Address: Lake Forest, CA 92630
APN: 025-441-16
Program/Element Code: 2800

C15
SSE
1/8-1/4
0.145 mi.
763 ft.

KNIGHTS AUTO & TIRE
748 BEVINS ST
LAKEPORT, CA 95453
Site 1 of 3 in cluster C

CUPA Listings S116381360
N/A

Relative:
Higher
Actual:
1364 ft.

CUPA LAKE:
Name: KNIGHTS AUTO & TIRE
Address: 748 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0001000
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 748 BEVINS ST
Mailing Telephone: 7072633039
Entered Date: 10/31/2016
Program Identifier: CUPA @748 BEVINS ST, LAKEPORT
Record ID: PR0002653
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 01/30/2020
Contact Name: KNIGHTS AUTO & TIRE
Mailing Address: LAKEPORT, CA 95453
APN: Not reported
Program/Element Code: 2800

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KNIGHTS AUTO & TIRE (Continued)

S116381360

Name: KNIGHTS AUTO & TIRE
Address: 748 BEVINS ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0001000
Business Type: 1 - CUPA
Program Element: 2008 - HMRRP Category 8 (Conditionally exempt small
Mailing Address: 748 BEVINS ST
Mailing Telephone: 7072633039
Entered Date: 10/29/2013
Program Identifier: CUPA PROGRAM-748 BEVINS ST., LAKEPORT
Record ID: PR0002072
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 141
Current Inspection Date: 01/30/2020
Contact Name: KNIGHTS AUTO & TIRE
Mailing Address: LAKEPORT, CA 95453
APN: Not reported
Program/Element Code: 2008

D16 **JONES AUTOMOTIVE**
SSW **924 PARALLEL DR**
1/8-1/4 **LAKEPORT, CA 95453**
0.149 mi.
788 ft. **Site 1 of 4 in cluster D**

LUST **S101307306**
Cortese **N/A**
HIST CORTESE
WDS
CERS

Relative:
Higher
Actual:
1368 ft.

LUST:
Name: JONES AUTOMOTIVE
Address: 924 PARALLEL DR
City,State,Zip: LAKEPORT, CA 95453
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603300017
Global Id: T0603300017
Latitude: 39.0316756
Longitude: -122.9247539
Status: Completed - Case Closed
Status Date: 08/20/1996
Case Worker: GTM
RB Case Number: 170033
Local Agency: LAKE COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:
Global Id: T0603300017
Contact Type: Regional Board Caseworker
Contact Name: GLENN T. MEEKS
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: gmeeks@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0603300017
Contact Type: Local Agency Caseworker

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JONES AUTOMOTIVE (Continued)

S101307306

Contact Name: MANUEL RAMIREZ
Organization Name: LAKE COUNTY
Address: Not reported
City: r5 UNKNOWN
Email: Not reported
Phone Number: Not reported

LUST:

Global Id: T0603300017
Action Type: Other
Date: 11/15/1991
Action: Leak Discovery

Global Id: T0603300017
Action Type: Other
Date: 10/31/1991
Action: Leak Stopped

Global Id: T0603300017
Action Type: Other
Date: 01/17/1991
Action: Leak Reported

LUST:

Global Id: T0603300017
Status: Open - Case Begin Date
Status Date: 01/17/1991

Global Id: T0603300017
Status: Open - Site Assessment
Status Date: 01/28/1992

Global Id: T0603300017
Status: Completed - Case Closed
Status Date: 08/20/1996

LUST REG 5:

Name: JONES AUTOMOTIVE
Address: 924 PARALLEL DR
City: LAKEPORT
Region: 5
Status: Case Closed
Case Number: 170033
Case Type: Soil only
Substance: WASTE OIL
Staff Initials: GTM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

CORTESE:

Name: JONES AUTOMOTIVE
Address: 924 PARALLEL DR
City,State,Zip: LAKEPORT, CA 95453

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JONES AUTOMOTIVE (Continued)

S101307306

Region: CORTESE
Envirostor Id: Not reported
Global ID: T0603300017
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:

edr_fname: JONES AUTOMOTIVE
edr_fadd1: 924 PARALLEL
City,State,Zip: LAKEPORT, CA
Region: CORTESE
Facility County Code: 17
Reg By: LTNKA
Reg Id: 170033

WDS:

Name: UNITED PARCEL SER CALAK
Address: 924 Parallel Dr
City: LAKEPORT
Facility ID: 5S 17I002100
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 0
Facility Telephone: 4157373758
Facility Contact: STAN PREDKI
Agency Name: UNITED PARCEL SERVICE
Agency Address: 2222 17TH ST
Agency City,St,Zip: SAN FRANCISCO 94103
Agency Contact: STAN PREDKI
Agency Telephone: Not reported
Agency Type: Private
SIC Code: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JONES AUTOMOTIVE (Continued)

S101307306

SIC Code 2: Not reported
Primary Waste Type: Not reported
Primary Waste: Not reported
Waste Type2: Not reported
Waste2: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported
POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CERS:

Name: JONES AUTOMOTIVE
Address: 924 PARALLEL DR
City,State,Zip: LAKEPORT, CA 95453
Site ID: 259284
CERS ID: T0603300017
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: MANUEL RAMIREZ - LAKE COUNTY
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: r5 UNKNOWN
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker
Entity Name: GLENN T. MEEKS - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE #200
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

D17
SSW
1/8-1/4
0.155 mi.
819 ft.

ENGLISH BEST
923 PARALLEL RD # 209
LAKEPORT, CA 95453

CUPA Listings **S126349464**
N/A

Site 2 of 4 in cluster D

Relative:
Higher

CUPA LAKE:

Actual:
1367 ft.

Name: ENGLISH BEST
Address: 923 PARALLEL RD # 209
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000060
Business Type: 1 - CUPA
Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb)
Mailing Address: PO Box 711
Mailing Telephone: 7072625895
Entered Date: 11/19/2012
Program Identifier: CUPA-923 PARALLEL RD, LAKEPORT
Record ID: PR0000681
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 391
Current Inspection Date: 03/27/2016
Contact Name: Robert English
Mailing Address: Kelseyville, CA 95451
APN: Not reported
Program/Element Code: 2002

Name: ENGLISH BEST
Address: 923 PARALLEL RD # 209
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000060
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: PO Box 711
Mailing Telephone: 7072625895
Entered Date: 11/19/2012
Program Identifier: CUPA
Record ID: PR0000682
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 0
Current Inspection Date: 03/27/2016
Contact Name: Robert English
Mailing Address: Kelseyville, CA 95451
APN: Not reported
Program/Element Code: 2800

18
WSW
1/8-1/4
0.161 mi.
849 ft.

MENDO-LAKE HOME RESPIRATORY SERVICES, INC.
843 PARALLEL ST
LAKEPORT, CA 95453

CUPA Listings **S116740076**
N/A

Relative:
Higher

CUPA LAKE:

Actual:
1405 ft.

Name: MENDO-LAKE HOME RESPIRATORY SERVICES, INC.
Address: 843 PARALLEL ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000183
Business Type: 1 - CUPA
Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb)
Mailing Address: P. O. Box 639
Mailing Telephone: 7072639888

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MENDO-LAKE HOME RESPIRATORY SERVICES, INC. (Continued)

S116740076

Entered Date: 11/19/2012
 Program Identifier: CUPA-843 PARALLEL DRIVE., LAKEPORT
 Record ID: PR0000581
 Billing Status: 01 - ACTIVE, BILLABLE
 Total Fee Amount: 501
 Current Inspection Date: 10/05/2020
 Contact Name: Robert C. Gambill-MENDO-LAKE HOME RESPIRATORY SERVICES
 Mailing Address: Lakeportq, CA 95453
 APN: 025-431-38
 Program/Element Code: 2002

Name: MENDO-LAKE HOME RESPIRATORY SERVICES, INC.
 Address: 843 PARALLEL ST
 City,State,Zip: LAKEPORT, CA 95453
 Facility: FA0000183
 Business Type: 1 - CUPA
 Program Element: 2800 - CUPA Hazardous Waste Generator Program
 Mailing Address: P. O. Box 639
 Mailing Telephone: 7072639888
 Entered Date: 11/19/2012
 Program Identifier: CUPA
 Record ID: PR0000582
 Billing Status: 01 - ACTIVE, BILLABLE
 Total Fee Amount: 0
 Current Inspection Date: 10/05/2020
 Contact Name: Robert C. Gambill
 Mailing Address: Lakeportq, CA 95453
 APN: 025-431-38
 Program/Element Code: 2800

D19
SSW
 1/8-1/4
 0.167 mi.
 881 ft.

UPS - LAKEPORT
966 PARALLEL DR
LAKEPORT, CA 95453

RCRA-SQG 1000399471
FINDS CAD982502544
ECHO

Site 3 of 4 in cluster D

Relative:
Higher
Actual:
1361 ft.

RCRA-SQG:
 Date Form Received by Agency: 2006-02-24 00:00:00.0
 Handler Name: UPS - LAKEPORT
 Handler Address: 966 PARALLEL DR
 Handler City,State,Zip: LAKEPORT, CA 95453
 EPA ID: CAD982502544
 Contact Name: FRANCIS GONZALES
 Contact Address: Not reported
 Contact City,State,Zip: Not reported
 Contact Telephone: 415-252-4471
 Contact Fax: Not reported
 Contact Email: FHGONZALES@UPS.COM
 Contact Title: Not reported
 EPA Region: 09
 Land Type: Private
 Federal Waste Generator Description: Small Quantity Generator
 Non-Notifier: Not reported
 Biennial Report Cycle: 2005
 Accessibility: Not reported
 Active Site Indicator: Handler Activities
 State District Owner: Not reported
 State District: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

UPS - LAKEPORT (Continued)

1000399471

Mailing Address:	UPS - PLANT ENGINEERING
Mailing City,State,Zip:	SAN FRANCISCO, CA 94103
Owner Name:	UNITED PARCEL SERVICE, INC., AN OHIO COR
Owner Type:	Private
Operator Name:	UPS
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	Yes
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2006-11-15 00:00:00.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS - LAKEPORT (Continued)

1000399471

Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Biennial: List of Years
Year: 2005

[Click Here for Biennial Reporting System Data:](#)

Hazardous Waste Summary:

Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: U240
Waste Description: 2,4-D, SALTS & ESTERS (OR) ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS (OR) DICHLOROPHENOXYACETIC ACID 2,4-D

Handler - Owner Operator:

Owner/Operator Indicator: Operator
Owner/Operator Name: UPS
Legal Status: Private
Date Became Current: 1986-05-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: NOT REQUIRED
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: UNITED PARCEL SERVICE
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS - LAKEPORT (Continued)

1000399471

Owner/Operator Name: UNITED PARCEL SERVICE, INC., AN OHIO COR
Legal Status: Private
Date Became Current: 1986-05-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 55 GLENLAKE PARKWAY, NE
Owner/Operator City,State,Zip: GA 30328
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 1989-05-01 00:00:00.0
Handler Name: UNITED PARCEL SERVICE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2006-02-24 00:00:00.0
Handler Name: UPS - LAKEPORT
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 49211
NAICS Description: COURIERS AND EXPRESS DELIVERY SERVICES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

FINDS:

Registry ID: 110006480192

Click Here:

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

UPS - LAKEPORT (Continued)

1000399471

Environmental Interest/Information System:

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000399471
Registry ID:	110006480192
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110006480192
Name:	UNITED PARCEL SERVICE
Address:	966 PARALLEL DR
City,State,Zip:	LAKEPORT, CA 95453

D20
SSW
 1/8-1/4
 0.173 mi.
 912 ft.

SHAWN ROGERS INDUSTRIES
923 PARALLEL DR SPACE #202
LAKEPORT, CA 95453

RCRA NonGen / NLR

1024863500
CAL000432045

Site 4 of 4 in cluster D

Relative:
Higher
Actual:
1361 ft.

RCRA NonGen / NLR:	
Date Form Received by Agency:	2017-11-13 00:00:00.0
Handler Name:	SHAWN ROGERS INDUSTRIES
Handler Address:	923 PARALLEL DR SPACE #202
Handler City,State,Zip:	LAKEPORT, CA 95453
EPA ID:	CAL000432045
Contact Name:	SHAWN ROGERS
Contact Address:	923 PARALLEL DR SPACE #202
Contact City,State,Zip:	LAKEPORT, CA 95453
Contact Telephone:	767-349-3811
Contact Fax:	Not reported
Contact Email:	SHAWN95451@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	923 PARALLEL DR SPACE #202
Mailing City,State,Zip:	LAKEPORT, CA 95453
Owner Name:	SHAWN ROGERS
Owner Type:	Other
Operator Name:	SHAWN ROGERS
Operator Type:	Other

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

SHAWN ROGERS INDUSTRIES (Continued)

1024863500

Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-07 19:36:59.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHAWN ROGERS INDUSTRIES (Continued)

1024863500

Handler - Owner Operator:

Owner/Operator Indicator: Owner
Owner/Operator Name: SHAWN ROGERS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 923 PARALLEL DR SPACE #202
Owner/Operator City,State,Zip: LAKEPORT, CA 95453
Owner/Operator Telephone: 767-349-3811
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SHAWN ROGERS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 923 PARALLEL DR SPACE #202
Owner/Operator City,State,Zip: LAKEPORT, CA 95453
Owner/Operator Telephone: 767-349-3811
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 2017-11-13 00:00:00.0
Handler Name: SHAWN ROGERS INDUSTRIES
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

C21
SSE
1/8-1/4
0.175 mi.
922 ft.

PERFORMANCE PLUS AUTOMOTIVE
808 BEVINS ST STE 2
LAKEPORT, CA 95453

CERS HAZ WASTE **S121744847**
HWTS **N/A**

Site 2 of 3 in cluster C

Relative:
Higher
Actual:
1362 ft.

CERS HAZ WASTE:
 Name: PERFORMANCE PLUS AUTOMOTIVE
 Address: 808 BEVINS ST STE 2
 City,State,Zip: LAKEPORT, CA 95453
 Site ID: 142544
 CERS ID: 10490677
 CERS Description: Hazardous Waste Generator

Violations:
 Site ID: 142544
 Site Name: Performance Plus Automotive
 Violation Date: 09-28-2017
 Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
 Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.

Violation Notes:
 OBSERVATION: This facility's EPA ID number is inactive. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an EPA ID number. EPA ID for new address will need to be updated. **CORRECTIVE ACTION:** Immediately contact DTSC and reactivate your EPA ID number and submit evidence to the CUPA. Please call the Department of Toxic Substance Control at 800-618-6942 or visit <http://www.dtsc.ca.gov/IDManifest/ReactivateID.cfm> to update your number.
 Violation Division: Lake County Environmental Health
 Violation Program: HW
 Violation Source: CERS

Site ID: 142544
 Site Name: Performance Plus Automotive
 Violation Date: 04-08-2014
 Citation: HSC 6.95 25504(b) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(b)

Violation Description:
 Failure to include adequate emergency response procedures in the business plan for a release or threatened release.
Violation Notes:
 Returned to compliance on 04/08/2014. As noted during our conversation, a full business plan including site map, emergency response plan will be required for facilities that have 55 gallons and above of hazardous material. Please properly dispose of the 55 gallon drum that is used to hold waste oil. You are currently listed as a conditionally exempt small quantity generator. As such you may generate up to 27 gallons of waste a month and must dispose of it within 90 days of the time you accumulate 27 or more gallons. To avoid additional reporting requirements and additional permit fees, you must generate no more than this amount and less than 55 gallons at any one time.

Violation Division: Lake County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 142544
 Site Name: Performance Plus Automotive

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PERFORMANCE PLUS AUTOMOTIVE (Continued)

S121744847

Violation Date: 09-28-2017
Citation: HSC 6.5 25250.19(c) - California Health and Safety Code, Chapter 6.5, Section(s) 25250.19(c)
Violation Description: Failure to record in an operating log and retain for three years the following information for each shipment of recycled or exempted oil:
1) The name and address of the used oil recycling facility or generator claiming the oil meets the requirements of HSC 6.5 25250.1.
2) The name and address of the facility receiving the shipment. 3) The quantity of oil delivered. 4) The date of shipment or delivery. 5) A cross-reference to the records and documentation required under HSC 6.5 25250.1.
Violation Notes: OBSERVATION: The Owner/Operator failed to retain paperwork documenting disposal of used oil for 3 years. CORRECTIVE ACTION: The Owner/Operator shall maintain copies documenting disposal of used oil for a minimum of 3 years.
Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 142544
Site Name: Performance Plus Automotive
Violation Date: 04-08-2014
Citation: HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)
Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.
Violation Notes: Returned to compliance on 08/08/2014. We completed an application for a CERS account while this Teale was there and successfully submitted it to the State.
Violation Division: Lake County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 142544
Site Name: Performance Plus Automotive
Violation Date: 04-08-2014
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes: As noted during our conversation, a full business plan including site map, emergency response plan will be required for facilities that have 55 gallons and above of hazardous material. Please properly dispose of the 55 gallon drum that is used to hold waste oil. You are currently listed as a conditionally exempt small quantity generator. As such you may generate up to 27 gallons of waste a month and must dispose of it within 90 days of the time you accumulate 27 or more gallons. To avoid additional reporting requirements and additional permit fees, you must generate no more than this amount and less than 55 gallons at any one time.
Violation Division: Lake County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PERFORMANCE PLUS AUTOMOTIVE (Continued)

S121744847

Eval Date: 04-08-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-08-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: This is a CESQG. - Needs to submit to CERS and obtain an EPA ID #
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-28-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No reportable quantities of hazardous material found onsite. No HMBP required.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-28-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Drove past old facility location and noticed that they had vacated the building. Researched the facility and found that they had moved to a new location and they were due for a routine inspection. Performed a routine inspection.
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Enforcement Action:

Site ID: 142544
Site Name: Performance Plus Automotive
Site Address: 808 BEVINS ST STE 2
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 09-28-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: CUPA District
Entity Name: Lake County Environmental Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PERFORMANCE PLUS AUTOMOTIVE (Continued)

S121744847

Entity Title: Not reported
Affiliation Address: 922 Bevins Court
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95453
Affiliation Phone: (707) 263-1164

Affiliation Type Desc: Document Preparer
Entity Name: Jose Ramirez
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: same
Entity Title: Not reported
Affiliation Address: 808 Bevins St Ste 2
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95453
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: JOSE RAMIREZ
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 263-3147

Affiliation Type Desc: Legal Owner
Entity Name: JOSE RAMIREZ
Entity Title: Not reported
Affiliation Address: 808 Bevins St Ste 2
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95453
Affiliation Phone: (707) 263-3147

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 808 bevins st suite 2
Affiliation City: lakeport
Affiliation State: ca
Affiliation Country: Not reported
Affiliation Zip: 95453
Affiliation Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PERFORMANCE PLUS AUTOMOTIVE (Continued)

S121744847

Affiliation Type Desc: Identification Signer
Entity Name: Jose Ramirez
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: Performance Plus Automotive
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

HWTS:

Name: PERFORMANCE PLUS AUTOMOTIVE
Address: 808 BEVINS ST STE 2
Address 2: Not reported
City,State,Zip: LAKEPORT, CA 95453
EPA ID: CAL000372643
Inactive Date: 06/30/2016
Create Date: 03/15/2012
Last Act Date: 01/12/2017
Mailing Name: JOSE
Mailing Address: 808 BEVINS ST STE 2
Mailing Address 2: Not reported
Mailing City,State,Zip: LAKEPORT, CA 954530000
Owner Name: JOSE LUIS RAMIREZ
Owner Address: 5385 LIVE OAK DR
Owner Address 2: Not reported
Owner City,State,Zip: KELSEYVILLE, CA 954510000
Contact Name: JOSE LUIS RAMIREZ
Contact Address: 5385 LIVE OAK DR
Contact Address 2: 808 BEVINS ST SUITE 2
City,State,Zip: LAKEPORT, CA 95453

NAICS:

EPA ID: CAL000372643
Create Date: 2012-03-15 16:42:48.383
NAICS Code: 811111
NAICS Description: General Automotive Repair
Issued EPA ID Date: 2012-03-15 16:42:48.32000
Inactive Date: 2016-06-30 00:00:00
Facility Name: PERFORMANCE PLUS AUTOMOTIVE
Facility Address: 808 BEVINS ST STE 2
Facility Address 2: Not reported
Facility City: LAKEPORT
Facility County: Not reported
Facility State: CA
Facility Zip: 95453

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

C22 **PERFORMANCE PLUS**
SSE **808 BEVINS ST # 2**
1/8-1/4 **LAKEPORT, CA 95453**
0.175 mi.
922 ft. **Site 3 of 3 in cluster C**

CUPA Listings **S112444521**
 N/A

Relative:
Higher
Actual:
1362 ft.

CUPA LAKE:

Name: PERFORMANCE PLUS
Address: 808 BEVINS ST # 2
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000861
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 808 BEVINS ST # 2
Mailing Telephone: Not reported
Entered Date: 12/06/2013
Program Identifier: CUPA-808 BEVINS #2, LAKEPORT
Record ID: PR0002086
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 09/28/2020
Contact Name: PERFORMANCE PLUS
Mailing Address: LAKEPORT, CA 95453
APN: Not reported
Program/Element Code: 2800

Name: PERFORMANCE PLUS
Address: 808 BEVINS ST # 2
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000861
Business Type: 1 - CUPA
Program Element: 2008 - HMRRP Category 8 (Conditionally exempt small
Mailing Address: 808 BEVINS ST # 2
Mailing Telephone: 7073492985
Entered Date: 01/16/2013
Program Identifier: CUPA PROGRAM-808 BEVINS ST., LAKEPORT
Record ID: PR0001556
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 141
Current Inspection Date: 09/28/2020
Contact Name: PERFORMANCE PLUS
Mailing Address: LAKEPORT, CA 95453
APN: Not reported
Program/Element Code: 2008

23 **LAKE COUNTY TRIBAL HEALTH CONSORTIUM INC**
SE **925 BEVINS CT**
1/8-1/4 **LAKEPORT, CA 95453**
0.177 mi.
936 ft.

RCRA NonGen / NLR **1024791417**
 CAL000105245

Relative:
Higher
Actual:
1364 ft.

RCRA NonGen / NLR:

Date Form Received by Agency: 1999-01-06 00:00:00.0
Handler Name: LAKE COUNTY TRIBAL HEALTH CONSORTIUM INC
Handler Address: 925 BEVINS CT
Handler City,State,Zip: LAKEPORT, CA 95453-0000
EPA ID: CAL000105245
Contact Name: ROSELINE MICHEL, DO
Contact Address: 925 BEVINS CT
Contact City,State,Zip: LAKEPORT, CA 95453

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKE COUNTY TRIBAL HEALTH CONSORTIUM INC (Continued)

1024791417

Contact Telephone:	707-263-8382
Contact Fax:	707-263-1909
Contact Email:	MDECKER@LCTHC.ORG
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 1950
Mailing City, State, Zip:	LAKEPORT, CA 95453-0000
Owner Name:	LAKE COUNTY TRIBAL HEALTH CONSE INC
Owner Type:	Other
Operator Name:	ROSELINE MICHEL, DO
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKE COUNTY TRIBAL HEALTH CONSORTIUM INC (Continued)

1024791417

Human Exposure Controls Indicator: N/A
Groundwater Controls Indicator: N/A
Operating TSDF Universe: Not reported
Full Enforcement Universe: Not reported
Significant Non-Complier Universe: No
Unaddressed Significant Non-Complier Universe: No
Addressed Significant Non-Complier Universe: No
Significant Non-Complier With a Compliance Schedule Universe: No
Financial Assurance Required: Not reported
Handler Date of Last Change: 2018-09-05 15:42:28.0
Recognized Trader-Importer: No
Recognized Trader-Exporter: No
Importer of Spent Lead Acid Batteries: No
Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Owner
Owner/Operator Name: LAKE COUNTY TRIBAL HEALTH CONSE INC
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 925 BEVINS CT
Owner/Operator City,State,Zip: LAKEPORT, CA 95453-0000
Owner/Operator Telephone: 707-263-8382
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ROSELINE MICHEL, DO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 925 BEVINS CT
Owner/Operator City,State,Zip: LAKEPORT, CA 95453
Owner/Operator Telephone: 707-263-8382
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 1999-01-06 00:00:00.0
Handler Name: LAKE COUNTY TRIBAL HEALTH CONSORTIUM INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKE COUNTY TRIBAL HEALTH CONSORTIUM INC (Continued)

1024791417

Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 62121
NAICS Description: OFFICES OF DENTISTS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

**E24
SW
1/8-1/4
0.192 mi.
1012 ft.**

**UPS LAKEPORT CENTER CALAK
1275 CRAIG AVE
LAKEPORT, CA 95453
Site 1 of 3 in cluster E**

**CUPA Listings S112444383
NPDES N/A
CIWQS
CERS**

**Relative:
Higher**

CUPA LAKE:

**Actual:
1378 ft.**

Name: UNITED PARCEL SERVICE-LAKEPORT
Address: 1275 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000114
Business Type: 1 - CUPA
Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb
Mailing Address: 8400 Pardee Drive
Mailing Telephone: 7072630832
Entered Date: 11/20/2012
Program Identifier: CUPA-1275 CRAIG AVE., LAKEPORT
Record ID: PR0000736
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 501
Current Inspection Date: 10/02/2021
Contact Name: UPS- Lakeport
Mailing Address: Oakland, CA 94621
APN: Not reported
Program/Element Code: 2002

Name: UNITED PARCEL SERVICE-LAKEPORT
Address: 1275 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000114
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 8400 Pardee Drive
Mailing Telephone: 7072630832
Entered Date: 11/20/2012
Program Identifier: CUPA
Record ID: PR0000737
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 10/02/2021
Contact Name: UPS- Lakeport
Mailing Address: Oakland, CA 94621
APN: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

Program/Element Code: 2800

NPDES:

Name: UPS LAKEPORT CENTER CALAK
Address: 1275 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Facility Status: Not reported
NPDES Number: Not reported
Region: Not reported
Agency Number: Not reported
Regulatory Measure ID: Not reported
Place ID: Not reported
Order Number: Not reported
WDID: 5S17NEC000341
Regulatory Measure Type: Industrial
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: Not reported
Discharge Name: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Status: Active
Status Date: 08/14/2015
Operator Name: United Parcel Service Oakland Hub
Operator Address: 8400 Pardee Drive
Operator City: Oakland
Operator State: California
Operator Zip: 94621

NPDES as of 03/2018:

NPDES Number: Not reported
Status: Not reported
Agency Number: Not reported
Region: 5S
Regulatory Measure ID: 198507
Order Number: Not reported
Regulatory Measure Type: Industrial
Place ID: Not reported
WDID: 5S17NEC000341
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Not reported
Discharge Address: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Received Date: 08/14/2015
Processed Date: 03/30/1992
Status: Active
Status Date: 08/14/2015

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

Place Size: 62262
Place Size Unit: SqFt
Contact: Ramona Powell
Contact Title: District Environmental Coordinator
Contact Phone: 916-373-6874
Contact Phone Ext: Not reported
Contact Email: repowell@ups.com
Operator Name: United Parcel Service Oakland Hub
Operator Address: 8400 Pardee Drive
Operator City: Oakland
Operator State: California
Operator Zip: 94621
Operator Contact: Carlos Medina
Operator Contact Title: District Plant Engineering Manager
Operator Contact Phone: 916-373-6874
Operator Contact Phone Ext: Not reported
Operator Contact Email: repowell@ups.com
Operator Type: Private Business
Developer: Not reported
Developer Address: Not reported
Developer City: Not reported
Developer State: California
Developer Zip: Not reported
Developer Contact: Not reported
Developer Contact Title: Not reported
Constype Linear Utility Ind: Not reported
Emergency Phone: 510-453-2090
Emergency Phone Ext: Not reported
Constype Above Ground Ind: Not reported
Constype Below Ground Ind: Not reported
Constype Cable Line Ind: Not reported
Constype Comm Line Ind: Not reported
Constype Commercial Ind: Not reported
Constype Electrical Line Ind: Not reported
Constype Gas Line Ind: Not reported
Constype Industrial Ind: Not reported
Constype Other Description: Not reported
Constype Other Ind: Not reported
Constype Recons Ind: Not reported
Constype Residential Ind: Not reported
Constype Transport Ind: Not reported
Constype Utility Description: Not reported
Constype Utility Ind: Not reported
Constype Water Sewer Ind: Not reported
Dir Discharge Uswater Ind: N
Receiving Water Name: Clear Lake
Certifier: CARLOS MEDINA
Certifier Title: President, North California District
Certification Date: 09-DEC-16
Primary Sic: 4215-Courier Services Except by Air
Secondary Sic: Not reported
Tertiary Sic: Not reported

NPDES Number: CAS000001
Status: Active
Agency Number: 0
Region: 5S

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

Regulatory Measure ID:	198507
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S17NEC000341
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/30/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	United Parcel Service Oakland Hub
Discharge Address:	8400 Pardee Drive
Discharge City:	Oakland
Discharge State:	California
Discharge Zip:	94621
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

Constype Recons Ind: Not reported
Constype Residential Ind: Not reported
Constype Transport Ind: Not reported
Constype Utility Description: Not reported
Constype Utility Ind: Not reported
Constype Water Sewer Ind: Not reported
Dir Discharge Uswater Ind: Not reported
Receiving Water Name: Not reported
Certifier: Not reported
Certifier Title: Not reported
Certification Date: Not reported
Primary Sic: Not reported
Secondary Sic: Not reported
Tertiary Sic: Not reported

Name: UPS LAKEPORT CENTER CALAK
Address: 1275 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Facility Status: Active
NPDES Number: CAS000001
Region: 5S
Agency Number: 0
Regulatory Measure ID: 198507
Place ID: Not reported
Order Number: 97-03-DWQ
WDID: 5S17NEC000341
Regulatory Measure Type: Enrollee
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 03/30/1992
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: 8400 Pardee Drive
Discharge Name: United Parcel Service Oakland Hub
Discharge City: Oakland
Discharge State: California
Discharge Zip: 94621
Status: Not reported
Status Date: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported

NPDES as of 03/2018:
NPDES Number: Not reported
Status: Not reported
Agency Number: Not reported
Region: 5S
Regulatory Measure ID: 198507
Order Number: Not reported
Regulatory Measure Type: Industrial
Place ID: Not reported
WDID: 5S17NEC000341
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

Effective Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Not reported
Discharge Address: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Received Date: 08/14/2015
Processed Date: 03/30/1992
Status: Active
Status Date: 08/14/2015
Place Size: 62262
Place Size Unit: SqFt
Contact: Ramona Powell
Contact Title: District Environmental Coordinator
Contact Phone: 916-373-6874
Contact Phone Ext: Not reported
Contact Email: repowell@ups.com
Operator Name: United Parcel Service Oakland Hub
Operator Address: 8400 Pardee Drive
Operator City: Oakland
Operator State: California
Operator Zip: 94621
Operator Contact: Carlos Medina
Operator Contact Title: District Plant Engineering Manager
Operator Contact Phone: 916-373-6874
Operator Contact Phone Ext: Not reported
Operator Contact Email: repowell@ups.com
Operator Type: Private Business
Developer: Not reported
Developer Address: Not reported
Developer City: Not reported
Developer State: California
Developer Zip: Not reported
Developer Contact: Not reported
Developer Contact Title: Not reported
Constype Linear Utility Ind: Not reported
Emergency Phone: 510-453-2090
Emergency Phone Ext: Not reported
Constype Above Ground Ind: Not reported
Constype Below Ground Ind: Not reported
Constype Cable Line Ind: Not reported
Constype Comm Line Ind: Not reported
Constype Commercial Ind: Not reported
Constype Electrical Line Ind: Not reported
Constype Gas Line Ind: Not reported
Constype Industrial Ind: Not reported
Constype Other Description: Not reported
Constype Other Ind: Not reported
Constype Recons Ind: Not reported
Constype Residential Ind: Not reported
Constype Transport Ind: Not reported
Constype Utility Description: Not reported
Constype Utility Ind: Not reported
Constype Water Sewer Ind: Not reported
Dir Discharge Uswater Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

Receiving Water Name: Clear Lake
Certifier: CARLOS MEDINA
Certifier Title: President, North California District
Certification Date: 09-DEC-16
Primary Sic: 4215-Courier Services Except by Air
Secondary Sic: Not reported
Tertiary Sic: Not reported

NPDES Number: CAS000001
Status: Active
Agency Number: 0
Region: 5S
Regulatory Measure ID: 198507
Order Number: 97-03-DWQ
Regulatory Measure Type: Enrollee
Place ID: Not reported
WDID: 5S17NEC000341
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 03/30/1992
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: United Parcel Service Oakland Hub
Discharge Address: 8400 Pardee Drive
Discharge City: Oakland
Discharge State: California
Discharge Zip: 94621
Received Date: Not reported
Processed Date: Not reported
Status: Not reported
Status Date: Not reported
Place Size: Not reported
Place Size Unit: Not reported
Contact: Not reported
Contact Title: Not reported
Contact Phone: Not reported
Contact Phone Ext: Not reported
Contact Email: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported
Operator Contact: Not reported
Operator Contact Title: Not reported
Operator Contact Phone: Not reported
Operator Contact Phone Ext: Not reported
Operator Contact Email: Not reported
Operator Type: Not reported
Developer: Not reported
Developer Address: Not reported
Developer City: Not reported
Developer State: Not reported
Developer Zip: Not reported
Developer Contact: Not reported
Developer Contact Title: Not reported
Constype Linear Utility Ind: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	UPS LAKEPORT CENTER CALAK
Address:	1275 CRAIG AVE
City,State,Zip:	LAKEPORT, CA 95453
Agency:	United Parcel Service Oakland Hub
Agency Address:	8400 Pardee Drive, Oakland, CA 94621
Place/Project Type:	Industrial - Courier Services Except by Air
SIC/NAICS:	4215
Region:	5S
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	5S17NEC000341
NPDES Number:	CAS000001
Adoption Date:	01/01/1900
Effective Date:	03/30/1992
Termination Date:	01/01/1900
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	39.035791
Longitude:	-122.928231

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS LAKEPORT CENTER CALAK (Continued)

S112444383

CERS:

Name: UPS LAKEPORT CENTER CALAK
Address: 1275 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Site ID: 545536
CERS ID: 269125
CERS Description: Industrial Facility Storm Water

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-16-2017
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: On 16 February 2017, Central Valley Regional Water Quality Control Board staff inspected the UPS Lakeport facility. During the inspection, staff determined that all industrial activities occurred indoors and all industrial materials were stored indoors or in containers.
Eval Division: Water Boards
Eval Program: INDSTW
Eval Source: SMARTS

Affiliation:

Affiliation Type Desc: Owner/Operator
Entity Name: United Parcel Service Oakland Hub
Entity Title: Operator
Affiliation Address: 8400 Pardee Drive
Affiliation City: Oakland
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94621
Affiliation Phone: Not reported

E25 **UPS - LAKEPORT**
SW **1275 CRAIG AVENUE**
1/8-1/4 **LAKEPORT, CA 95453**
0.192 mi.
1012 ft. **Site 2 of 3 in cluster E**

CERS HAZ WASTE **S121776653**
CERS **N/A**

Relative:
Higher
Actual:
1378 ft.

CERS HAZ WASTE:
Name: UPS - LAKEPORT
Address: 1275 CRAIG AVENUE
City,State,Zip: LAKEPORT, CA 95453
Site ID: 404957
CERS ID: 10135534
CERS Description: Hazardous Waste Generator

CERS:

Name: UPS - LAKEPORT
Address: 1275 CRAIG AVENUE
City,State,Zip: LAKEPORT, CA 95453
Site ID: 404957
CERS ID: 10135534
CERS Description: Chemical Storage Facilities

Evaluation:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS - LAKEPORT (Continued)

S121776653

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-30-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: no violations noted
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-30-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: You may wish to consider taking advantage of the exemption for up to 500 gallons of propane that is used for heating employee work areas, food prep, etc.

Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-02-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection. No violations noted at time of inspection.
Eval Division: Lake County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-02-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection. No violations noted at time of inspection.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:

Affiliation Type Desc: Environmental Contact
Entity Name: Jennifer Trigos
Entity Title: Not reported
Affiliation Address: 8400 Pardee Drive
Affiliation City: Oakland
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94621
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 8400 Pardee Drive, Attn: Plant Engineering
Affiliation City: Oakland
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94621

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPS - LAKEPORT (Continued)

S121776653

Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	Lake County Environmental Health
Entity Title:	Not reported
Affiliation Address:	922 Bevins Court
Affiliation City:	Lakeport
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95453
Affiliation Phone:	(707) 263-1164
Affiliation Type Desc:	Identification Signer
Entity Name:	Carlos Medina
Entity Title:	District Plant Engineering Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	United Parcel Service, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(510) 453-2090
Affiliation Type Desc:	Document Preparer
Entity Name:	Alvin Solis
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	United Parcel Service, Inc.
Entity Title:	Not reported
Affiliation Address:	55 Glenlake Parkway, NE
Affiliation City:	Atlanta
Affiliation State:	GA
Affiliation Country:	United States
Affiliation Zip:	30328
Affiliation Phone:	(510) 453-2090
Affiliation Type Desc:	Parent Corporation
Entity Name:	United Parcel Service, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

UPS - LAKEPORT (Continued)

S121776653

Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: Not reported

F26
SSE
1/8-1/4
0.197 mi.
1041 ft.

LAKEPORT TRANSFER STATION
910 BEVINS STREET
LAKEPORT, CA 95453

RCRA NonGen / NLR

1024784198
CAH111000086

Site 1 of 2 in cluster F

Relative:
Higher
Actual:
1361 ft.

RCRA NonGen / NLR:	
Date Form Received by Agency:	1991-06-25 00:00:00.0
Handler Name:	LAKEPORT TRANSFER STATION
Handler Address:	910 BEVINS STREET
Handler City,State,Zip:	LAKEPORT, CA 95453-0000
EPA ID:	CAH111000086
Contact Name:	-- HAY
Contact Address:	--
Contact City,State,Zip:	--
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	255 N FORBES ST
Mailing City,State,Zip:	LAKEPORT, CA 95453-0000
Owner Name:	COUNTY OF LAKE
Owner Type:	Other
Operator Name:	-- HAY
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKEPORT TRANSFER STATION (Continued)

1024784198

Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:40:21.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	COUNTY OF LAKE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	--
Owner/Operator City,State,Zip:	--
Owner/Operator Telephone:	000-000-0000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	-- HAY
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAKEPORT TRANSFER STATION (Continued)

1024784198

Owner/Operator Address: --
 Owner/Operator City,State,Zip: --
 Owner/Operator Telephone: Not reported
 Owner/Operator Telephone Ext: Not reported
 Owner/Operator Fax: Not reported
 Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 1991-06-25 00:00:00.0
 Handler Name: LAKEPORT TRANSFER STATION
 Federal Waste Generator Description: Not a generator, verified
 State District Owner: Not reported
 Large Quantity Handler of Universal Waste: No
 Recognized Trader Importer: No
 Recognized Trader Exporter: No
 Spent Lead Acid Battery Importer: No
 Spent Lead Acid Battery Exporter: No
 Current Record: Yes
 Non Storage Recycler Activity: Not reported
 Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 56299
 NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

F27
SSE
1/8-1/4
0.197 mi.
1041 ft.

LAKEPORT TRANSFER STATION
910 BEVINS STREET
LAKEPORT, CA 95453
Site 2 of 2 in cluster F

SWF/LF **S113019761**
HAZNET **N/A**
HWTS

Relative:
Higher
Actual:
1361 ft.

SWF/LF (SWIS):
 Name: LAKEPORT TRANSFER STATION
 Address: 910 BEVINS STREET
 City,State,Zip: LAKEPORT, CA 95453
 Region: STATE
 Facility ID: 17-AA-0002
 SWIS Number: 17-AA-0002
 Point of Contact: Christine Karl
 Is Archived: Yes
 Is Closed Illegal Abandoned: No
 Is Site Inert Debris Engineered Fill: No
 Is Financial Assurances Responsible: No
 Absorbed On: Not reported
 Operational Status: Closed
 Absorbed By: Not reported
 Closed Illegal Abandoned Category: Not reported
 EPA Federal Registry ID: Not reported
 ARB District: Lake

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSFER STATION (Continued)

S113019761

SWRCB Region: Central Valley
Local Government: Lakeport
Reporting Agency Legal Name: County of Lake
Reporting Agency Department: Environmental Health Division
Enforcing Agency Legal Name: County of Lake
Enforcing Agency Department: Environmental Health Division
Regulation Status: Surrendered

Operator:

SWIS Number: 17-AA-0002
Site Name: Lakeport Transfer Station
Site Operational Status: Closed
Site Type: Non-Disposal Only
Site Regulatory Status: Surrendered
Latitude: 39.03455
Longitude: -122.9233
Is Archived: Yes
Operator: County Of Lake
Started On: 8/16/1994
Contact Name: Lars Ewing
Contact Title: Public Service Director
Contact Email: Not reported
Contact Phone: (707) 262-1760
Street Address: 333 Second St
Operator City: Lakeport
Operator State: CA
Operator Zip: 95453

Waste:

SWIS Number: 17-AA-0002
Site Name: Lakeport Transfer Station
Activity: Large Volume Transfer/Processing Facility
Waste Type: Mixed municipal
Site Is Archived: Yes
Site Operational Status: Closed
Site Regulatory Status: Surrendered
Site Type: Non-Disposal Only
Point of Contact: Christine Karl
Activity Is Archived: Yes
Activity Operational Status: Closed
Activity Regulatory Status: Surrendered
Activity Category: Transfer/Processing
Activity Classification: Solid Waste Facility

HAZNET:

Name: LAKEPORT TRANSFER STATION
Address: 910 BEVINS STREET
Address 2: Not reported
City,State,Zip: LAKEPORT, CA 954530000
Contact: --
Telephone: --
Mailing Name: Not reported
Mailing Address: 255 N FORBES ST

Year: 2009
Gepaid: CAH111000086

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSFER STATION (Continued)

S113019761

TSD EPA ID: CAH111000474
CA Waste Code: 612 - Household waste
Disposal Method: -
Tons: 0.1901

Additional Info:

Year: 2009
Gen EPA ID: CAH111000086

Shipment Date: 20090624
Creation Date: 7/20/2009 18:30:33
Receipt Date: 20090624
Manifest ID: 000636751JJK
Trans EPA ID: CAL000272339
Trans Name: SAN BERNARDINO COUNTY FIRE DEPARTMENT
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSD EPA ID: CAH111000474
Trans Name: SAN BERNARDINO COUNTY FIRE DEPARTMENT
TSD EPA ID: Not reported
TSD Name: Not reported
Waste Code Description: 612 - Household waste
RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: 0.1251
Waste Quantity: 30
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20090624
Creation Date: 7/20/2009 18:30:33
Receipt Date: 20090624
Manifest ID: 000636751JJK
Trans EPA ID: CAL000272339
Trans Name: SAN BERNARDINO COUNTY FIRE DEPARTMENT
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSD EPA ID: CAH111000474
Trans Name: SAN BERNARDINO COUNTY FIRE DEPARTMENT
TSD EPA ID: Not reported
TSD Name: Not reported
Waste Code Description: 612 - Household waste
RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: 0.065
Waste Quantity: 130
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT TRANSFER STATION (Continued)

S113019761

HWTS:

Name: LAKEPORT TRANSFER STATION
Address: 910 BEVINS STREET
Address 2: Not reported
City,State,Zip: LAKEPORT, CA 954530000
EPA ID: CAH111000086
Inactive Date: Not reported
Create Date: 06/25/1991
Last Act Date: 08/18/1999
Mailing Name: Not reported
Mailing Address: 255 N FORBES ST
Mailing Address 2: Not reported
Mailing City,State,Zip: LAKEPORT, CA 954530000
Owner Name: COUNTY OF LAKE
Owner Address: --
Owner Address 2: Not reported
Owner City,State,Zip: --, 99 --
Contact Name: --
Contact Address: --
Contact Address 2: Not reported
City,State,Zip: --, 99 --

E28
SW
1/8-1/4
0.205 mi.
1082 ft.

QUAIL RUN FITNESS CENTER
1279 CRAIG AVE
LAKEPORT, CA 95453
Site 3 of 3 in cluster E

CUPA Listings S117742429
CERS N/A

Relative:
Higher
Actual:
1379 ft.

CUPA LAKE:
Name: QUAIL RUN FITNESS CENTER
Address: 1279 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000718
Business Type: 5 - FOOD
Program Element: 2001 - HMRRP Category 1 (55-110 gal, 500-1,000 lbs)
Mailing Address: 1279 CRAIG AVE
Mailing Telephone: 7072636565
Entered Date: 04/09/2015
Program Identifier: CUPA-QUAIL RUN FITNESS CTR-1279 CRAIG AVE., LAKEPORT
Record ID: PR0002353
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 324
Current Inspection Date: 04/09/2015
Contact Name: DARRON JORDAN
Mailing Address: LAKEPORT, CA 95453
APN: 025-441-38
Program/Element Code: 2001

Name: QUAIL RUN FITNESS CENTER
Address: 1279 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000718
Business Type: 5 - FOOD
Program Element: 2003 - HMRRP Category 3 (501-1000 gal, 5,001-10,000)
Mailing Address: 1279 CRAIG AVE
Mailing Telephone: Not reported
Entered Date: 04/09/2015

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

QUAIL RUN FITNESS CENTER (Continued)

S117742429

Program Identifier: CUPA
Record ID: PR0002354
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 731
Current Inspection Date: 05/06/2032
Contact Name: Not reported
Mailing Address: LAKEPORT, CA 95453
APN: 025-441-38
Program/Element Code: 2003

Name: QUAIL RUN FITNESS CENTER
Address: 1279 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0001136
Business Type: 1 - CUPA
Program Element: 2000 - CUPA HMRRP Program (Business Plan)
Mailing Address: 1279 CRAIG AVE
Mailing Telephone: Not reported
Entered Date: 04/09/2015
Program Identifier: CUPA
Record ID: PR0002355
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 01/27/2023
Contact Name: Not reported
Mailing Address: Lakeport, CA 95453
APN: 025-441-380
Program/Element Code: 2000

CERS:

Name: QUAIL RUN FITNESS CENTER
Address: 1279 CRAIG AVE
City,State,Zip: LAKEPORT, CA 95453
Site ID: 400036
CERS ID: 10630732
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 400036
Site Name: Quail Run Fitness Center
Violation Date: 04-13-2015
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 06/29/2015. Please complete a Hazardous Materials Business Plan. The only chemical in reportable quantities is propane. The Business Plan information should be electronically submitted at the following location: www.cers.calepa.ca.gov
Violation Division: Lake County Environmental Health
Violation Program: HMRRP
Violation Source: CERS
Site ID: 400036
Site Name: Quail Run Fitness Center
Violation Date: 01-27-2020

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

QUAIL RUN FITNESS CENTER (Continued)

S117742429

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: OBSERVATION: Owner/Operator failed to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be submitted by March 1st of each year. CORRECTIVE ACTION: Owner/Operator shall submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required within 30 days of this inspection.
Violation Division: Lake County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-27-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Routine inspection.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-09-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Quail Run Fitness G do they need to do BP? Yes G category 1 at least to get them in the system. Sent email to Warren G at OSHA pressure vessel. These tanks are not on the state permit list.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-13-2015
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-27-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Ferrell Gas called for inspection records for UST propane tanks at Quail Run. Left a message for Drew Hessler copy to ec
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-27-2015

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

QUAIL RUN FITNESS CENTER (Continued)

S117742429

Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Follow up Call Darron Jordan at Quail Run to see when I can assist him in setting up CERS 263-6565 no answer on phone. Sent email darronjordan@mchsi.com to ask him to contact me about CERS and some questions about the installation of the tanks. Copy to ec
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-29-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Left message for Dan Davidson re tank inspection reports.
Eval Division: Lake County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:
Site ID: 400036
Site Name: Quail Run Fitness Center
Site Address: 1279 CRAIG AVE
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 01-27-2020
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 400036
Site Name: Quail Run Fitness Center
Site Address: 1279 CRAIG AVE
Site City: LAKEPORT
Site Zip: 95453
Enf Action Date: 04-13-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Lake County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Coordinates:
Site ID: 400036
Facility Name: Quail Run Fitness Center
Env Int Type Code: HMBP
Program ID: 10630732
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 39.035590
Longitude: -122.928890

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

QUAIL RUN FITNESS CENTER (Continued)

S117742429

Affiliation:

Affiliation Type Desc: CUPA District
Entity Name: Lake County Environmental Health
Entity Title: Not reported
Affiliation Address: 922 Bevins Court
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95453
Affiliation Phone: (707) 263-1164

Affiliation Type Desc: Document Preparer
Entity Name: darron jordan
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: darron jordan
Entity Title: Not reported
Affiliation Address: 1279 Craig Ave
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95453
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1279 Craig Ave
Affiliation City: Lakeport
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95453
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: darron jordan
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: carma joradn
Entity Title: Not reported
Affiliation Address: 1279 Craig Ave
Affiliation City: Lakeport
Affiliation State: CA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

QUAIL RUN FITNESS CENTER (Continued)

S117742429

Affiliation Country: United States
Affiliation Zip: 95453
Affiliation Phone: (707) 263-6565

Affiliation Type Desc: Operator
Entity Name: carma jordan
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 263-6565

Affiliation Type Desc: Parent Corporation
Entity Name: Quail Run Fitness Center
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

29
West
1/4-1/2
0.320 mi.
1692 ft.

PARKSIDE SUBDIVISION
1453 MARTIN STREET
LAKEPORT, CA 95453

ENVIROSTOR **S108054453**
VCP **N/A**
LIENS

Relative:
Higher
Actual:
1408 ft.

ENVIROSTOR:
Name: PARKSIDE SUBDIVISION
Address: 1453 MARTIN STREET
City,State,Zip: LAKEPORT, CA 95453
Facility ID: 60000339
Status: No Further Action
Status Date: 03/27/2007
Site Code: 101792
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 22.4
NPL: NO
Regulatory Agencies: SMBRP, LAKE COUNTY
Lead Agency: SMBRP
Program Manager: Tami Trearse
Supervisor: Fernando A. Amador
Division Branch: Cleanup Sacramento
Assembly: 04
Senate: 02
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 39.03846
Longitude: -122.9323
APN: 00503049
Past Use: AGRICULTURAL - ORCHARD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARKSIDE SUBDIVISION (Continued)

S108054453

Potential COC: Arsenic
Confirmed COC: Arsenic
Potential Description: SOIL
Alias Name: 00503049
Alias Type: APN
Alias Name: 110033610466
Alias Type: EPA (FRS #)
Alias Name: 101792
Alias Type: Project Code (Site Code)
Alias Name: 60000339
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 06/16/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/27/2007
Comments: NFA letter sent out on March 27, 2007

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/27/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/01/2010
Comments: Third Collection letter was sent out since there has been no reply.
Next step is to send to collections.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Lien
Completed Date: 04/13/2012
Comments: Lien and letter to Lake County Recorders office sent on April 13th
and uploaded to Envirostor. Will load stamped Lien when received from
county.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARKSIDE SUBDIVISION (Continued)

S108054453

Name: PARKSIDE SUBDIVISION
Address: 1453 MARTIN STREET
City,State,Zip: LAKEPORT, CA 95453
Facility ID: 60000339
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 22.4
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP, LAKE COUNTY
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Tami Trearse
Supervisor: Fernando A. Amador
Division Branch: Cleanup Sacramento
Site Code: 101792
Assembly: 04
Senate: 02
Special Programs Code: Voluntary Cleanup Program
Status: No Further Action
Status Date: 03/27/2007
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 39.03846 / -122.9323
APN: 00503049
Past Use: AGRICULTURAL - ORCHARD
Potential COC: 30001
Confirmed COC: 30001
Potential Description: SOIL
Alias Name: 00503049
Alias Type: APN
Alias Name: 110033610466
Alias Type: EPA (FRS #)
Alias Name: 101792
Alias Type: Project Code (Site Code)
Alias Name: 60000339
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 06/16/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/27/2007
Comments: NFA letter sent out on March 27, 2007

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/27/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PARKSIDE SUBDIVISION (Continued)

S108054453

Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/01/2010
Comments: Third Collection letter was sent out since there has been no reply.
Next step is to send to collections.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Lien
Completed Date: 04/13/2012
Comments: Lien and letter to Lake County Recorders office sent on April 13th
and uploaded to Envirostor. Will load stamped Lien when received from
county.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LIENS:

Name: PARKSIDE SUBDIVISION
City,State,Zip: LAKEPORT, CA 95453
Envirostor Id: 60000339
Latitude: 39.038469
Longitude: -122.93230
Project Mgr: TAMI TREARSE
Project Code: 101792
If Satisfied: NO
Date Satisfied: Not reported
Site Status: NO FURTHER ACTION
Site Type: VOLUNTARY CLEANUP
Completed: 04/13/2012
Lien Amount: \$4,755.19
Amount Remaining: Not reported
APNS: 503049
Description: Former orchard site

G30
SE
1/4-1/2
0.422 mi.
2230 ft.
Relative:
Lower
Actual:
1351 ft.

PACIFIC BELL
555 LAKEPORT BOULEVARD
LAKEPORT, CA 95453
Site 1 of 2 in cluster G

RCRA-LQG **1000251835**
LUST **CAT080028863**
SWEEPS UST
HIST UST
FINDS
ECHO
CUPA Listings
EMI

RCRA-LQG:
Date Form Received by Agency: 1981-02-05 00:00:00.0
Handler Name: PACIFIC BELL
Handler Address: 555 LAKEPORT BOULEVARD
Handler City,State,Zip: LAKEPORT, CA 95453
EPA ID: CAT080028863

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Contact Name:	ENVIRONMENTAL MANAGER
Contact Address:	555 LAKEPORT BOULEVARD
Contact City,State,Zip:	LAKEPORT, CA 95453
Contact Telephone:	916-485-0997
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	1
Mailing Address:	3707 KINGS WAY SEC A-6
Mailing City,State,Zip:	SACRAMENTO, CA 95821
Owner Name:	THE PACIFIC TELEPHONE AND TELEGRAPH CO
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	Yes
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSD Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 04:00:48.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	THE PACIFIC TELEPHONE AND TELEGRAPH CO
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1981-02-05 00:00:00.0
Handler Name:	PACIFIC BELL
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found
--------------	----------------------

Facility Has Received Notices of Violations:

Violations:	No Violations Found
-------------	---------------------

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Evaluation Action Summary:

Evaluations:

No Evaluations Found

LUST:

Name: AT&T
Address: 555 LAKEPORT BOULEVARD
City,State,Zip: LAKEPORT, CA 95453
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603315849
Global Id: T0603315849
Latitude: 39.034643
Longitude: -122.919696
Status: Completed - Case Closed
Status Date: 11/27/2006
Case Worker: GTM
RB Case Number: 170114
Local Agency: LAKE COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:

Global Id: T0603315849
Contact Type: Local Agency Caseworker
Contact Name: KEN WILLIAMS
Organization Name: LAKE COUNTY
Address: 922 BEVINS COURT
City: LAKEPORT
Email: Not reported
Phone Number: Not reported

Global Id: T0603315849
Contact Type: Regional Board Caseworker
Contact Name: GLENN T. MEEKS
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: gmeeks@waterboards.ca.gov
Phone Number: Not reported

LUST:

Global Id: T0603315849
Action Type: RESPONSE
Date: 09/08/2006
Action: Request for Closure

Global Id: T0603315849
Action Type: ENFORCEMENT
Date: 03/30/2006
Action: Staff Letter

Global Id: T0603315849

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Action Type: ENFORCEMENT
Date: 11/27/2006
Action: Closure/No Further Action Letter

Global Id: T0603315849
Action Type: Other
Date: 03/17/2005
Action: Leak Discovery

Global Id: T0603315849
Action Type: Other
Date: 03/29/2006
Action: Leak Reported

Global Id: T0603315849
Action Type: REMEDIATION
Date: 09/20/2006
Action: Not reported

LUST:

Global Id: T0603315849
Status: Open - Case Begin Date
Status Date: 03/17/2005

Global Id: T0603315849
Status: Open - Site Assessment
Status Date: 03/17/2005

Global Id: T0603315849
Status: Completed - Case Closed
Status Date: 11/27/2006

SWEEPS UST:

Name: PACIFIC BELL (TD-255)LKPTCA022
Address: 555 LAKEPORT BLVD
City: LAKEPORT
Status: Active
Comp Number: 57526
Number: 9
Board Of Equalization: 44-001027
Referral Date: Not reported
Action Date: 10-29-88
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 17-000-057526-000001
Tank Status: A
Capacity: 1500
Active Date: 10-29-88
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 1

HIST UST:

Name: PACIFIC BELL (TD-255)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Address: 555 LAKEPORT
City,State,Zip: LAKEPORT, CA 95453
File Number: 000259F9
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000259F9.pdf>
Region: STATE
Facility ID: 00000057526
Facility Type: Other
Other Type: SIC 4800
Contact Name: E.J. KOEHLER
Telephone: 4155426758
Owner Name: PACIFIC BELL
Owner Address: 370 THIRD STREET
Owner City,St,Zip: SAN FRANCISCO, CA 94107
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1970
Tank Capacity: 00001500
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

FINDS:

Registry ID: 110002954857

Click Here:

Environmental Interest/Information System:

AIR EMISSIONS CLASSIFICATION UNKNOWN
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000251835
Registry ID: 110002954857
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002954857>
Name: PACIFIC BELL
Address: 555 LAKEPORT BOULEVARD
City,State,Zip: LAKEPORT, CA 95453

CUPA LAKE:

Name: AT&T CORP-TD255-LAKEPORT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000598
Business Type: 1 - CUPA
Program Element: 2004 - HMRRP Category 4 (1,001-5,000 gal, 10,001-100
Mailing Address: 308 S AKARD ST, 17TH FLOOR
Mailing Telephone: 4154994848
Entered Date: 12/04/2012
Program Identifier: CUPA-TD255-555 LAKEPORT BLVD., LAKEPORT
Record ID: PR0001191
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 904
Current Inspection Date: 12/07/2021
Contact Name: AT&T CORP TD255
Mailing Address: DALLAS, TX 75202
APN: 025-521-47
Program/Element Code: 2004

Name: AT&T CORP-TD255-LAKEPORT
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000598
Business Type: 1 - CUPA
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 308 S AKARD ST, 17TH FLOOR
Mailing Telephone: 7075752115
Entered Date: 12/04/2012
Program Identifier: CUPA-TD255-555 LAKEPORT BLVD., LAKEPORT
Record ID: PR0001192
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 12/07/2021
Contact Name: MATTHEW LAWS
Mailing Address: DALLAS, TX 75202
APN: 025-521-47
Program/Element Code: 2800

EMI:

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 1996
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 1997
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 1998
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 1999
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2000
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2001
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2002
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2003
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2004
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.01
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.01

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2005
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .008367
Carbon Monoxide Emissions Tons/Yr: .02
NOX - Oxides of Nitrogen Tons/Yr: .11
SOX - Oxides of Sulphur Tons/Yr: .01
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smllr Tons/Yr:.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2006
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .008367
Carbon Monoxide Emissions Tons/Yr: .02
NOX - Oxides of Nitrogen Tons/Yr: .11
SOX - Oxides of Sulphur Tons/Yr: .01
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smllr Tons/Yr:.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 93212
Year: 2007
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .008367
Carbon Monoxide Emissions Tons/Yr: .02
NOX - Oxides of Nitrogen Tons/Yr: .11
SOX - Oxides of Sulphur Tons/Yr: .01
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smllr Tons/Yr:.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2008
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .008367
Carbon Monoxide Emissions Tons/Yr: .02
NOX - Oxides of Nitrogen Tons/Yr: .11
SOX - Oxides of Sulphur Tons/Yr: .01
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smllr Tons/Yr:.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2009
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 8.3669999999999994E-3
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:9.7599999999999996E-3

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2010
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 8.3669999999999994E-3
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:9.7599999999999996E-3

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2011
County Code: 17

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.008367
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2012
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.008367
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2013
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.008367
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

City,State,Zip: LAKEPORT, CA 95453
Year: 2014
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.008367
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2015
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.008367
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.00976

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2016
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.008367
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.00976

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC BELL (Continued)

1000251835

Name: PACIFIC BELL
Address: 555 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2017
County Code: 17
Air Basin: LC
Facility ID: 214
Air District Name: LAK
SIC Code: 4911
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.008367
Carbon Monoxide Emissions Tons/Yr: 0.02
NOX - Oxides of Nitrogen Tons/Yr: 0.11
SOX - Oxides of Sulphur Tons/Yr: 0.01
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smlr Tons/Yr:0.00976

**G31
SE
1/4-1/2
0.422 mi.
2230 ft.**

**AT&T
555 LAKEPORT BOULEVARD
LAKEPORT, CA 95453**

**LUST S108277126
Cortese N/A
CERS**

Site 2 of 2 in cluster G

**Relative:
Lower
Actual:
1351 ft.**

LUST REG 5:
Name: AT&T
Address: 555 LAKEPORT BOULEVARD
City: LAKEPORT
Region: 5
Status: Case Closed
Case Number: 170114
Case Type: Soil only
Substance: DIESEL
Staff Initials: GTM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

CORTESE:

Name: AT&T
Address: 555 LAKEPORT BOULEVARD
City,State,Zip: LAKEPORT, CA 95453
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0603315849
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AT&T (Continued)

S108277126

Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Unit Name: Not reported
File Name: Active Open

CERS:

Name: AT&T
Address: 555 LAKEPORT BOULEVARD
City,State,Zip: LAKEPORT, CA 95453
Site ID: 243870
CERS ID: T0603315849
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: KEN WILLIAMS - LAKE COUNTY
Entity Title: Not reported
Affiliation Address: 922 BEVINS COURT
Affiliation City: LAKEPORT
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker
Entity Name: GLENN T. MEEKS - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE #200
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

H32
East
1/4-1/2
0.480 mi.
2532 ft.

SOPER-REESE COMMUNITY THEATER
275 SOUTH MAIN STREET
LAKEPORT, CA 95453
Site 1 of 3 in cluster H

LUST S106859257
Cortese N/A
CERS

Relative:
Lower

LUST:

Actual:
1332 ft.

Name: SOPER-REESE COMMUNITY THEATER
Address: 275 SOUTH MAIN STREET
City,State,Zip: LAKEPORT, CA 95453
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603346446
Global Id: T0603346446
Latitude: 39.040617666667
Longitude: -122.915501333333
Status: Completed - Case Closed
Status Date: 12/12/2008
Case Worker: GTM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOPER-REESE COMMUNITY THEATER (Continued)

S106859257

RB Case Number: 170111
Local Agency: LAKE COUNTY
File Location: Archived
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel, Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:

Global Id: T0603346446
Contact Type: Local Agency Caseworker
Contact Name: KEN WILLIAMS
Organization Name: LAKE COUNTY
Address: 922 BEVINS COURT
City: LAKEPORT
Email: Not reported
Phone Number: Not reported

Global Id: T0603346446
Contact Type: Regional Board Caseworker
Contact Name: GLENN T. MEEKS
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: gmeeks@waterboards.ca.gov
Phone Number: Not reported

LUST:

Global Id: T0603346446
Action Type: RESPONSE
Date: 02/20/2006
Action: Request for Closure

Global Id: T0603346446
Action Type: RESPONSE
Date: 11/07/2005
Action: Request for Closure

Global Id: T0603346446
Action Type: RESPONSE
Date: 01/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603346446
Action Type: RESPONSE
Date: 09/23/2004
Action: Other Workplan

Global Id: T0603346446
Action Type: RESPONSE
Date: 04/14/2005
Action: Preliminary Site Assessment Report

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 11/23/2005
Action: Staff Letter

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOPER-REESE COMMUNITY THEATER (Continued)

S106859257

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 07/14/2006
Action: Staff Letter

Global Id: T0603346446
Action Type: RESPONSE
Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603346446
Action Type: RESPONSE
Date: 04/28/2006
Action: Other Workplan

Global Id: T0603346446
Action Type: RESPONSE
Date: 05/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0603346446
Action Type: RESPONSE
Date: 09/04/2006
Action: Other Report / Document

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 09/23/2004
Action: Staff Letter

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 05/23/2006
Action: Staff Letter

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 03/17/2006
Action: Staff Letter

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 10/26/2007
Action: Site Visit / Inspection / Sampling

Global Id: T0603346446
Action Type: RESPONSE
Date: 08/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0603346446
Action Type: RESPONSE
Date: 10/31/2007
Action: Monitoring Report - Quarterly

Global Id: T0603346446
Action Type: ENFORCEMENT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOPER-REESE COMMUNITY THEATER (Continued)

S106859257

Date: 04/27/2007
Action: Technical Correspondence / Assistance / Other

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 06/21/2007
Action: Staff Letter

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 08/22/2007
Action: Staff Letter

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 03/21/2008
Action: Staff Letter

Global Id: T0603346446
Action Type: Other
Date: 05/13/2002
Action: Leak Discovery

Global Id: T0603346446
Action Type: Other
Date: 09/23/2004
Action: Leak Reported

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 07/15/2008
Action: Verbal Enforcement

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 05/27/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 12/09/2008
Action: Closure/No Further Action Letter

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 11/24/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 05/27/2008
Action: Staff Letter

Global Id: T0603346446
Action Type: REMEDIATION
Date: 06/19/2002
Action: Excavation

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOPER-REESE COMMUNITY THEATER (Continued)

S106859257

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 12/15/2008
Action: Closure/No Further Action Letter

Global Id: T0603346446
Action Type: ENFORCEMENT
Date: 11/02/2007
Action: Technical Correspondence / Assistance / Other

LUST:

Global Id: T0603346446
Status: Open - Case Begin Date
Status Date: 05/13/2002

Global Id: T0603346446
Status: Open - Site Assessment
Status Date: 09/23/2004

Global Id: T0603346446
Status: Open - Site Assessment
Status Date: 04/14/2005

Global Id: T0603346446
Status: Open - Verification Monitoring
Status Date: 10/04/2006

Global Id: T0603346446
Status: Completed - Case Closed
Status Date: 12/12/2008

LUST REG 5:

Name: SOPER-REESE COMMUNITY THEATER
Address: 275 SOUTH MAIN STREET
City: LAKEPORT
Region: 5
Status: Post remedial action monitoring
Case Number: 170111
Case Type: Drinking Water Aquifer affected
Substance: Not reported
Staff Initials: GTM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

CORTESE:

Name: SOPER-REESE COMMUNITY THEATER
Address: 275 SOUTH MAIN STREET
City,State,Zip: LAKEPORT, CA 95453
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0603346446
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOPER-REESE COMMUNITY THEATER (Continued)

S106859257

Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:

Name: SOPER-REESE COMMUNITY THEATER
Address: 275 SOUTH MAIN STREET
City,State,Zip: LAKEPORT, CA 95453
Site ID: 237893
CERS ID: T0603346446
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: KEN WILLIAMS - LAKE COUNTY
Entity Title: Not reported
Affiliation Address: 922 BEVINS COURT
Affiliation City: LAKEPORT
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker
Entity Name: GLENN T. MEEKS - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE #200
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

33
SSE
1/4-1/2
0.490 mi.
2588 ft.
**Relative:
Higher**
**Actual:
1367 ft.**

CO OF LAKE (AGRICULTURAL COMM)
883 LAKEPORT BLVD
LAKEPORT, CA 95453

HIST UST:

Name: LAKE COUNTY DEPARTMENT OF AGRI
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
File Number: Not reported

HIST UST **U001610369**
EMI **N/A**
HWP
PEST LIC
CERS
HWTS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

URL: Not reported
Region: STATE
Facility ID: 00000031035
Facility Type: Other
Other Type: OFFICE
Contact Name: DON TOMPKINS
Telephone: 7072632271
Owner Name: LAKE COUNTY DEPARTMENT OF AGRICULTURE
Owner Address: 883 LAKEPORT BOULEVARD
Owner City,St,Zip: LAKEPORT, CA 95453
Total Tanks: 0001

Tank Num: 001
Container Num: 1975 AG
Year Installed: 1975
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 4
Leak Detection: None

EMI:

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2000
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2001
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2002
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2003
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2004
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.01
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.01

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2005
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .006986
Carbon Monoxide Emissions Tons/Yr: .03
NOX - Oxides of Nitrogen Tons/Yr: .09
SOX - Oxides of Sulphur Tons/Yr: .004
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smllr Tons/Yr:.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2006
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .006986
Carbon Monoxide Emissions Tons/Yr: .03
NOX - Oxides of Nitrogen Tons/Yr: .09
SOX - Oxides of Sulphur Tons/Yr: .004
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smllr Tons/Yr:.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 960070000
Year: 2007
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .006986
Carbon Monoxide Emissions Tons/Yr: .03
NOX - Oxides of Nitrogen Tons/Yr: .09
SOX - Oxides of Sulphur Tons/Yr: .004
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smlr Tons/Yr:.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2008
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .01
Reactive Organic Gases Tons/Yr: .006986
Carbon Monoxide Emissions Tons/Yr: .03
NOX - Oxides of Nitrogen Tons/Yr: .09
SOX - Oxides of Sulphur Tons/Yr: .004
Particulate Matter Tons/Yr: .01
Part. Matter 10 Micrometers and Smlr Tons/Yr:.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2009
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 2.9999999999999999E-2
NOX - Oxides of Nitrogen Tons/Yr: 8.9999999999999997E-2
SOX - Oxides of Sulphur Tons/Yr: 4.0000000000000001E-3
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smlr Tons/Yr:7.0000000000000001E-3

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2010
County Code: 17
Air Basin: LC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 2.9999999999999999E-2
NOX - Oxides of Nitrogen Tons/Yr: 8.9999999999999997E-2
SOX - Oxides of Sulphur Tons/Yr: 4.0000000000000001E-3
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smlr Tons/Yr:7.0000000000000001E-3

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2011
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smlr Tons/Yr:0.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2012
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smlr Tons/Yr:0.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

Year: 2013
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2014
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2015
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.007

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2016
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smlr Tons/Yr:0.007

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Year: 2017
County Code: 17
Air Basin: LC
Facility ID: 178
Air District Name: LAK
SIC Code: 7261
Air District Name: LAKE COUNTY AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.01
Reactive Organic Gases Tons/Yr: 0.006986
Carbon Monoxide Emissions Tons/Yr: 0.03
NOX - Oxides of Nitrogen Tons/Yr: 0.09
SOX - Oxides of Sulphur Tons/Yr: 0.004
Particulate Matter Tons/Yr: 0.01
Part. Matter 10 Micrometers and Smlr Tons/Yr:0.007

HWP:

EPA ID: CAD980816425
Name: CO OF LAKE (AGRICULTURAL COMM)
Address: 883 LAKEPORT BLVD
Cleanup Status: CLOSED
Latitude: 39.03255
Longitude: -122.9221
Facility Type: Historical - Non-Operating
Facility Size: Not reported
Supervisor: Not reported
Site Code: Not reported
Senate District: 02
Assembly District: 04
Public Information Officer: Not reported
Commercial Offsite Facility Types: Not reported
Quarterly Update: Lake County Agricultural Commissioner operated as a facility that received and stored household pesticides. They received a permit on

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

06/28/1985. They later notified the Department of Toxic Substances Control (DTSC) that they did not operate as a TSDF in an Affidavit dated 12/27/1994. The DTSC agreed with the evidence of their affidavit and certified their closure and rescinded their permit on 1/20/1995.

Project Manager Lead: Not reported
Project Manager: Not reported
Permit Type: Standardized
Permit Effective Date: Not reported
Permit Expiration Date: Not reported
Calenviroscreen Score: 41-45%
Total Planned Hours: Not reported
Total Planned Amount: Not reported
Total Actual Hours: Not reported

Activities:

EPA ID: CAD980816425
Facility Type: Historical - Non-Operating
Facility Name: CO OF LAKE (AGRICULTURAL COMM)
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1985-06-28 00:00:00
Type: STND
Title Description: Permit for Pesticide Storage Facility
Due Date: Not reported
Comments: Not reported
Unit Names: Unit1
Event Description: New Operating Permit - FINAL PERMIT
Actual Date: 06/28/1985

EPA ID: CAD980816425
Facility Type: Historical - Non-Operating
Facility Name: CO OF LAKE (AGRICULTURAL COMM)
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1985-06-28 00:00:00
Type: STND
Title Description: Permit for Pesticide Storage Facility
Due Date: Not reported
Comments: Not reported
Unit Names: Unit1
Event Description: New Operating Permit - FINAL PERMIT (EXPIRES)
Actual Date: 06/28/1990

Closure:

EPA ID: CAD980816425
Facility Type: Historical - Non-Operating
Facility Name: CO OF LAKE (AGRICULTURAL COMM)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Size: Not reported
Facility Status: CLOSED
Activity Type: Closure Final
Final Date: Not reported
Type: STND
Title Description: Closure of a Pesticides storage facility
Due Date: Not reported
Comments: Not reported
Unit Names: Unit1
Event Description: Closure Final - ISSUE CLOSURE VERIFICATION
Actual Date: 01/20/1995

Alias:

EPA ID: CAD980816425
Facility Type: Historical - Non-Operating
Facility Name: CO OF LAKE (AGRICULTURAL COMM)
Facility Status: CLOSED
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Alias Type: FRS
Alias: 110021307753

PEST LIC:

Name: KATHERINE VANDERWALL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453
Facility Type: QAC
Categories: CG
License No: 124916
Issued or Renewed Date: 01/01/2020
Expiration Date: 12/31/2021

CERS:

Name: LAKE COUNTY ANIMAL CONTROL
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 95453-5405
Site ID: 476701
CERS ID: 110021307753
CERS Description: US EPA Air Emission Inventory System (EIS)

Name: CO OF LAKE (AGRICULTURAL COMM)
Address: 883 LAKEPORT BLVD
City,State,Zip: LAKEPORT, CA 954530000
Site ID: 200523
CERS ID: CAD980816425
CERS Description: Hazardous Waste

HWTS:

Name: CO OF LAKE (AGRICULTURAL COMM)
Address: 883 LAKEPORT BLVD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CO OF LAKE (AGRICULTURAL COMM) (Continued)

U001610369

Address 2: Not reported
City,State,Zip: LAKEPORT, CA 954530000
EPA ID: CAD980816425
Inactive Date: 06/30/1996
Create Date: 02/21/1986
Last Act Date: 10/11/1996
Mailing Name: Not reported
Mailing Address: 883 LAKEPORT BLVD
Mailing Address 2: Not reported
Mailing City,State,Zip: LAKEPORT, CA 954530000
Owner Name: --
Owner Address: --
Owner Address 2: Not reported
Owner City,State,Zip: --, 99 --
Contact Name: INACT PER 96 VQ AD
Contact Address: --
Contact Address 2: Not reported
City,State,Zip: --, 99 --

H34 AN-LEE EXXON
ENE 201 S MAIN ST
1/4-1/2 LAKEPORT, CA 95453
0.495 mi.
2616 ft. Site 2 of 3 in cluster H

ENVIROSTOR U001610330
SWEEPS UST N/A
HIST UST

Relative: ENVIROSTOR:
Lower Name: AN-LEE
Actual: Address: 201 S MAIN ST
1337 ft. City,State,Zip: LAKEPORT, CA 95453
Facility ID: 17510005
Status: Refer: RWQCB
Status Date: 12/31/2008
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 1
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Sacramento
Assembly: 04
Senate: 02
Special Program: * Rural County Survey Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 39.04108
Longitude: -122.9154
APN: 02532402
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: Exxon
Alias Type: Alternate Name
Alias Name: 02532402

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AN-LEE EXXON (Continued)

U001610330

Alias Type: APN
Alias Name: T0603300008
Alias Type: GeoTracker Global ID
Alias Name: 17510005
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 05/19/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 02/25/1988
Comments: FACILITY IDENTIFIED DEPARTMENT OF FISH AND GAME (DFG) OIL GAS DISCHARGE. ILLEGAL PRACTICE OF RADIATOR FLUID.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 07/14/1988
Comments: SITE SCREENING DONE. SITE CLOSING.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SWEEPS UST:

Name: AN-LEE EXXON
Address: 201 S MAIN ST
City: LAKEPORT
Status: Not reported
Comp Number: 19747
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 17-000-019747-000001
Tank Status: Not reported
Capacity: 3000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: 5

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AN-LEE EXXON (Continued)

U001610330

Name: AN-LEE EXXON
Address: 201 S MAIN ST
City: LAKEPORT
Status: Not reported
Comp Number: 19747
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 17-000-019747-000002
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: AN-LEE EXXON
Address: 201 S MAIN ST
City: LAKEPORT
Status: Not reported
Comp Number: 19747
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 17-000-019747-000003
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: AN-LEE EXXON
Address: 201 S MAIN ST
City: LAKEPORT
Status: Not reported
Comp Number: 19747
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 17-000-019747-000004
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AN-LEE EXXON (Continued)

U001610330

Content: REG UNLEADED
Number Of Tanks: Not reported

Name: AN-LEE EXXON
Address: 201 S MAIN ST
City: LAKEPORT
Status: Not reported
Comp Number: 19747
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 17-000-019747-000005
Tank Status: Not reported
Capacity: 350
Active Date: Not reported
Tank Use: OIL
STG: WASTE
Content: WASTE OIL
Number Of Tanks: Not reported

HIST UST:

Name: AN-LEE EXXON
Address: 201 SOUTH MAIN ST
City,State,Zip: LAKEPORT, CA 95453
File Number: 0002583D
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002583D.pdf>
Region: STATE
Facility ID: 00000019747
Facility Type: Gas Station
Other Type: Not reported
Contact Name: DAVE LEMMONS
Telephone: 7072633548
Owner Name: CLAYTON . & MILDRED E. PICKERS
Owner Address: 2569 LAGOON DR
Owner City,St,Zip: LAKEPORT, CA 95453
Total Tanks: 0005

Tank Num: 001
Container Num: L1
Year Installed: 1978
Tank Capacity: 00003000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 3/16
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: L2
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AN-LEE EXXON (Continued)

U001610330

Tank Num: 003
 Container Num: L3
 Year Installed: Not reported
 Tank Capacity: 00001000
 Tank Used for: PRODUCT
 Type of Fuel: UNLEADED
 Container Construction Thickness: Not reported
 Leak Detection: Stock Inventor

Tank Num: 004
 Container Num: L4
 Year Installed: Not reported
 Tank Capacity: 00000550
 Tank Used for: PRODUCT
 Type of Fuel: UNLEADED
 Container Construction Thickness: Not reported
 Leak Detection: Stock Inventor

Tank Num: 005
 Container Num: L5
 Year Installed: Not reported
 Tank Capacity: 00000350
 Tank Used for: WASTE
 Type of Fuel: WASTE OIL
 Container Construction Thickness: Not reported
 Leak Detection: None

[Click here for Geo Tracker PDF:](#)

H35
East
1/4-1/2
0.499 mi.
2633 ft.

LAKEPORT SHELL
301 MAIN
LAKEPORT, CA 95453
Site 3 of 3 in cluster H

LUST **S104403187**
Cortese **N/A**
HIST CORTESE
CERS

Relative:
Lower
Actual:
1335 ft.

LUST:
 Name: LAKEPORT SHELL
 Address: 301 MAIN ST S
 City,State,Zip: LAKEPORT, CA 95453
 Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
 Case Type: LUST Cleanup Site
 Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603300069
 Global Id: T0603300069
 Latitude: 39.040341935
 Longitude: -122.915274592
 Status: Completed - Case Closed
 Status Date: 12/13/2010
 Case Worker: GTM
 RB Case Number: 170090
 Local Agency: LAKE COUNTY
 File Location: Not reported
 Local Case Number: Not reported
 Potential Media Affect: Aquifer used for drinking water supply
 Potential Contaminants of Concern: Gasoline
 Site History: The subject site is currently an operating service station. The station opened in 1950 and originally contained four (4) underground storage tanks (USTs), all of which have either been removed or closed in place. In 1197, one three compartment 20,000 gallon tanks was

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT SHELL (Continued)

S104403187

installed at the site. Soil sampling in 1999 indicated the presence of petroleum hydrocarbon in soil and groundwater at the site to a depth of approximately 10 feet below ground surface (bgs). Subsequent investigation work delineated the contamination, indicating that the plume had migrated across Main Street towards Clear Lake. Monitored natural attenuation was selected as the remedial measure for the site in 2006 and groundwater monitoring has been performed at the site since December 2000. Current data indicate the plume is decreasing in size and concentration and that soil vapor intrusion is not a significant health risk at the site. Closure of the site under a Low risk Scenario is possible and may be considered in the near future.

LUST:

Global Id: T0603300069
Contact Type: Regional Board Caseworker
Contact Name: GLENN T. MEEKS
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: gmeeks@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0603300069
Contact Type: Local Agency Caseworker
Contact Name: MANUEL RAMIREZ
Organization Name: LAKE COUNTY
Address: Not reported
City: r5 UNKNOWN
Email: Not reported
Phone Number: Not reported

LUST:

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 07/29/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 10/19/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 01/20/2010
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 02/03/2010
Action: Notification - Public Notice of Case Closure

Global Id: T0603300069
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT SHELL (Continued)

S104403187

Global Id:	T0603300069
Action Type:	RESPONSE
Date:	01/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	04/12/2010
Action:	Staff Letter
Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	03/29/2010
Action:	Notification - Public Notice of Case Closure
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	01/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	04/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	04/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	04/08/2005
Action:	Staff Letter
Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	12/13/2010
Action:	Closure/No Further Action Letter
Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	07/21/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	07/22/2010
Action:	File Review - Closure
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	04/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0603300069
Action Type:	RESPONSE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT SHELL (Continued)

S104403187

Date: 07/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 07/25/2006
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 07/18/2007
Action: Technical Correspondence / Assistance / Other

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 08/09/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 07/19/2010
Action: Verbal Enforcement

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 08/11/2010
Action: Staff Letter

Global Id: T0603300069
Action Type: RESPONSE
Date: 03/27/2006
Action: CAP/RAP - Feasibility Study Report

Global Id: T0603300069
Action Type: RESPONSE
Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603300069
Action Type: RESPONSE
Date: 01/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 02/25/2008
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 10/26/2007
Action: Site Visit / Inspection / Sampling

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 07/06/2010
Action: Verbal Enforcement

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT SHELL (Continued)

S104403187

Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	03/20/2000
Action:	Staff Letter
Global Id:	T0603300069
Action Type:	Other
Date:	12/31/1997
Action:	Leak Discovery
Global Id:	T0603300069
Action Type:	Other
Date:	12/31/1997
Action:	Leak Stopped
Global Id:	T0603300069
Action Type:	Other
Date:	01/02/1998
Action:	Leak Reported
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	05/15/2010
Action:	Request for Closure
Global Id:	T0603300069
Action Type:	ENFORCEMENT
Date:	02/02/2006
Action:	Staff Letter
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	12/31/2008
Action:	Other Workplan
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	07/31/2009
Action:	Risk Assessment Report
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	02/25/2010
Action:	Fact Sheets - Public Participation
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	01/15/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0603300069
Action Type:	RESPONSE
Date:	07/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0603300069
Action Type:	RESPONSE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT SHELL (Continued)

S104403187

Date: 08/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 05/08/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0603300069
Action Type: RESPONSE
Date: 10/30/2010
Action: Well Destruction Report

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 09/19/2008
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 12/12/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 01/14/2009
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 08/04/2004
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 01/15/2008
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 06/05/2000
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 11/15/2001
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 08/07/2001
Action: Staff Letter

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 03/26/2009
Action: Staff Letter

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT SHELL (Continued)

S104403187

Global Id: T0603300069
Action Type: ENFORCEMENT
Date: 07/14/2009
Action: Staff Letter

LUST:

Global Id: T0603300069
Status: Open - Case Begin Date
Status Date: 12/31/1997

Global Id: T0603300069
Status: Open - Site Assessment
Status Date: 12/31/1997

Global Id: T0603300069
Status: Open - Site Assessment
Status Date: 12/23/1998

Global Id: T0603300069
Status: Open - Verification Monitoring
Status Date: 06/13/2003

Global Id: T0603300069
Status: Open - Referred
Status Date: 04/22/2010

Global Id: T0603300069
Status: Open - Verification Monitoring
Status Date: 05/05/2010

Global Id: T0603300069
Status: Completed - Case Closed
Status Date: 12/13/2010

LUST REG 5:

Name: LAKEPORT SHELL
Address: 301 MAIN ST S
City: LAKEPORT
Region: 5
Status: Post remedial action monitoring
Case Number: 170090
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: GTM
Lead Agency: Regional
Program: LUST
MTBE Code: 7

CORTESE:

Name: LAKEPORT SHELL
Address: 301 MAIN ST S
City,State,Zip: LAKEPORT, CA 95453
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0603300069

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAKEPORT SHELL (Continued)

S104403187

Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:

edr_fname: LAKEPORT SHELL
edr_fadd1: 301 MAIN
City,State,Zip: LAKEPORT, CA 95453
Region: CORTESE
Facility County Code: 17
Reg By: LTNKA
Reg Id: 170090

CERS:

Name: LAKEPORT SHELL
Address: 301 MAIN ST S
City,State,Zip: LAKEPORT, CA 95453
Site ID: 207630
CERS ID: T0603300069
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: MANUEL RAMIREZ - LAKE COUNTY
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: r5 UNKNOWN
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker
Entity Name: GLENN T. MEEKS - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE #200
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

36
ENE
1/2-1
0.524 mi.
2769 ft.

TIME OIL CO
202 S MAIN ST
LAKEPORT, CA 95453

ENVIROSTOR **S101480529**
CUPA Listings **N/A**

Relative:
Lower

Actual:
1334 ft.

ENVIROSTOR:
Name: TIME OIL CO
Address: 202 S MAIN ST
City,State,Zip: LAKEPORT, CA 95453
Facility ID: 17510002
Status: Refer: RWQCB
Status Date: 12/31/2008
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 1
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Sacramento
Assembly: 04
Senate: 02
Special Program: * Rural County Survey Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 39.04111
Longitude: -122.9149
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: Jackpot Station
Alias Type: Alternate Name
Alias Name: 17510002
Alias Type: Envirostor ID Number
Alias Name: 17510010
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 02/25/1988
Comments: Facility identified Department of Fish and Game (DFG) - Gas- Oil Discharge from south wall.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 07/14/1988
Comments: SITE SCREENING DONE. Preliminary assessment low priority based on Department of Fish and Game file. Send questionnaire.

Future Area Name: Not reported
Future Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TIME OIL CO (Continued)

S101480529

Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: JACKPOT STATION
Address: 202 S MAIN
City,State,Zip: LAKEPORT, CA 95453
Facility ID: 17510010
Status: Refer: RWQCB
Status Date: 12/31/2008
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 1
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Sacramento
Assembly: 04
Senate: 02
Special Program: * Rural County Survey Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 39.04111
Longitude: -122.9149
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: Jackpot Food Mart
Alias Type: Alternate Name
Alias Name: Time Oil Company
Alias Type: Alternate Name
Alias Name: T0603300001
Alias Type: GeoTracker Global ID
Alias Name: 17510002
Alias Type: Envirostor ID Number
Alias Name: 17510010
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 02/25/1988
Comments: FACILITY IDENTIFIED BY DEPARTMENT OF FISH AND GAME (DFG). TIME OIL COMPANY HEAVY BLACK WASTE OIL DISCHARING FROM CONCRETE BULK HEAD. PAST PRACTICE TO DUMP WASTE OILS ON SITE 07/28/83.

Completed Area Name: PROJECT WIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TIME OIL CO (Continued)

S101480529

Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 07/13/1988
Comments: SITE SCREENING DONE. PRELIMINARY ASSESSMENT LOW PRIORITY BASED ON DEPARTMENT OF FISH AND GAME FILE.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CUPA LAKE:

Name: H&S ENERGY PRODUCTS #3008 (DBA POWER MART #860)
Address: 202 S MAIN ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000240
Business Type: 2 - CUPA UST
Program Element: 2100 - UST GENERAL PROGRAM
Mailing Address: 2860 N SANTIAGO BLVD
Mailing Telephone: 7072637220
Entered Date: 11/16/2012
Program Identifier: CUPA UST @ 202 S. MAIN ST, LAKEPORT #3008 (PM#860)
Record ID: PR0000414
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 03/10/2021
Contact Name: H&S ENERGY PRODUCTS LLC - OPERATOR
Mailing Address: ORANGE, CA 92867
APN: 025-331-08
Program/Element Code: 2100

Name: H&S ENERGY PRODUCTS #3008 (DBA POWER MART #860)
Address: 202 S MAIN ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000240
Business Type: 2 - CUPA UST
Program Element: 2006 - HMRRP Category 6 (20,001-150,000 gal, 200,001
Mailing Address: 2860 N SANTIAGO BLVD
Mailing Telephone: 7072637220
Entered Date: 11/14/2012
Program Identifier: CUPA UST @ 202 S. MAIN ST, LAKEPORT #3008 (PM#860)
Record ID: PR0000149
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 1455
Current Inspection Date: 03/10/2023
Contact Name: H&S ENERGY PRODUCTS LLC- OPERATOR
Mailing Address: ORANGE, CA 92867
APN: 025-331-08
Program/Element Code: 2006

Name: H&S ENERGY PRODUCTS #3008 (DBA POWER MART #860)
Address: 202 S MAIN ST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TIME OIL CO (Continued)

S101480529

City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000240
Business Type: 2 - CUPA UST
Program Element: 2800 - CUPA Hazardous Waste Generator Program
Mailing Address: 2860 N SANTIAGO BLVD
Mailing Telephone: 7072637220
Entered Date: 11/14/2012
Program Identifier: CUPA UST @ 202 S. MAIN ST, LAKEPORT #3008 (PM#860)
Record ID: PR0000150
Billing Status: 01 - ACTIVE, BILLABLE
Total Fee Amount: 0
Current Inspection Date: 03/10/2023
Contact Name: H&S ENERGY PRODUCTS LLC - OPERATOR
Mailing Address: ORANGE, CA 92867
APN: 025-331-08
Program/Element Code: 2800

Name: H&S ENERGY PRODUCTS #3008 (DBA POWER MART #860)
Address: 202 S MAIN ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000240
Business Type: 2 - CUPA UST
Program Element: 2106 - UST Tanks over 10,000 Gallons
Mailing Address: 2860 N SANTIAGO BLVD
Mailing Telephone: 7072637220
Entered Date: 11/14/2012
Program Identifier: CUPA UST
Record ID: PR0000151
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 308
Current Inspection Date: 03/05/2015
Contact Name: Tower Energy Group
Mailing Address: ORANGE, CA 92867
APN: 025-331-08
Program/Element Code: 2106

Name: H&S ENERGY PRODUCTS #3008 (DBA POWER MART #860)
Address: 202 S MAIN ST
City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000240
Business Type: 2 - CUPA UST
Program Element: 2105 - UST Tanks 5,001 - 10,000 Gallons
Mailing Address: 2860 N SANTIAGO BLVD
Mailing Telephone: 7072637220
Entered Date: 11/14/2012
Program Identifier: CUPA UST
Record ID: PR0000152
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 235
Current Inspection Date: 03/05/2015
Contact Name: Tower Energy Group
Mailing Address: ORANGE, CA 92867
APN: 025-331-08
Program/Element Code: 2105

Name: H&S ENERGY PRODUCTS #3008 (DBA POWER MART #860)
Address: 202 S MAIN ST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TIME OIL CO (Continued)

S101480529

City,State,Zip: LAKEPORT, CA 95453
Facility: FA0000240
Business Type: 2 - CUPA UST
Program Element: 2105 - UST Tanks 5,001 - 10,000 Gallons
Mailing Address: 2860 N SANTIAGO BLVD
Mailing Telephone: 7072637220
Entered Date: 11/14/2012
Program Identifier: CUPA UST
Record ID: PR0000153
Billing Status: 02 - INACTIVE, NON-BILLABLE
Total Fee Amount: 235
Current Inspection Date: 03/05/2015
Contact Name: Tower Energy Group
Mailing Address: ORANGE, CA 92867
APN: 025-331-08
Program/Element Code: 2105

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
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NO SITES FOUND

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: N/A
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: N/A
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/30/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: 800-424-9346
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 07/26/2021
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/22/2021	Source: EPA
Date Data Arrived at EDR: 03/23/2021	Telephone: 800-424-9346
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/09/2021	Source: Department of the Navy
Date Data Arrived at EDR: 02/11/2021	Telephone: 843-820-7326
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 05/05/2021
Number of Days to Update: 39	Next Scheduled EDR Contact: 08/23/2021
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/23/2021	Telephone: 703-603-0695
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/23/2021	Telephone: 703-603-0695
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2021

Date Data Arrived at EDR: 03/24/2021

Date Made Active in Reports: 06/17/2021

Number of Days to Update: 85

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 06/17/2021

Next Scheduled EDR Contact: 10/04/2021

Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/25/2021

Date Data Arrived at EDR: 01/26/2021

Date Made Active in Reports: 04/13/2021

Number of Days to Update: 77

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/23/2021

Next Scheduled EDR Contact: 08/09/2021

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/25/2021

Date Data Arrived at EDR: 01/26/2021

Date Made Active in Reports: 04/13/2021

Number of Days to Update: 77

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/23/2021

Next Scheduled EDR Contact: 08/09/2021

Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/08/2021

Date Data Arrived at EDR: 02/09/2021

Date Made Active in Reports: 05/03/2021

Number of Days to Update: 83

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 05/11/2021

Next Scheduled EDR Contact: 08/23/2021

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: see region list
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2020	Telephone: 415-972-3372
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020	Source: EPA Region 8
Date Data Arrived at EDR: 12/16/2020	Telephone: 303-312-6271
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/30/2020	Source: EPA Region 7
Date Data Arrived at EDR: 12/22/2020	Telephone: 913-551-7003
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/02/2020	Source: EPA Region 4
Date Data Arrived at EDR: 12/18/2020	Telephone: 404-562-8677
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2020	Source: EPA Region 1
Date Data Arrived at EDR: 12/16/2020	Telephone: 617-918-1313
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-6597
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 06/11/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/05/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 916-327-7844
Date Made Active in Reports: 04/01/2021	Last EDR Contact: 06/04/2021
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 06/08/2021
Number of Days to Update: 69	Next Scheduled EDR Contact: 09/27/2021
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/09/2020	Source: EPA Region 8
Date Data Arrived at EDR: 12/16/2020	Telephone: 303-312-6137
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/02/2020	Source: EPA Region 4
Date Data Arrived at EDR: 12/18/2020	Telephone: 404-562-9424
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/12/2020	Source: EPA Region 10
Date Data Arrived at EDR: 12/16/2020	Telephone: 206-553-2857
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-7591
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 06/11/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2020	Source: EPA, Region 1
Date Data Arrived at EDR: 12/16/2020	Telephone: 617-918-1313
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/01/2020	Source: EPA Region 9
Date Data Arrived at EDR: 12/16/2020	Telephone: 415-972-3368
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/30/2020	Source: EPA Region 7
Date Data Arrived at EDR: 12/22/2020	Telephone: 913-551-7003
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/07/2020	Source: EPA Region 5
Date Data Arrived at EDR: 12/16/2020	Telephone: 312-886-6136
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/15/2021
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/25/2021	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/26/2021	Telephone: 916-323-3400
Date Made Active in Reports: 04/13/2021	Last EDR Contact: 04/23/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 08/09/2021
	Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/22/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/23/2021	Telephone: 916-323-7905
Date Made Active in Reports: 06/10/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/15/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/16/2021	Telephone: 202-566-2777
Date Made Active in Reports: 06/10/2021	Last EDR Contact: 06/10/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 09/27/2021
	Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/22/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/22/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/20/2021	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 01/20/2021	Telephone: 916-323-2514
Date Made Active in Reports: 04/08/2021	Last EDR Contact: 04/20/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/01/2021	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 03/03/2021	Telephone: 916-323-3400
Date Made Active in Reports: 05/20/2021	Last EDR Contact: 05/25/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/03/2021	Telephone: 202-564-6023
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/02/2021	Source: DTSC and SWRCB
Date Data Arrived at EDR: 03/03/2021	Telephone: 916-323-3400
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 05/28/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/22/2021	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/24/2021	Telephone: 202-366-4555
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2020	Source: Office of Emergency Services
Date Data Arrived at EDR: 01/20/2021	Telephone: 916-845-8400
Date Made Active in Reports: 04/08/2021	Last EDR Contact: 04/20/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021	Source: State Water Quality Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 47

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 04/30/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 05/07/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/17/2020	Telephone: 202-260-5521
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 06/17/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/27/2021
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 08/14/2020	Telephone: 202-566-0250
Date Made Active in Reports: 11/04/2020	Last EDR Contact: 05/17/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/30/2021
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/20/2021	Source: EPA
Date Data Arrived at EDR: 01/21/2021	Telephone: 202-564-4203
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 04/20/2021
Number of Days to Update: 60	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: 703-416-0223
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/18/2021	Telephone: 202-564-8600
Date Made Active in Reports: 05/11/2021	Last EDR Contact: 04/19/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: 202-564-6023
Date Made Active in Reports: 03/05/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 50	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020	Source: EPA
Date Data Arrived at EDR: 01/08/2021	Telephone: 202-566-0500
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 04/09/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 07/19/2021
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 03/11/2021	Telephone: 301-415-7169
Date Made Active in Reports: 05/11/2021	Last EDR Contact: 04/16/2021
Number of Days to Update: 61	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019	Source: Department of Energy
Date Data Arrived at EDR: 12/01/2020	Telephone: 202-586-8719
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 05/27/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 05/27/2021
Number of Days to Update: 251	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/07/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 06/22/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 01/28/2020	Telephone: 202-366-4595
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 04/27/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/09/2021
	Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/13/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 68

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/02/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/02/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 05/27/2021
Date Data Arrived at EDR: 05/27/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 14

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 05/27/2021
Number of Days to Update: 97	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/23/2021	Source: Department of Interior
Date Data Arrived at EDR: 03/25/2021	Telephone: 202-208-2609
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/14/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021	Source: EPA
Date Data Arrived at EDR: 03/03/2021	Telephone: (415) 947-8000
Date Made Active in Reports: 04/05/2021	Last EDR Contact: 05/18/2021
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/17/2020	Telephone: 202-564-0527
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/04/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/06/2021	Telephone: 202-564-2280
Date Made Active in Reports: 06/25/2021	Last EDR Contact: 07/01/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 79

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/04/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/25/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/09/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 82

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/07/2021
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/05/2021
Date Data Arrived at EDR: 04/06/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 05/04/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 01/07/2020	Telephone: 559-445-5577
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 07/01/2021
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 05/14/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 08/30/2021
	Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 06/15/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 916-341-5810
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/07/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/01/2020	Telephone: 866-794-4977
Date Made Active in Reports: 02/12/2021	Last EDR Contact: 05/19/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/20/2021	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 01/20/2021	Telephone: 916-323-2514
Date Made Active in Reports: 04/08/2021	Last EDR Contact: 04/20/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011	Source: EPA, Office of Water
Date Data Arrived at EDR: 08/05/2011	Telephone: 202-564-2496
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 06/30/2021
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014	Source: EPA
Date Data Arrived at EDR: 01/06/2015	Telephone: 202-564-2496
Date Made Active in Reports: 05/06/2015	Last EDR Contact: 06/30/2021
Number of Days to Update: 120	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014	Source: EPA
Date Data Arrived at EDR: 02/05/2015	Telephone: 202-564-2497
Date Made Active in Reports: 03/06/2015	Last EDR Contact: 06/30/2021
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018	Source: USGS
Date Data Arrived at EDR: 10/21/2019	Telephone: 703-648-6533
Date Made Active in Reports: 10/24/2019	Last EDR Contact: 05/27/2021
Number of Days to Update: 3	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2021	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/09/2021	Telephone: 916-324-2444
Date Made Active in Reports: 04/20/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 11	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 03/17/2021
Date Data Arrived at EDR: 03/18/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 7

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/15/2021
Date Data Arrived at EDR: 06/16/2021
Date Made Active in Reports: 07/02/2021
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 80

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/14/2021
Date Data Arrived at EDR: 01/15/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 80

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/17/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 2

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/10/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List

Cupa facility list.

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INYO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List

A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/29/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 7

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 01/28/2021
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 02/10/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 03/11/2021
Number of Days to Update: 27

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

LASSEN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/13/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 76

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/12/2021
Date Data Arrived at EDR: 04/13/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 76

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 02/04/2021	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/16/2021	Telephone: 626-458-6973
Date Made Active in Reports: 04/21/2021	Last EDR Contact: 04/16/2021
Number of Days to Update: 5	Next Scheduled EDR Contact: 07/26/2021
	Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/17/2021	Telephone: 213-978-3800
Date Made Active in Reports: 06/28/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 11	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 06/17/2021
Number of Days to Update: 58	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/02/2021	Source: Community Health Services
Date Data Arrived at EDR: 04/16/2021	Telephone: 323-890-7806
Date Made Active in Reports: 07/06/2021	Last EDR Contact: 04/16/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 07/26/2021
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 07/06/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/25/2021
	Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 04/14/2021
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 09/11/2020	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/07/2020	Telephone: 310-618-2973
Date Made Active in Reports: 12/23/2020	Last EDR Contact: 04/23/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 05/12/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/30/2021
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 06/22/2021
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/24/2021	Source: Department of Public Health
Date Data Arrived at EDR: 04/07/2021	Telephone: 707-463-4466
Date Made Active in Reports: 06/24/2021	Last EDR Contact: 05/18/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/04/2021	Source: Merced County Environmental Health
Date Data Arrived at EDR: 02/09/2021	Telephone: 209-381-1094
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 05/12/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 08/30/2021
	Data Release Frequency: Varies

MONO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/23/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 1

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/02/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 6

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/07/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/25/2021
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 4

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/19/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 06/07/2021
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/21/2021
Number of Days to Update: 79

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 05/07/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 3

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/06/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SHASTA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/23/2021
Date Data Arrived at EDR: 03/25/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 09/12/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 7

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/28/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/01/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List

Cupa program facilities

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List

Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Division of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

VENTURA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/28/2020	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 01/29/2021	Telephone: 805-654-2813
Date Made Active in Reports: 04/22/2021	Last EDR Contact: 04/19/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 06/22/2021
Number of Days to Update: 49	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 05/05/2021
Number of Days to Update: 37	Next Scheduled EDR Contact: 08/23/2021
	Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/29/2021	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 04/21/2021	Telephone: 805-654-2813
Date Made Active in Reports: 04/23/2021	Last EDR Contact: 04/19/2021
Number of Days to Update: 2	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2021	Source: Environmental Health Division
Date Data Arrived at EDR: 03/09/2021	Telephone: 805-654-2813
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/04/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/26/2021	Source: Yolo County Department of Health
Date Data Arrived at EDR: 04/01/2021	Telephone: 530-666-8646
Date Made Active in Reports: 06/23/2021	Last EDR Contact: 06/22/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Annually

YUBA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 20

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/24/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 10/05/2020
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

VACANT LAND
447 BEVINS STREET
LAKEPORT, CA 95453

TARGET PROPERTY COORDINATES

Latitude (North):	39.03939 - 39° 2' 21.80"
Longitude (West):	122.925627 - 122° 55' 32.26"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	506436.7
UTM Y (Meters):	4320942.5
Elevation:	1361 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5604780 LAKEPORT, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

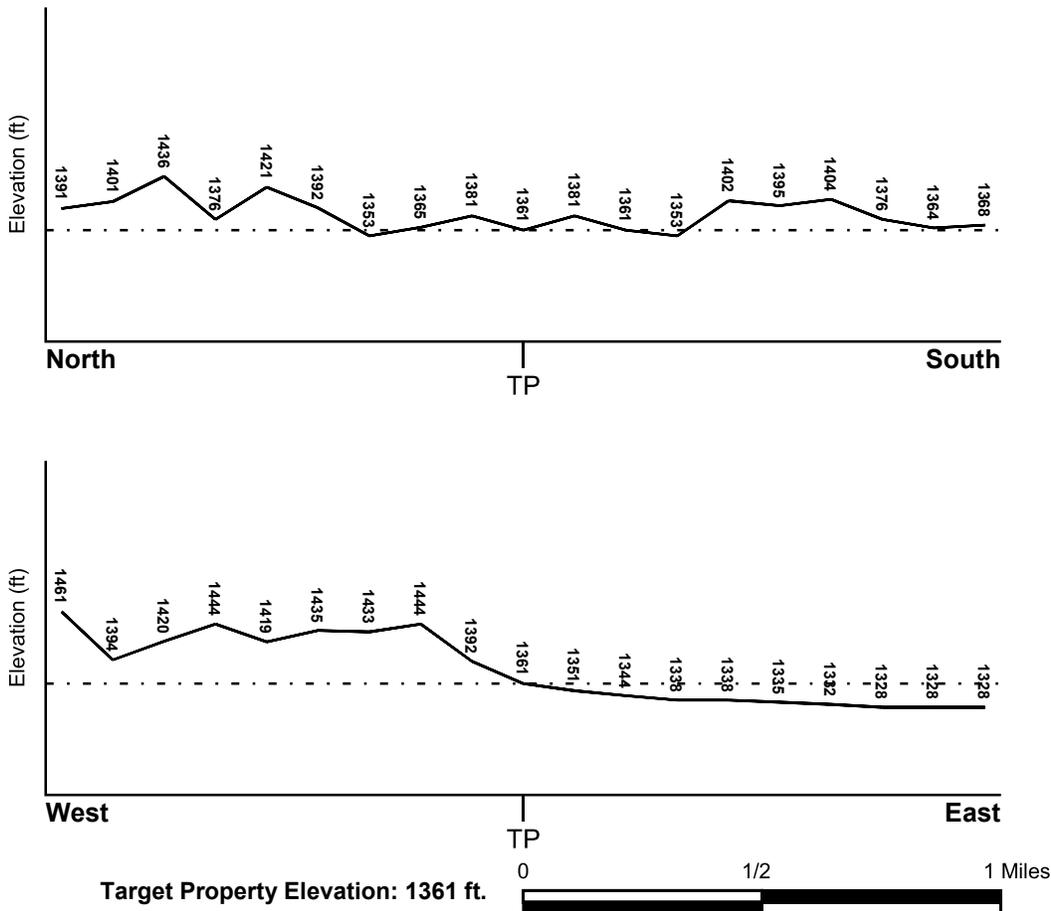
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06033C0491D	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06033C0487D	FEMA FIRM Flood data
0600900490A	FEMA Q3 Flood data
0600900495B	FEMA Q3 Flood data
06033C0493D	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

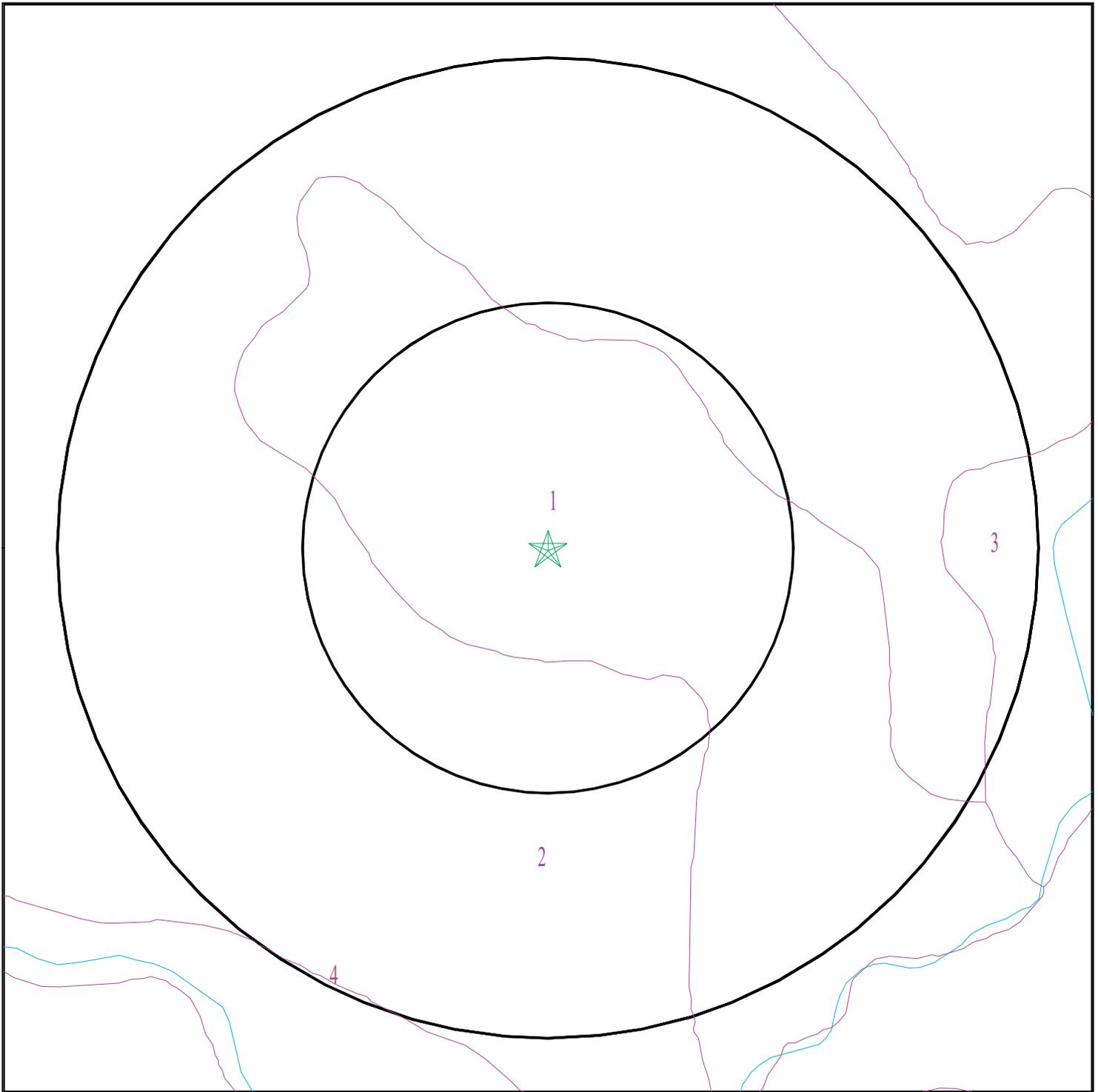
Era: Mesozoic
System: Cretaceous
Series: Upper Mesozoic
Code: uMze(*decoded above as Era, System & Series*)

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6566821.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Vacant Land
ADDRESS: 447 Bevins Street
Lakeport CA 95453
LAT/LONG: 39.03939 / 122.925627

CLIENT: KCE Matrix
CONTACT: Aram Kaloustian
INQUIRY #: 6566821.2s
DATE: July 07, 2021 1:38 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: HENNEKE

Soil Surface Texture: gravelly loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 38 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 0.07	Max: Min:
2	3 inches	11 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 0.07	Max: Min:
3	11 inches	18 inches	very gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 0.07	Max: Min:
4	18 inches	22 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 0.07	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: WAPPO

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches		Not reported	Not reported	Max: 14 Min: 0.42	Max: 8.4 Min: 6.6
2	9 inches	33 inches		Not reported	Not reported	Max: 14 Min: 0.42	Max: 8.4 Min: 6.6
3	33 inches	62 inches		Not reported	Not reported	Max: 14 Min: 0.42	Max: 8.4 Min: 6.6

Soil Map ID: 3

Soil Component Name: COLE VARIANT

Soil Surface Texture:
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
2	20 inches	59 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6

Soil Map ID: 4

Soil Component Name: STILL

Soil Surface Texture:

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 6.1
2	5 inches	51 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 6.1
3	51 inches	70 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
14	CA1700593	1/2 - 1 Mile ENE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

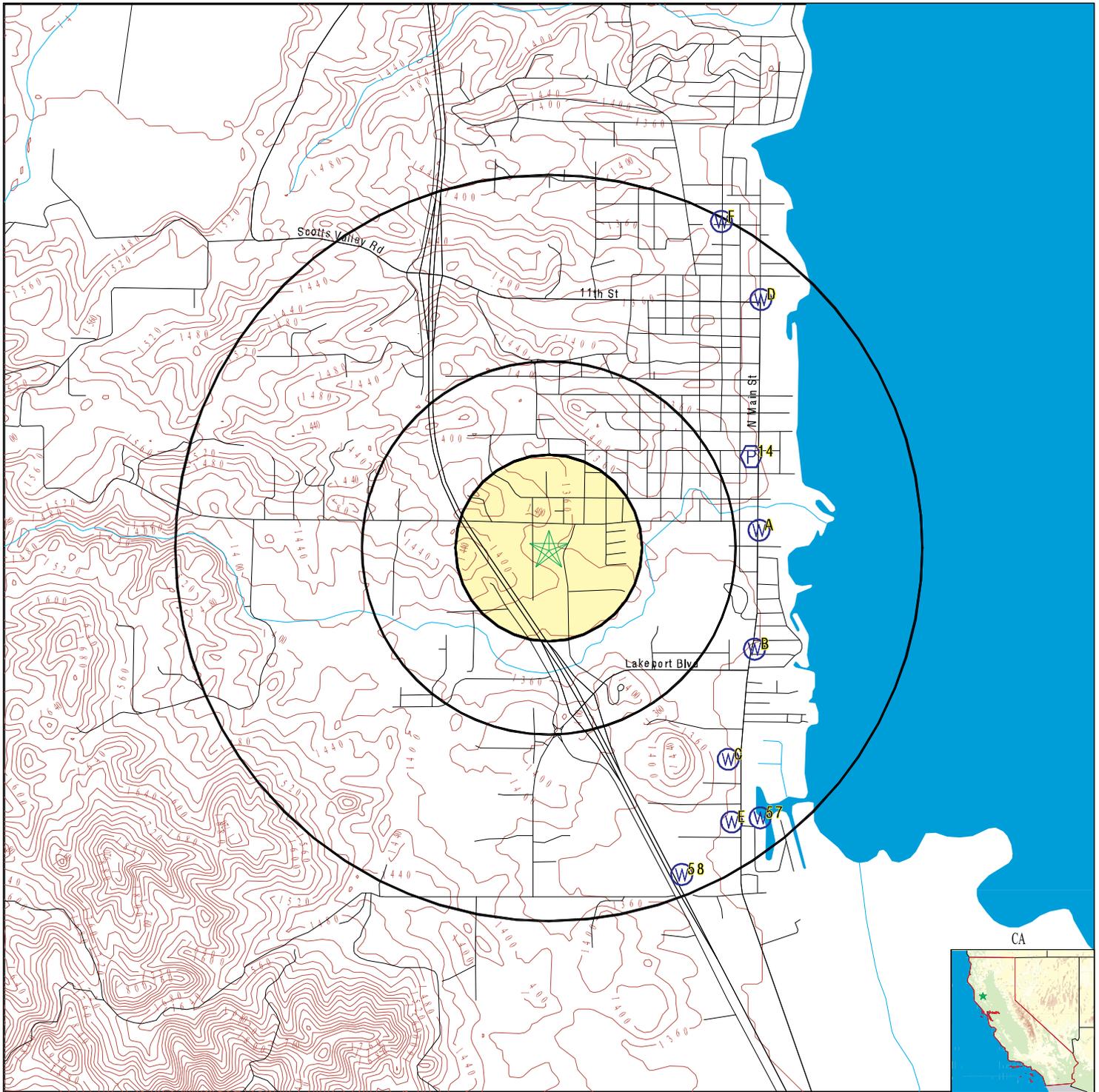
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	CAEDF0000096888	1/2 - 1 Mile East
A2	CAEDF0000104927	1/2 - 1 Mile East
A3	CAEDF0000001341	1/2 - 1 Mile East
A4	CAEDF0000037628	1/2 - 1 Mile East
A5	CAEDF0000016788	1/2 - 1 Mile East
A6	CAEDF0000037643	1/2 - 1 Mile East
A7	CAEDF0000106600	1/2 - 1 Mile East
A8	CAEDF0000001019	1/2 - 1 Mile East
A9	CAEDF0000078748	1/2 - 1 Mile East
A10	CAEDF0000059202	1/2 - 1 Mile East
A11	CAEDF0000061519	1/2 - 1 Mile East
A12	CAEDF0000041875	1/2 - 1 Mile East
B13	CAEDF0000018425	1/2 - 1 Mile ESE
A15	CAEDF0000072382	1/2 - 1 Mile East
B16	CAEDF0000057145	1/2 - 1 Mile ESE
B17	CAEDF0000127527	1/2 - 1 Mile ESE
B18	CAEDF0000080645	1/2 - 1 Mile ESE
B19	CAEDF0000061983	1/2 - 1 Mile ESE
B20	CAEDF0000123337	1/2 - 1 Mile ESE
B21	CAEDF0000097236	1/2 - 1 Mile ESE
B22	CAEDF0000065575	1/2 - 1 Mile ESE
B23	CAEDF0000129459	1/2 - 1 Mile ESE
A24	CAEDF0000034409	1/2 - 1 Mile East
B25	CAEDF0000013720	1/2 - 1 Mile ESE
B26	CAEDF0000125719	1/2 - 1 Mile ESE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B27	CAEDF0000023911	1/2 - 1 Mile ESE
B28	CAEDF0000074981	1/2 - 1 Mile ESE
B29	CAEDF0000080129	1/2 - 1 Mile ESE
B30	CAEDF0000044465	1/2 - 1 Mile ESE
B31	CAEDF0000127295	1/2 - 1 Mile ESE
C32	CAEDF0000060624	1/2 - 1 Mile SE
C33	CAEDF0000088749	1/2 - 1 Mile SE
C34	CAEDF0000094433	1/2 - 1 Mile SE
C35	CAEDF0000126036	1/2 - 1 Mile SE
C36	CAEDF0000054269	1/2 - 1 Mile SE
C37	CAEDF0000098794	1/2 - 1 Mile SE
C38	CAEDF0000020792	1/2 - 1 Mile SE
C39	CAEDF0000082310	1/2 - 1 Mile SE
C40	CAEDF0000054213	1/2 - 1 Mile SE
D41	CAEDF0000115630	1/2 - 1 Mile NE
E42	CAEDF0000094412	1/2 - 1 Mile SSE
D43	CAEDF0000002467	1/2 - 1 Mile NE
D44	CAEDF0000096295	1/2 - 1 Mile NE
D45	CAEDF0000104054	1/2 - 1 Mile NE
E46	CAEDF0000099538	1/2 - 1 Mile SSE
D47	CAEDF0000036768	1/2 - 1 Mile NE
D48	CAEDF0000129313	1/2 - 1 Mile NE
D49	CAEDF0000112835	1/2 - 1 Mile NE
D50	CAEDF0000042724	1/2 - 1 Mile NE
E51	CAEDF0000119659	1/2 - 1 Mile SSE
D52	CAEDF0000108766	1/2 - 1 Mile NE
D53	CAEDF0000006481	1/2 - 1 Mile NE
E54	CAEDF0000044707	1/2 - 1 Mile SE
D55	CAEDF0000134115	1/2 - 1 Mile NE
E56	CAEDF0000035017	1/2 - 1 Mile SE
57	CADDW0000015373	1/2 - 1 Mile SE
58	CADWR9000041274	1/2 - 1 Mile SSE
F59	CAEDF0000075079	1/2 - 1 Mile NNE
F60	CAEDF0000043107	1/2 - 1 Mile NNE
F61	CAEDF0000135166	1/2 - 1 Mile NNE
F62	CAEDF0000036117	1/2 - 1 Mile NNE
F63	CAEDF0000068673	1/2 - 1 Mile NNE
F64	CAEDF0000047789	1/2 - 1 Mile NNE
F65	CAEDF0000017823	1/2 - 1 Mile NNE
F66	CAEDF0000076603	1/2 - 1 Mile NNE
F67	CAEDF0000103130	1/2 - 1 Mile NNE

PHYSICAL SETTING SOURCE MAP - 6566821.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport CA 95453
 LAT/LONG: 39.03939 / 122.925627

CLIENT: KCE Matrix
 CONTACT: Aram Kaloustian
 INQUIRY #: 6566821.2s
 DATE: July 07, 2021 1:38 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A1
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000096888

Well ID:	T0603300069-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-2		

A2
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000104927

Well ID:	T0603300069-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-11		

A3
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000001341

Well ID:	T0603300069-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-12		

A4
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000037628

Well ID:	T0603300069-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A5
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000016788

Well ID:	T0603300069-MW-14	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-14		

A6
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000037643

Well ID:	T0603300069-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-5		

A7
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000106600

Well ID:	T0603300069-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-4		

A8
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000001019

Well ID:	T0603300069-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A9
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000078748

Well ID:	T0603300069-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-8		

A10
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000059202

Well ID:	T0603300069-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-7		

A11
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000061519

Well ID:	T0603300069-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-6		

A12
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000041875

Well ID:	T0603300069-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-10		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B13
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000018425

Well ID:	T0603300005-SB-20	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-20
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-20&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-20		

14
ENE
1/2 - 1 Mile
Lower

FRDS PWS CA1700593

Epa region:	09	State:	CA
Pwsid:	CA1700593	Pwsname:	PERKS MOBILE HOME ESTATES
Cityserved:	Not Reported	Stateserved:	CA
Zipsserved:	Not Reported	Fipscounty:	06033
Status:	Closed	Retpopsrvd:	0
Pwssvconn:	51	Psource longname:	Groundwater
Pwstype:	CWS	Owner:	Private
Contact:	PERKS MOBILE HOME ESTATES	Contactorgname:	Not Reported
Contactphone:	Not Reported	Contactaddress1:	PERKS MOBILE HOME ESTATES
Contactaddress2:	4265 LAKESHORE BLV	Contactcity:	LAKEPORT
Contactstate:	CA	Contactzip:	95453
Pwsactivitycode:	N		
PWS ID:	CA1700593	PWS type:	System Owner/Responsible Party
PWS name:	PERKS MOBILE HOME ESTATES	PWS address:	Not Reported
PWS city:	LAKEPORT	PWS state:	CA
PWS zip:	95453	PWS ID:	CA1700593
Activity status:	Active	Date system activated:	8404
Date system deactivated:	Not Reported	Retail population:	00000065
System name:	PERKS MOBILE HOME ESTATES	System address:	PERKS MOBILE HOME ESTATES
System address:	4265 LAKESHORE BLV	System city:	LAKEPORT
System state:	CA	System zip:	95453
Population served:	Under 101 Persons	Treatment:	Untreated
Latitude:	390235	Longitude:	1225452

A15
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000072382

Well ID:	T0603300069-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-9		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B16
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000057145

Well ID:	T0603300005-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-1		

B17
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000127527

Well ID:	T0603300005-SB-21	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-21
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-21&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-21		

B18
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000080645

Well ID:	T0603300005-SB-19	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-19
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-19&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-19		

B19
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000061983

Well ID:	T0603300005-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B20
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000123337

Well ID:	T0603300005-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-8		

B21
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000097236

Well ID:	T0603300005-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-2		

B22
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000065575

Well ID:	T0603300005-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-7		

B23
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000129459

Well ID:	T0603300005-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A24
East
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000034409

Well ID:	T0603300069-MW-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300069&assigned_name=MW-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300069&assigned_name=MW-13		

B25
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000013720

Well ID:	T0603300005-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-5		

B26
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000125719

Well ID:	T0603300005-SB-18	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-18
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-18&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-18		

B27
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000023911

Well ID:	T0603300005-SB-22	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-22
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-22&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-22		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B28
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000074981

Well ID:	T0603300005-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=MW-6		

B29
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000080129

Well ID:	T0603300005-SB-16	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-16		

B30
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000044465

Well ID:	T0603300005-SB-14	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-14		

B31
ESE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000127295

Well ID:	T0603300005-SB-17	Well Type:	MONITORING
Source:	EDF	Other Name:	SB-17
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300005&assigned_name=SB-17&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300005&assigned_name=SB-17		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C32
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000060624

Well ID:	T0603369451-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-8		

C33
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000088749

Well ID:	T0603369451-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-1		

C34
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000094433

Well ID:	T0603369451-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-3		

C35
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000126036

Well ID:	T0603369451-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-9		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C36
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000054269

Well ID:	T0603369451-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-7		

C37
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000098794

Well ID:	T0603369451-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-4		

C38
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000020792

Well ID:	T0603369451-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-2		

C39
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000082310

Well ID:	T0603369451-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C40
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000054213

Well ID:	T0603369451-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603369451&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603369451&assigned_name=MW-5		

D41
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000115630

Well ID:	T0603300068-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-10		

E42
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000094412

Well ID:	T0603300081-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300081&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300081&assigned_name=MW-2		

D43
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000002467

Well ID:	T0603300068-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D44
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000096295

Well ID:	T0603300068-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-2		

D45
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000104054

Well ID:	T0603300068-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-6		

E46
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000099538

Well ID:	T0603300081-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300081&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300081&assigned_name=MW-1		

D47
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000036768

Well ID:	T0603300068-MW-8-S	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8-S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-8-S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-8-S		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D48
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000129313

Well ID:	T0603300068-MW-8-D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8-D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-8-D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-8-D		

D49
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000112835

Well ID:	T0603300068-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-3		

D50
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000042724

Well ID:	T0603300068-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-1		

E51
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000119659

Well ID:	T0603300081-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300081&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300081&assigned_name=MW-3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D52
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000108766

Well ID:	T0603300068-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-9		

D53
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000006481

Well ID:	T0603300068-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-4		

E54
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000044707

Well ID:	T0603300081-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300081&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300081&assigned_name=MW-4		

D55
NE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000134115

Well ID:	T0603300068-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300068&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300068&assigned_name=MW-7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

E56
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000035017

Well ID:	T0603300081-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300081&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300081&assigned_name=MW-5		

57
SE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000015373

Well ID:	1700630-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=1700630-001&store_num=		
GeoTracker Data:	Not Reported		

58
SSE
1/2 - 1 Mile
Lower

CA WELLS CADWR9000041274

State Well #:	14N10W25Q001M	Station ID:	17390
Well Name:	Not Reported	Basin Name:	Scotts Valley
Well Use:	Irrigation	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	SFBD BK

F59
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000075079

Well ID:	T0603300026-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

F60
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000043107

Well ID:	T0603300026-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-3		

F61
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000135166

Well ID:	T0603300026-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-9		

F62
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000036117

Well ID:	T0603300026-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-4		

F63
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000068673

Well ID:	T0603300026-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

F64
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000047789

Well ID:	T0603300026-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-12		

F65
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000017823

Well ID:	T0603300026-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-2		

F66
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000076603

Well ID:	T0603300026-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-7		

F67
NNE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000103130

Well ID:	T0603300026-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0603300026&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0603300026&assigned_name=MW-8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95453	19	0

Federal EPA Radon Zone for LAKE County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95453

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.733 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

REGULATORY RECORDS SEARCH

APPENDIX C-1

REGULATORY RECORDS SEARCH

CALIFORNIA STATE
REGIONAL WATER QUALITY CONTROL BOARD

Hagop Tatian

From: Hagop Tatian
Sent: Wednesday, July 7, 2021 9:27 AM
To: r5s-pra@waterboards.ca.gov
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request *copies* or *scans* of any files and documentation that you may maintain with regard to Underground Storage Tanks (UST's) and/or Hazardous Materials (HAZMAT) for the following property:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com



Central Valley Regional Water Quality Control Board

July 26, 2021

Hagop Tatian
KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 95451

Hagop,

In response to your Public Record Request of July 7, 2021 no records were found on the following property(s): **447 Bevins Street, Lakeport CA**

The search was conducted with the GeoTracker database, available for public access at <http://www.geotracker.waterboards.ca.gov/>.

In addition to GeoTracker, the California Integrated Water Quality Systems (CIWQS) database was also used in the search, and is available for public access at http://www.waterboards.ca.gov/centralvalley/resources/data_databases/.

In addition to GeoTracker, the California Storm Water Multiple Applications and Report Tracking System (Smarts) was also used in the search, and is available for public access at <http://smarts.waterboards.ca.gov>.

Thank you,

Margie Saldana
Office Technician
Public Records Coordinator
916-464-3291
R5S-PRA@waterboards.ca.gov

APPENDIX C-2

REGULATORY RECORDS SEARCH

CALIFORNIA STATE
DEPARTMENT OF TOXIC SUBSTANCE CONTROL

Hagop Tatian

From: Hagop Tatian
Sent: Wednesday, July 7, 2021 9:30 AM
To: BerkeleyFileRoom@DTSC
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request *copies* or *scans* of any files and documentation that you may maintain with regard to Underground Storage Tanks (UST's) and/or Hazardous Materials (HAZMAT) for the following property:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
700 Heinz Avenue
Berkeley, California 94710-2721



Gavin Newsom
Governor

July 14, 2021

Hagop Tatian
hagop@kcematrixinc.com
818-559-5500

Public Records Request Number: PR2-070721-03

Location(s): 447 Bevins St., Lakeport, CA 95453

Dear Mr. Tatian:

We have received your Public Records Act Request at the Department of Toxic Substances Control (DTSC). Upon thorough review of our files, we found no records pertaining to the site(s) referenced above.

We were unable to locate an address in the county database using the APNs provided and we are unable to search our records using APNs as our databases do not include this information. If you have a specific address or cross streets, please let us know.

For information regarding public reports on hazardous waste shipments of generators, transporters, and TSDFs, you can access our Hazardous Waste Tracking System (HWTS) online at: <https://hwts.dtsc.ca.gov/>. Select the "Reports" tab for search options. If you are interested in retrieving detailed reports, please contact the HWTS unit via e-mail: hwtsreports@dtsc.ca.gov or phone: 1-800-618-6942. Customized reports may require a fee. For copies of manifests, please send an e-mail to mcr@dtsc.ca.gov.

In addition, the DTSC provides access to public records online via EnviroStor; another data management system that tracks our efforts in cleanup, permitting, enforcement, and investigation of known/suspected hazardous waste sites and facilities. The available data is updated in real-time. You can access Envirostor online at www.envirostor.dtsc.ca.gov. Navigate the website easily by clicking the "How to Use EnviroStor" tab, then selecting the option "Take a Tour".

If you have any questions or would like further information regarding your request, please contact me via phone: [510-540-3800](tel:510-540-3800) or e-mail: Berkeleyfileroom@dtsc.ca.gov.

Sincerely,

Carl Rose

Regional Records Coordinator

APPENDIX C-3

REGULATORY RECORDS SEARCH

**LAKE COUNTY – DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION**

Hagop Tatian

From: Hagop Tatian
Sent: Wednesday, July 7, 2021 9:31 AM
To: environmentalhealth@lakecountyca.gov
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request *copies* or *scans* of any files and documentation that you may maintain with regard to Underground Storage Tanks (UST's) and/or Hazardous Materials (HAZMAT) for the following property:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Hagop Tatian

From: Tina Rubin <Tina.Rubin@lakecountyca.gov>
Sent: Thursday, July 8, 2021 4:01 PM
To: Hagop Tatian
Cc: Christina Gearhart
Subject: RE: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

Hagop,

See the inspector comments below. It appears our office has no records on this parcel.

Tina Dawn-Rubin
Environmental Health Aide

County of Lake

Department of Health Services
Environmental Health Division
922 Bevins Ct, Lakeport, CA 95453
Tel: 707-263-1164 Fax: 707-263-1681

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From: Christina Gearhart
Sent: Thursday, July 8, 2021 3:38 PM
To: Tina Rubin <Tina.Rubin@lakecountyca.gov>
Subject: RE: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

I don't see anything on this parcel in our files or on the calepa regulated site portal.

Warm Regards,
Chris

Christina Gearhart
Lake County Division of Environmental Health
922 Bevins Ct.
Lakeport, CA 95453
(707) 263-1164
(707) 263-1681 (FAX)
Christina.Gearhart@lakecountyca.gov

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From: Tina Rubin
Sent: Thursday, July 8, 2021 8:29 AM
To: Christina Gearhart <Christina.Gearhart@lakecountyca.gov>
Subject: FW: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

Do we have anything on this address.

Tina Dawn-Rubin
Environmental Health Aide

County of Lake

Department of Health Services
Environmental Health Division
922 Bevins Ct, Lakeport, CA 95453
Tel: 707-263-1164 Fax: 707-263-1681

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From: Hagop Tatian [<mailto:hagop@kcematrixinc.com>]
Sent: Wednesday, July 7, 2021 9:31 AM
To: EnvironmentalHealthGeneralEmail <EnvironmentalHealth@lakecountyca.gov>
Subject: [EXTERNAL] Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request *copies* or *scans* of any files and documentation that you may maintain with regard to Underground Storage Tanks (UST's) and/or Hazardous Materials (HAZMAT) for the following property:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax

APPENDIX C-4

REGULATORY RECORDS SEARCH

LAKE COUNTY FIRE PROTECTION DISTRICT

Hagop Tatian

From: Hagop Tatian
Sent: Wednesday, July 7, 2021 9:35 AM
To: 'office@lakecountyfire.com'
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request *copies* or *scans* of any files and documentation that you may maintain with regard to Underground Storage Tanks (UST's) and/or Hazardous Materials (HAZMAT) for the following property:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Hagop Tatian

From: Tiffany Franklin <TFranklin@lakecountyfire.com>
Sent: Wednesday, July 7, 2021 9:34 AM
To: Hagop Tatian
Subject: RE: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

Good morning,
Unfortunately lakeport is outside of our district, you may want to contact Lakeport Fire.

Thank you,

Tiffany Franklin

Finance Assistant
Lake County Fire Protection District
707-994-2170 Fax 707-994-4861

The information contained in this transmission may contain privileged and confidential information, including patient information protected by federal and state privacy laws. It is intended only for the use of the person(s) named above. If you are not the intended recipient, you are hereby notified that any review, dissemination, distribution, or duplication of this communication is strictly prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Wednesday, July 7, 2021 9:32 AM
To: Tiffany Franklin <TFranklin@lakecountyfire.com>
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request *copies* or *scans* of any files and documentation that you may maintain with regard to Underground Storage Tanks (UST's) and/or Hazardous Materials (HAZMAT) for the following property:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

APPENDIX C-5

REGULATORY RECORDS SEARCH

CITY OF LAKEPORT
FIRE PROTECTION DISTRICT

Hagop Tatian

From: Hagop Tatian
Sent: Thursday, July 8, 2021 8:20 AM
To: 'lakeportfire@lakeportfire.com'
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request *copies* or *scans* of any files and documentation that you may maintain with regard to Underground Storage Tanks (UST's) and/or Hazardous Materials (HAZMAT) for the following property:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Hagop Tatian

From: Mandi Huff <mhuff@lakeportfire.com>
Sent: Friday, July 23, 2021 8:25 AM
To: Hagop Tatian
Subject: Records Request

Hi Hugo,

There are no hazardous materials or storage tanks to my former chief's knowledge at the Bevins St. address you inquired about.

Mandi Huff

Administrative Assistant
Lakeport Fire Protection District
445 N. Main St.
Lakeport, CA 95453
Phone: (707) 263-4396
Fax: (707) 263-7087

This email message and its attachments are for the sole use of the intended recipient or recipients and may contain confidential information. If you have received this email in error, please notify the sender and delete this message.

APPENDIX C-6

HYDROLOGY INFORMATION

APPENDIX C-7

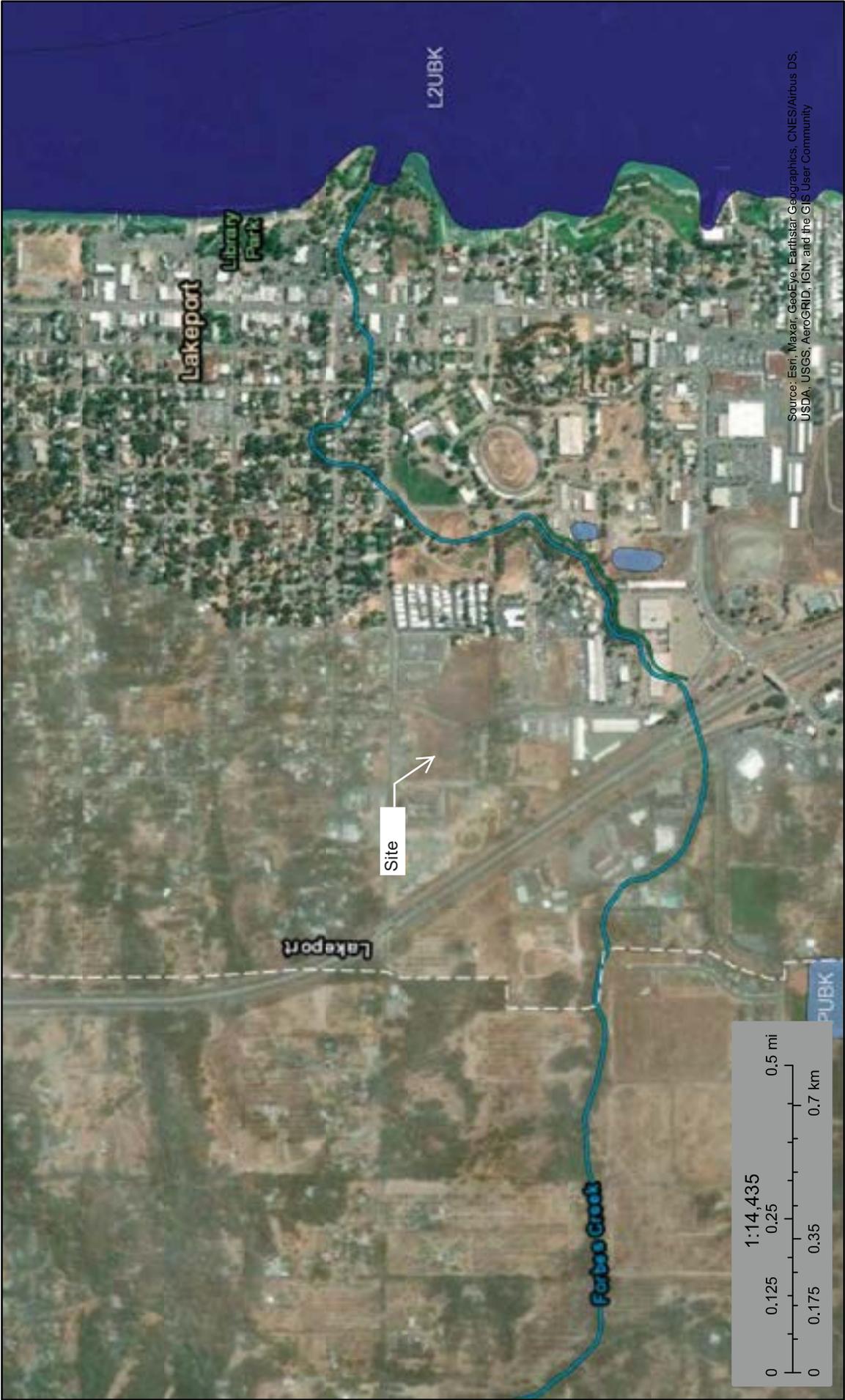
NATIONAL WETLANDS INVENTORY - WETLAND MAP



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



August 5, 2021

Wetlands

-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Lake
-  Other
-  Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX C-8

FEDERAL EMERGENCY MANAGEMENT AGENCY

NATIONAL FLOOD HAZARD MAP

APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

APPENDIX D-1

**CITY OF LAKEPORT– CITY CLERK’S OFFICE
(BUILDING DEPARTMENT)**

**LAKEPORT COUNTY
DEPARTMENT OF COMMUNITY DEVELOPMENT**

Hagop Tatian

From: Hagop Tatian
Sent: Wednesday, July 7, 2021 10:02 AM
To: admininfo@cityoflakeport.com
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453
Attachments: KCE Matrix Request (7-7-21).pdf

Please find the attached public record request form regarding the property located at 447 Bevins Street, Lakeport, CA 95453.

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

I. Form CPRA RequestDate: 7/7/2021

Time: _____

Name of Requestor: HagopAddress: 1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506Telephone Number: (818) 559 5500Email: hagop@kcematrixinc.comDo you want us to make copies of responsive documents for an additional charge? **Yes**

Description of the records sought:

(Please be as precise as possible. If your request produces a large number of documents, or documents from many different locations, it may delay our ability to locate and collect them. Staff may assist with narrowing the scope down to meet a specific need)

KCE Matrix would like to request copies or scans of any files and documentation as follows:(1) Fire Department Records - related to Underground Storage Tanks (USTs) and/or Hazardous Materials (HAZMAT)(2) Building Department Records - related to site history, including historic and current building permits, certificates of occupation and violations; for the following property:447 Bevins Street
Lakeport, CA 95453

CORRESPONDENCE LOG	
DATE:	ACTION:

10 Day Review Due _____ 14 Day Review Due _____

Form Prepared by: _____

Hagop Tatian

From: Hilary Britton <hbritton@cityoflakeport.com>
Sent: Wednesday, July 7, 2021 2:06 PM
To: Hagop Tatian
Subject: FW: Public Record Request: 447 Bevins Street, Lakeport, CA 95453 APN 025-431-37
Attachments: 2E..0447 BEVINS ST 25-431-37 ALL IN NEW SYS.doc

Hi Hagop,

We are in receipt of your public records request, dated 07/07/2021. Pursuant to Government Code Section 6253(c) this letter shall serve as a formal response to your request and notification that I am the person responsible for the determination of which records are responsive and subject to production. After review of the relevant law and the City's records we have determined as follows:

The City is fully committed to making the documents requested available to you. Accordingly, the records identified in your request are attached:

1. Building Department Records for 447 Bevins Street – Please see attached data card for the property.
2. Underground Storage Tanks (USTs) or Hazardous Materials (HAZMAT) - Hazardous materials and underground/above ground storage tanks – the City has no responsive records. These would require CUPA permitting, provided by Lake county Environmental Health. Here is some information on who to should contact: <http://www.lakecountycalifornia.gov/Page1670.aspx>
3. Your request referenced the Lakeport Fire Department which is not affiliated with the City – Contact info: (707) 263-4396

Please be advised that the City will not allow inspection or copying of any privileged documents. While we will try to remove all privileged documents, the inadvertent inclusion of any privileged documents does not constitute a waiver and we ask you to notify us of any privileged material that is inadvertently provided.

Please let us know if you would like to discuss your request further or if you would like additional assistance in formulating a request for particular records.

Very truly yours,

Hilary Britton
Deputy City Clerk/Records Supervisor
City of Lakeport
225 Park Street
Lakeport, CA 95453
(707) 263-5615 x102
hbritton@cityoflakeport.com

E-mail correspondence and attachments with the City of Lakeport may be subject to the California Public Records Act, and as such may therefore be subject to public disclosure unless otherwise exempt under the Act.



(Click button to register online)

From: Bonnie Sharp
Sent: Wednesday, July 07, 2021 1:41 PM
To: Hilary Britton <hbritton@cityoflakeport.com>
Cc: Jenni Byers <jbyers@cityoflakeport.com>; Linda Sobieraj <lsobieraj@cityoflakeport.com>
Subject: RE: Public Record Request: 447 Bevins Street, Lakeport, CA 95453 APN 025-431-37

Hello,

This is vacant land – there are only 2 permits showing for it in 2006 – one for grading – and one for the water meter and lateral.

I have attached the Data card to this email, and will be happy to pull the water meter permit if you need it, however there won't be a lot of information with it.

There are no Certificates of Occupancy, and I have not found any Code Enforcement activity on this parcel.

I hope this covers everything. If you have any questions, or if I can be of further assistance, please let me know.
All My Best,

Bonne C. Sharp

Bonne C. Sharp|Permit Technician|Community Development Dept.
City of Lakeport | 225 Park St. | Lakeport CA 95453
Phone: 707.263.5615 ext. 205 |FAX: 707.263.9413
Email: bsharp@cityoflakeport.com



From: Hilary Britton <hbritton@cityoflakeport.com>
Sent: Wednesday, July 7, 2021 12:09 PM
To: Bonnie Sharp <bsharp@cityoflakeport.com>
Cc: Jenni Byers <jbyers@cityoflakeport.com>
Subject: FW: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

Hi Bonnie,

Please find attached a public records request for the following information regarding 447 Bevins Street:

Building Department Records - related to site history, including

- historic and current building permits

- Certificates of occupation
- Violations

The 10-day response is due 07/16/2021.

Please let me know if there is anything I can do to assist.

Hilary Britton
Deputy City Clerk/Records Supervisor
City of Lakeport
225 Park Street
Lakeport, CA 95453
(707) 263-5615 x102
hbritton@cityoflakeport.com

E-mail correspondence and attachments with the City of Lakeport may be subject to the California Public Records Act, and as such may therefore be subject to public disclosure unless otherwise exempt under the Act.



(Click button to register online)

From: Hagop Tatian [<mailto:hagop@kcematrixinc.com>]
Sent: Wednesday, July 07, 2021 10:02 AM
To: Hilary Britton <hbritton@cityoflakeport.com>
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

Please find the attached public record request form regarding the property located at [447 Bevins Street, Lakeport, CA 95453](#).

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

DATA CARD

CITY OF LAKEPORT COMMUNITY DEVELOPMENT DEPARTMENT

ADDRESS:
and
APN:

**447 BEVINS STREET
25-431-37
R-3 as of 1/99
In Redev. Project Area
G.P. as of 6/92= High
Density Residential
In reimbursement dist.**

OWNER
& MAILING
ADDRESS

**Robert Schall
P.O. Box 737
Nice, CA 95464**

BUILDING PERMITS				LAND USE ACTIONS	
permit number	description	value	date finalized	date & ap. no.	item / description / conditions
06-05-8394	Hose bib for 4" water meter & line	\$250		12/3/84	Rezoning R-1-A to R-3 (Ord. 637 (84))
				AR 87-013 11/9/87	approved arch & design review to allow apt. complex (AR 87-013)
				AR 87-013 7/11/88	AR 87-013 approved landscaping & revised site plan
				2/3/89	changed to parcel # 25-431-37
				AR 87-003 5/22/89	1-year extension for AR 87-003 granted
				AR 90-004 UP 90-005 ER 90-002 5/29/90	approved arch. & design review, supplemental environmental review, use permit for 63-units (see AR 90-004/UP 90-005/ER 90-002 for conditions)
				GPA 01-01 ZC 01-01 AR 01-10 UP 01-01 LL 01-01 ER 01-04 9/10/01	P C recommend to CC to approve GPA 01-01/ZC 01-01. P C continued consideration of AR/UP/LL/ER to next meeting requesting more information. (See also 25-431-16) 10/2001 PC approved construction of an 80 unit multi-family hsg project with conditions. (see also 25-431-37)

NOTATIONS OF INTEREST:

January 2005: The approval period for all previously approved projects has expired.

5/8/2006: Owner paid water expansion fee of \$33,000 for 4' water meter.

In Building Permit need to pick up file drawer under Bevins is a breakdown for an 80 unit apartment complex dated 2/28/2005.

6/10/2020: Sewer fee credits have been applied to 447 Bevins Street, APN 25-431-37 as follows. On 6/10/2020 the City (Finance Director, Asst. City Manager, Building Official) confirmed a determination of sewer fees paid through revised assessment, District 91-1 based on documents

provided by Robert Schall, property owner, and Assessment District Records.

Original assessment = \$2,688 – Sewer Assessment District 91-1.

On 2/27/1992 the City agreed to provide 62 connections at 0.6 RUEs per connection.

The fee/price per RUE on that date was \$3,100.

$62 \times 0.6 = 37.2$ RUEs. $\$3,100 \times 37.2 = \$115,320$.

The assessment was changed from \$2,688 to \$115,320 in 1992, and payment on tax role has continued to this date with outstanding balance due and payments to continue.

Given that the original assessment was not added to the purchase of RUEs at the time the assessment was modified, the City will deduct that amount (\$2,688) from the adjusted figure (\$115,320) for a remainder of \$112,632 to be applied toward the purchase of RUEs at \$3,100 each.

$\$112,632 / 3,100 = 36.33$ RUEs credited to any future development of the parcel.

tc

Hagop Tatian

From: Hagop Tatian
Sent: Wednesday, July 7, 2021 9:39 AM
To: Lauri.Ensley@lakecountyca.gov
Cc: PlanningCounter@lakecountyca.gov
Subject: Public Record Request: 447 Bevins Street, Lakeport, CA 95453
Attachments: KCE Matrix - (7-7-21).pdf

KCE Matrix would like to request copies or scans of any files and documentation that you may maintain with regard to site history, including historic and current building permits, certificates of occupancy and violations for the property located at:

**447 Bevins Street
Lakeport, CA 95453**

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com



PUBLIC INFORMATION REQUEST

Guidelines for obtaining copies of public information.
Cost for copies of any documents is 10 cents a page.
The department requires 10 days to produce documents.
Confidential documents are not privy under the Public Information Records Act.

Requesting Party Date of request July 7, 2021

Name: Hagop. T - KCE Matrix, Inc.

Mailing Address: 1112 W. Burbank Blvd., Suite 301 Town Burbank Zip 91506

Phone Number (818) 559 5500 Email: hagop@kcematrixinc.com

Signed:

Identification: _____

Property for requested information

Street Address: 447 Bevins Street Town Lakeport, CA 95453

Assessor's Parcel Number: 025-431-370-000 Zoning _____

Property owner's name: NA

Description of documents requested:

- Site history information, including historic and current building permits, certificates of occupation, and violations

COMMENTS: _____

Date completed _____ By whom _____

Total Pages _____ Total Cost _____ Paid _____

/ /

STAFF Date Completed/ Mailed or picked up.

COMMUNITY DEVELOPMENT DEPARTMENT
255 North Forbes St Lakeport CA Phone 707/263-2221
Mail: 255 North Forbes Street Lakeport, CA 95453

Hagop Tatian

From: Lauri Ensley <Lauri.Ensley@lakecountyca.gov>
Sent: Wednesday, July 7, 2021 9:49 AM
To: Hagop Tatian
Cc: PlanningCounter@lakecountyca.gov
Subject: RE: Public Record Request: 447 Bevins Street, Lakeport, CA 95453

Good Morning,
You have reached the County of Lake.
447 Bevins Street is located in the City of Lakeport jurisdiction. Please call 707-263-3056 for your request.
Thank you and enjoy the day!



Lauri Ensley
Building Permit Technician
Department of Community Development
255 N. Forbes St.
Lakeport, CA 95453
Phone: (707) 263-2221 x 38109
Fax: (707) 262-2225
Email: lauri.ensley@lakecountyca.gov

STAY CONNECTED:



From: Hagop Tatian [mailto:hagop@kcematrixinc.com]
Sent: Wednesday, July 7, 2021 9:39 AM
To: Lauri Ensley <Lauri.Ensley@lakecountyca.gov>
Cc: PlanningCounter@lakecountyca.gov
Subject: [EXTERNAL] Public Record Request: 447 Bevins Street, Lakeport, CA 95453

KCE Matrix would like to request copies or scans of any files and documentation that you may maintain with regard to site history, including historic and current building permits, certificates of occupancy and violations for the property located at:

447 Bevins Street
Lakeport, CA 95453

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

APPENDIX D-2

HISTORIC MAPS



Vacant Land

447 Bevins Street

Lakeport, CA 95453

Inquiry Number: 6566821.3

July 07, 2021

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

07/07/21

Site Name:

Vacant Land
447 Bevins Street
Lakeport, CA 95453
EDR Inquiry # 6566821.3

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Aram Kaloustian



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by KCE Matrix were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # A1FC-4E88-8242
PO # KCE-2021-223E
Project Vacant Land



Sanborn® Library search results

Certification #: A1FC-4E88-8242

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

KCE Matrix (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

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APPENDIX D-3

AERIAL PHOTOGRAPHS



Vacant Land

447 Bevins Street

Lakeport, CA 95453

Inquiry Number: 6566821.8

July 08, 2021

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

07/08/21

Site Name:

Vacant Land
447 Bevins Street
Lakeport, CA 95453
EDR Inquiry # 6566821.8

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Aram Kaloustian



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1993	1"=500'	Acquisition Date: July 11, 1993	USGS/DOQQ
1983	1"=500'	Flight Date: July 03, 1983	USDA
1977	1"=500'	Flight Date: June 23, 1977	USGS
1974	1"=500'	Flight Date: October 01, 1974	USGS
1957	1"=500'	Flight Date: June 05, 1957	USGS
1952	1"=500'	Flight Date: July 03, 1952	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

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INQUIRY #: 6566821.8

YEAR: 2016

— = 500'





INQUIRY #: 6566821.8

YEAR: 2012

— = 500'





INQUIRY #: 6566821.8

YEAR: 2009

— = 500'





INQUIRY #: 6566821.8

YEAR: 2006

— = 500'





INQUIRY #: 6566821.8

YEAR: 1993

— = 500'





INQUIRY #: 6566821.8

YEAR: 1983

— = 500'





INQUIRY #: 6566821.8

YEAR: 1977

— = 500'





INQUIRY #: 6566821.8

YEAR: 1974

— = 500'



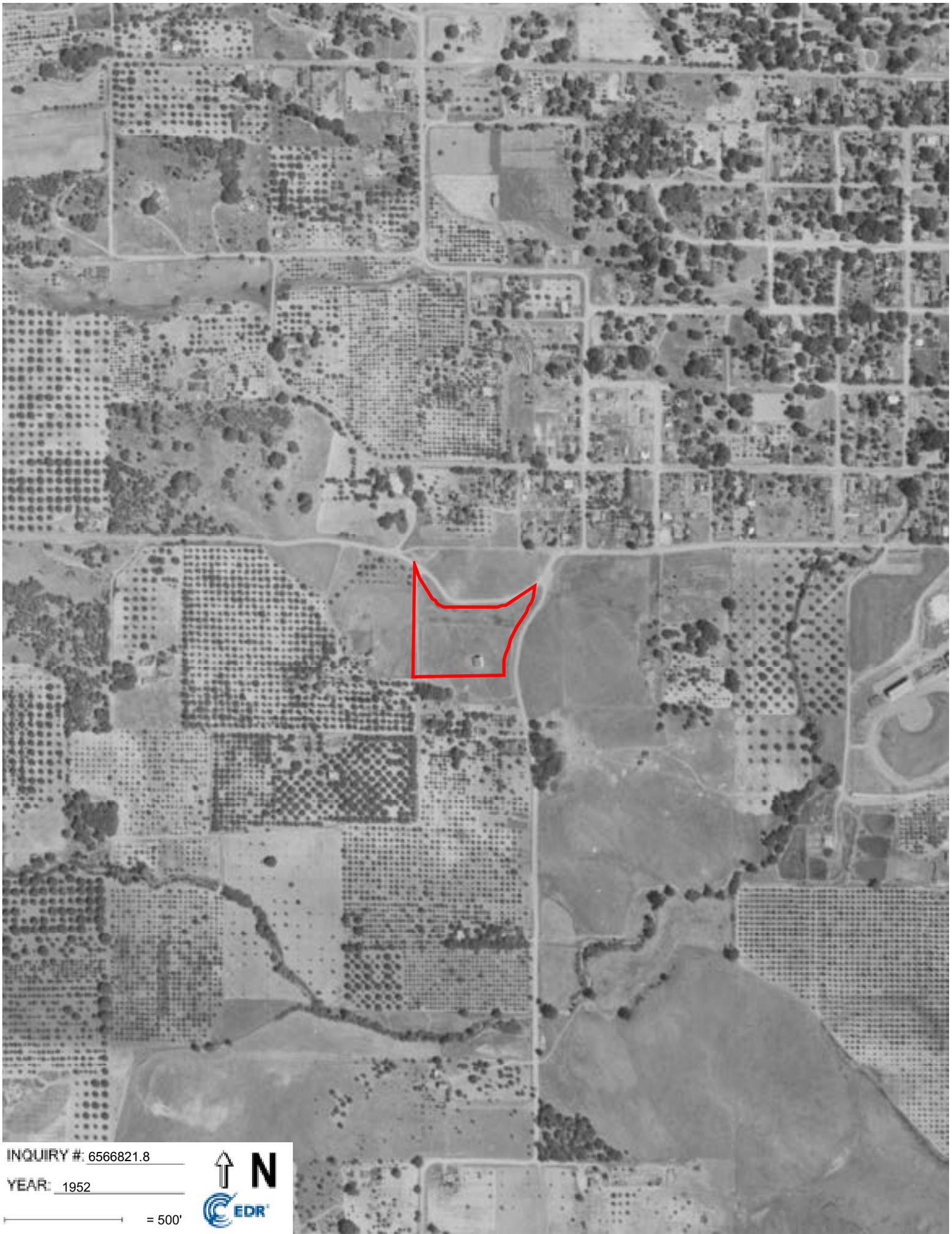


INQUIRY #: 6566821.8

YEAR: 1957

— = 500'





INQUIRY #: 6566821.8

YEAR: 1952

— = 500'



APPENDIX D-4

HISTORICAL TOPOGRAPHIC MAPS

Vacant Land
447 Bevins Street
Lakeport, CA 95453

Inquiry Number: 6566821.4

July 07, 2021

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

07/07/21

Site Name:

Vacant Land
447 Bevins Street
Lakeport, CA 95453
EDR Inquiry # 6566821.4

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Aram Kaloustian



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by KCE Matrix were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	KCE-2021-223E	Latitude:	39.03939 39° 2' 22" North
Project:	Vacant Land	Longitude:	-122.925627 -122° 55' 32" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	506436.52
		UTM Y Meters:	4321150.38
		Elevation:	1361.41' above sea level

Maps Provided:

2012
1994
1983
1978
1958
1951
1938

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Lakeport

7.5-minute, 24000

1994 Source Sheets



Lakeport

7.5-minute, 24000
Aerial Photo Revised 1975

1983 Source Sheets



Lakeport

15-minute, 48000

1978 Source Sheets



Lakeport

7.5-minute, 24000
Aerial Photo Revised 1975

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1958 Source Sheets



Lakeport

7.5-minute, 24000
Aerial Photo Revised 1957

1951 Source Sheets



Lakeport

15-minute, 62500

1938 Source Sheets

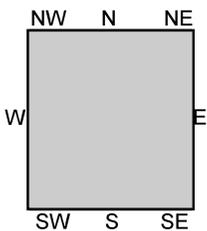


Lakeport

15-minute, 62500



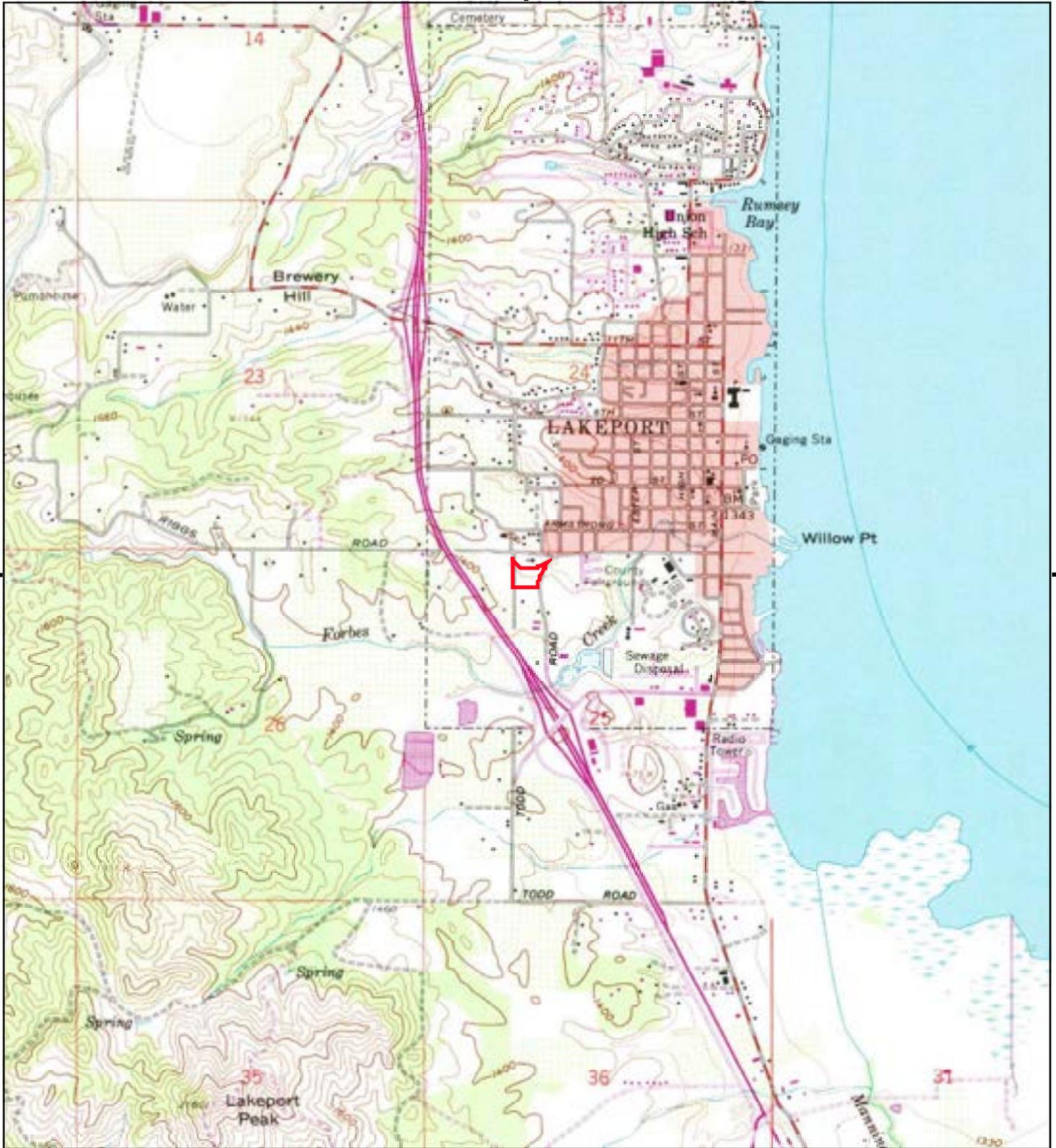
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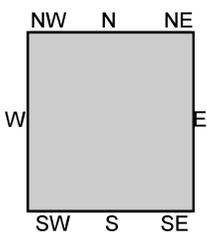
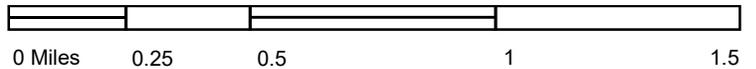
TP, Lakeport, 2012, 7.5-minute

SITE NAME: Vacant Land
 ADDRESS: 447 Bevens Street
 Lakeport, CA 95453
 CLIENT: KCE Matrix





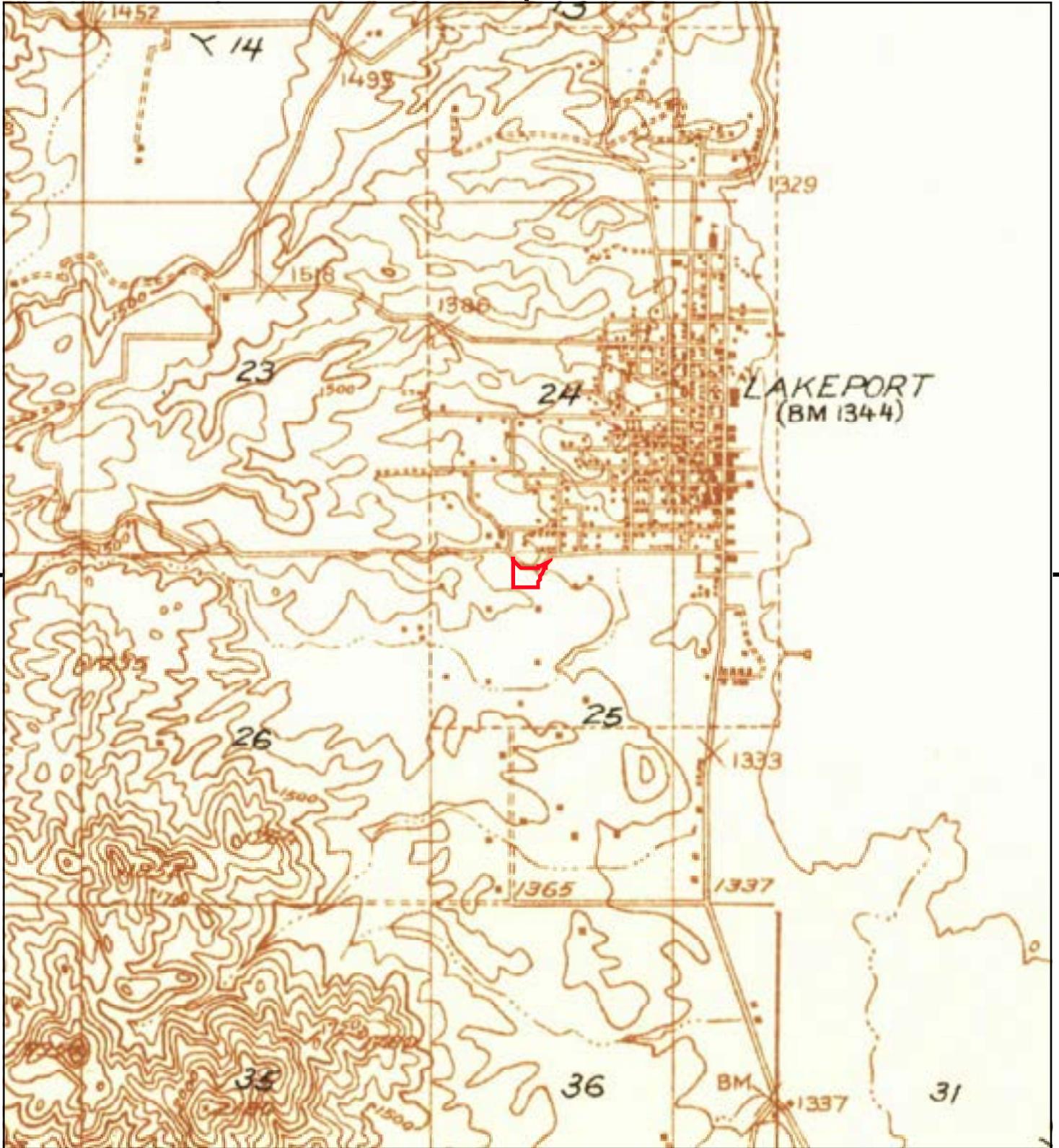
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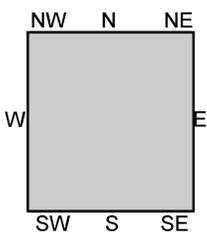
TP, Lakeport, 1994, 7.5-minute

SITE NAME: Vacant Land
 ADDRESS: 447 Bevin Street
 Lakeport, CA 95453
 CLIENT: KCE Matrix





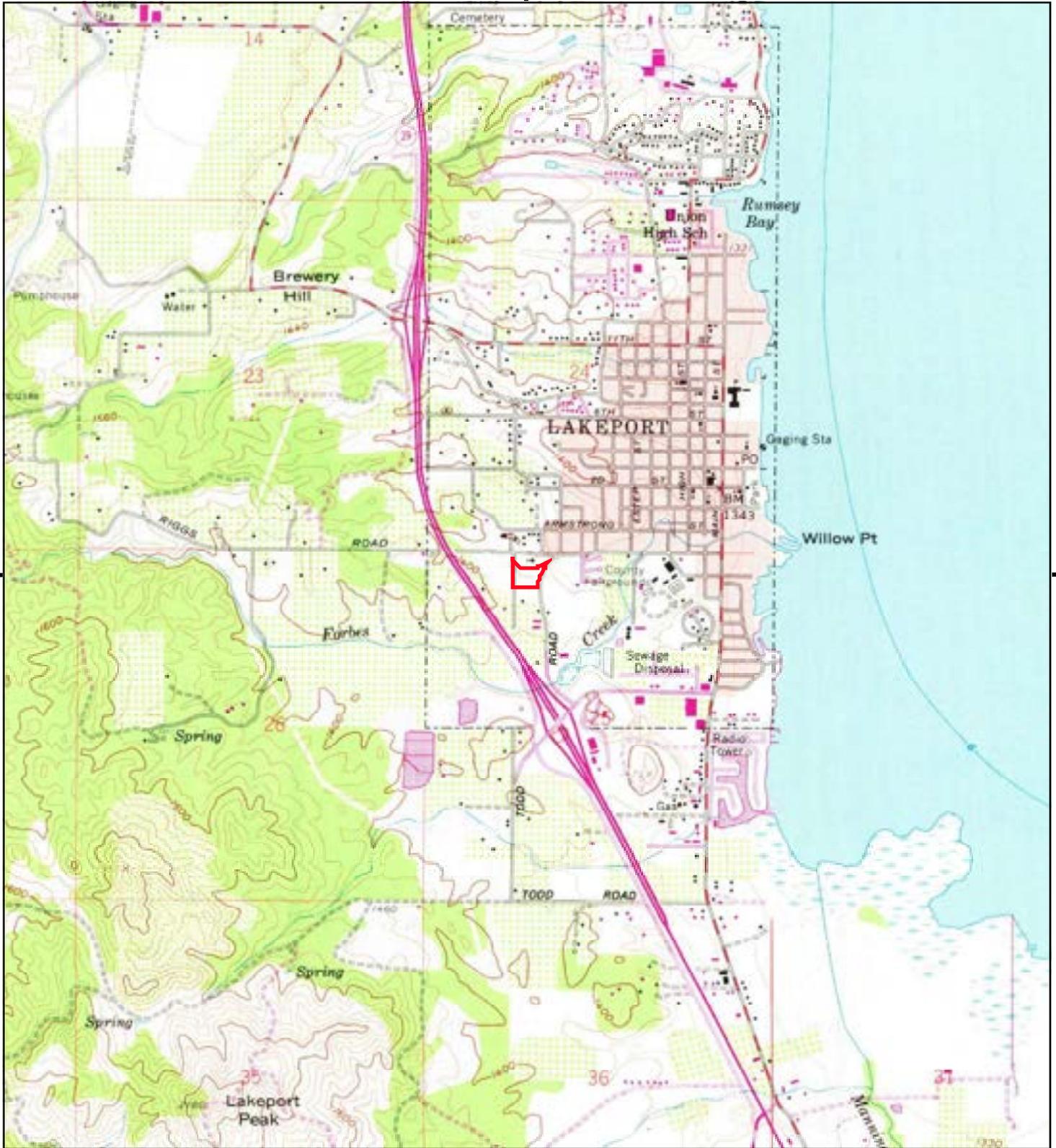
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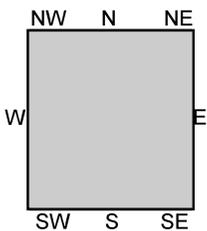
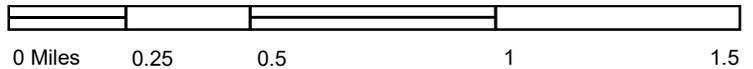
TP, Lakeport, 1983, 15-minute

SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport, CA 95453
 CLIENT: KCE Matrix





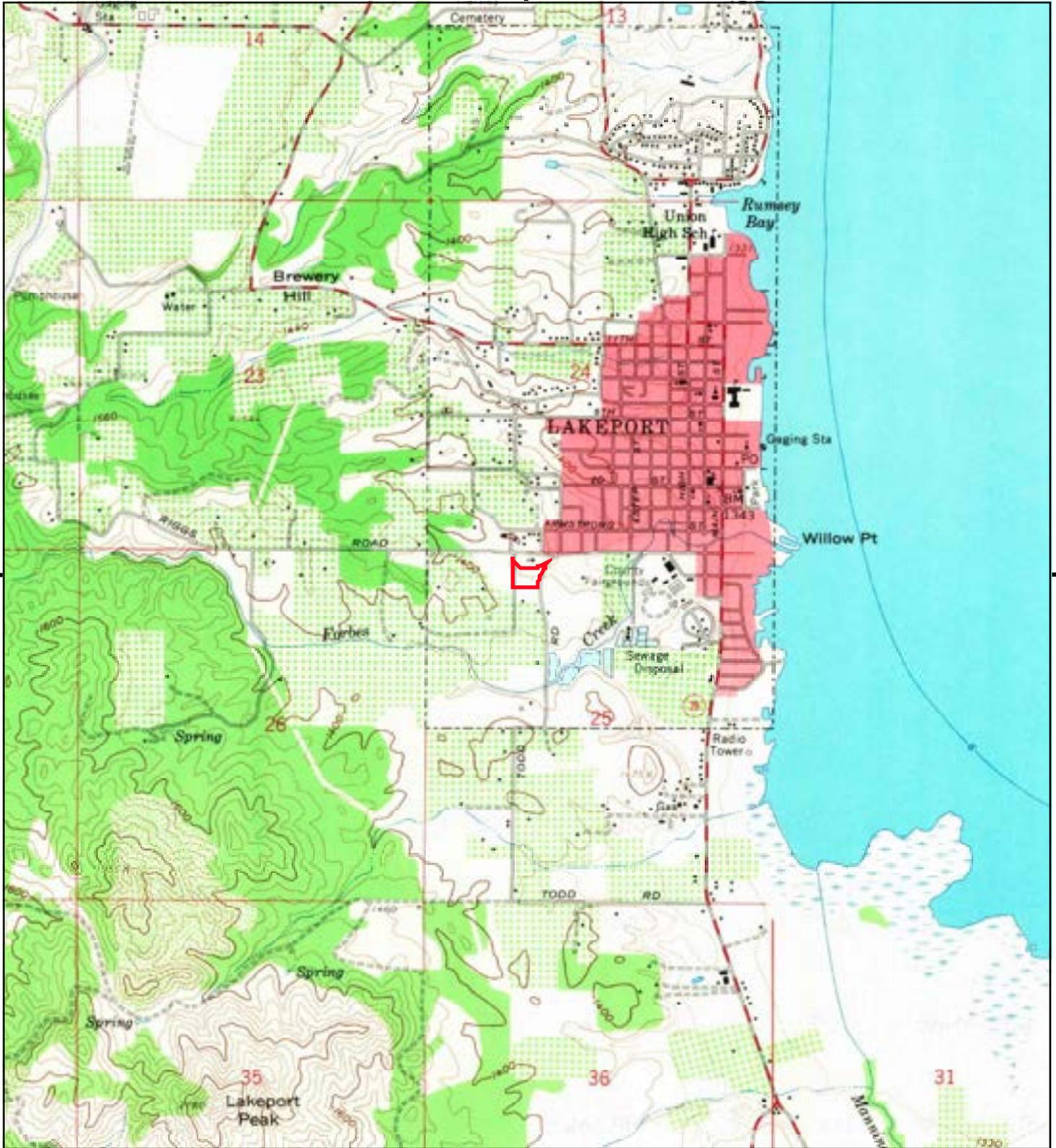
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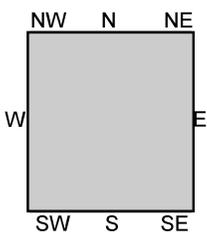
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SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport, CA 95453
 CLIENT: KCE Matrix





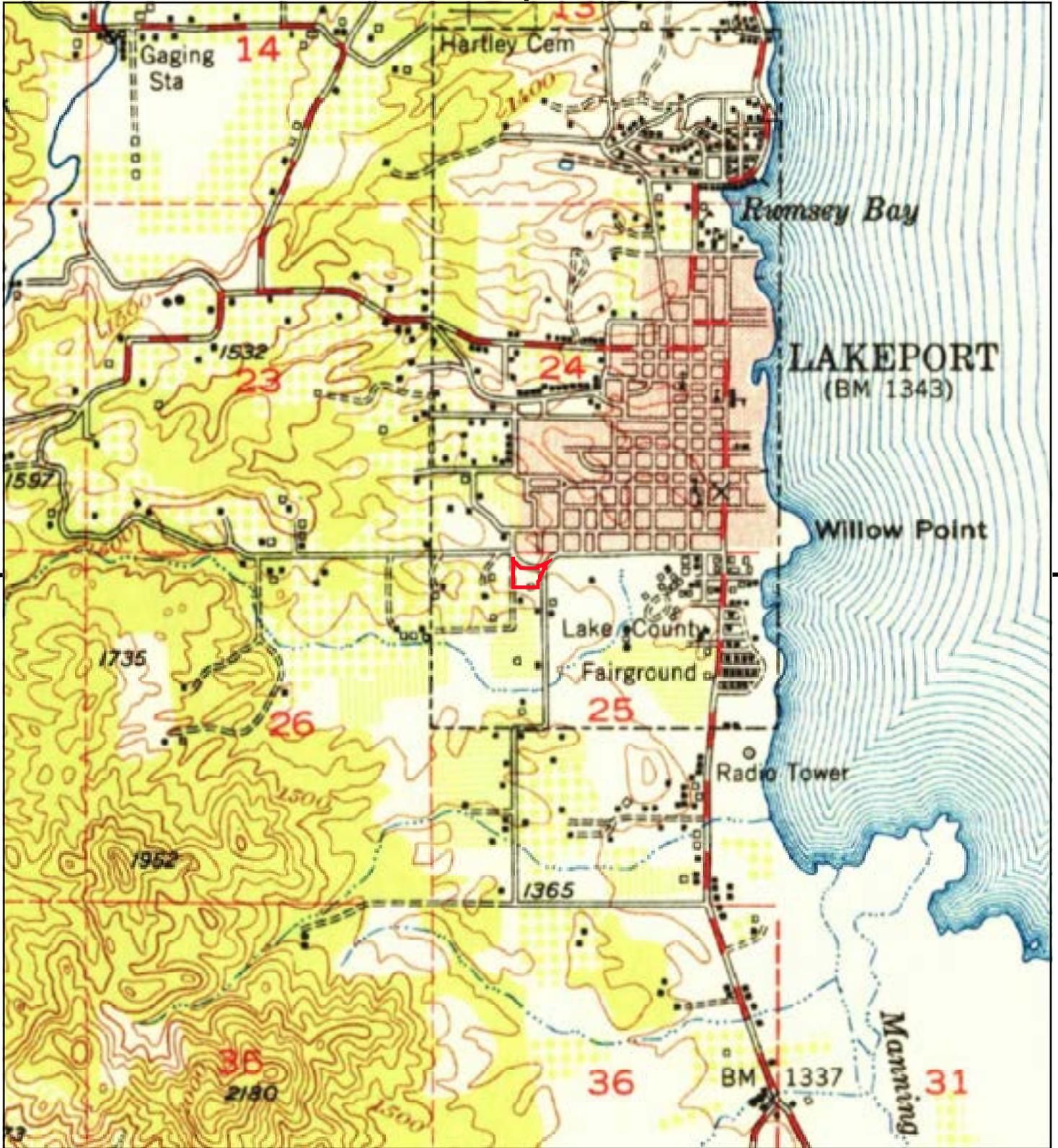
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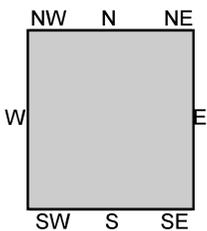
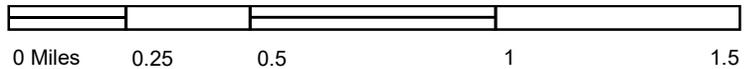
TP, Lakeport, 1958, 7.5-minute

SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport, CA 95453
 CLIENT: KCE Matrix





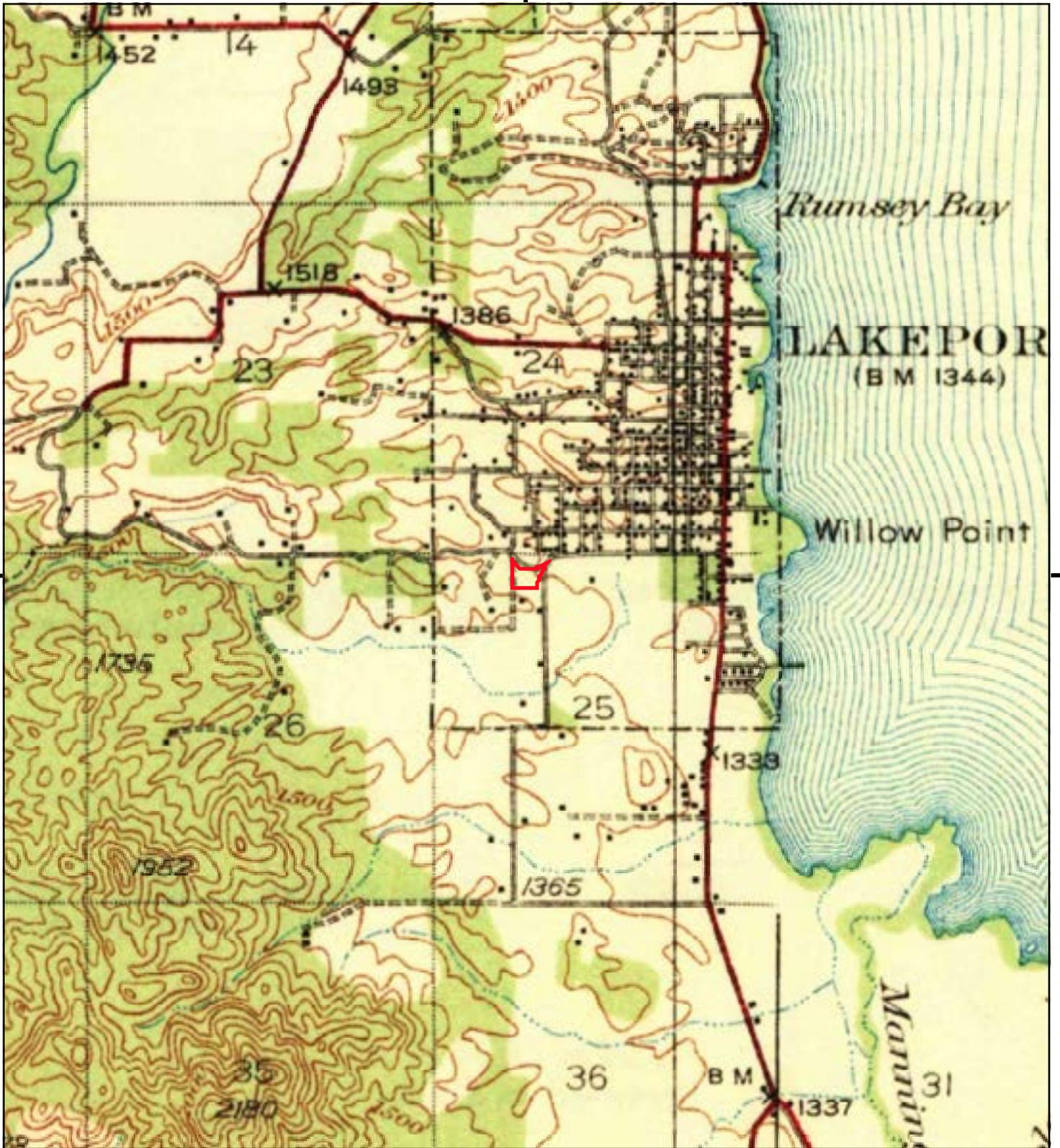
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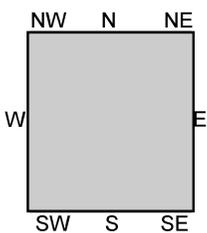
TP, Lakeport, 1951, 15-minute

SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport, CA 95453
 CLIENT: KCE Matrix





This report includes information from the following map sheet(s).



TP, Lakeport, 1938, 15-minute

SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport, CA 95453
 CLIENT: KCE Matrix



APPENDIX D-5

CITY DIRECTORY ABSTRACT

Vacant Land

447 Bevins Street
Lakeport, CA 95453

Inquiry Number: 6566821.5
July 09, 2021

The EDR-City Directory Image Report

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive

FINDINGS

TARGET PROPERTY STREET

447 Bevins Street
Lakeport, CA 95453

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

BEVINS ST

2017	pg A1	EDR Digital Archive
2014	pg A5	EDR Digital Archive
2010	pg A9	EDR Digital Archive
2005	pg A13	EDR Digital Archive
2000	pg A17	EDR Digital Archive
1995	pg A20	EDR Digital Archive
1992	pg A24	EDR Digital Archive

FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

MARTIN ST

2017	pg. A2	EDR Digital Archive
2014	pg. A6	EDR Digital Archive
2010	pg. A10	EDR Digital Archive
2005	pg. A14	EDR Digital Archive
2000	pg. A18	EDR Digital Archive
1995	pg. A21	EDR Digital Archive
1992	pg. A25	EDR Digital Archive

City Directory Images

BEVINS ST 2017

525 ALANIZ, JOSE
AUGUST, EVELYN M
BERG, CHARLOTTE J
CHONG, HIU
DURNAL, BARRY C
EELS, JENNY L
EVENINGRED, ELTON R
HARDESTY, HILFRI T
HARDY, SHIRLEY E
JORDAN, JOHN
JURGENS, SHIRLEY C
KAFKALOFF, JOHN
KENNY, DIANE K
LAKEVIEW HOUSING
LYNNETTE, SANDOVAL
MOORE, ARLINE E
PAOLI, MARION
REHLING, KIRK D
REID, ALEX L
ROSS, SUSAN
SANDOVAL, LYNNETTE C
WALKER, NICHOLAS
WALLACH, TERRIE
WILLOWOAK, ISTARWOOD
WILSON, THOMAS J
535 KALAVERAS, SALLY
575 LAKEPORT TRANSMISSION
637 AAA WELDING & FABRIC
681 CHESTER, JEANETTE M
727 LAKE COUNTY WELDERS SUPPLY
748 KNIGHTS AUTO & TIRE SERVICES
755 APRIA HEALTHCARE
781 FRITOLAY
785 NCO COMMUNITY ACTION
788 ADVANCED MOVING & STORAGE
791 SERVICEMASTER CLEAN
795 PRECISION WIRELESS
808 JOSE RAMIREZ DBA PERFORMANCE PLUS AU
811 VIRGIN VAPORS
815 HEAD FEATHER
831 WIC
WOMEN INFANTS & CHILDREN
841 ENVY TANNING BOUTIQUE
845 COUNTY OF LAKE
865 NUTRIBLENDS
871 CITY FITNESS
881 A 1 ALARM & LOCK
901 OMEARA BROS BREWING COMPANY LLC
975 SCHALL REAL ESTATE

MARTIN ST 2017

202 KAUR, RAMANDEEP
230 MORENO, CHERICE
260 AGUIRRE, LEONEL J
290 THEIS, GREGG E
390 JIMENEZ, HILDA
401 KONOCTI CHRISTIAN ACEDEMY
LAKE COUNTY FAIRGROUNDS
420 CARRILLO, LUCIA
450 MCINTOSH, MELANIE L
470 WILLIAMS, ANASTACIA
550 HAINES, TOM C
590 KUMARI, RANJNA
591 CITY OF LAKEPORT
606 MARTINEZ, ARTURO F
622 FAYLE, EDWARD G
644 LINDLEY, KAREN
688 LI, CHAOJI
MARSCHALL, CHARLES M
SHAW, THEA
770 NIETO, TOM A
850 COCCO, ERNEST J
870 MCALOON, MICHAEL D
960 MOSES CONSTRUCTION
MOSES, DAVE D
990 GIROD, ANNA R
1025 BALL, GERALD R
BARRON, FILIBERTO
BETTY, IRICK
BRAIDER, JUSTIN
COLE, DAVID B
DAVIS, HAROLD O
DERREBERRY, JOHN A
DEVARRIS, MICHAEL S
FAIRGROUNDS VILLAGE SENIOR MOBILE HO
GAITAN, MICHAEL E
HARDY, SHIRLEY
HARRALL, DARRELL D
HAYES, CALVIN G
HELLDORFER, WILLIAM R
HUSTED, SALLY
HUSTED, SALLY D
IRICK, BETTY J
JACKSON, HOOD
JACOB, JUDI A
JOHNSON, CARL W
JOSKOVIC, BRENDA
LANGLEY, CLAUDE E
LOGUE, RONALD L
MANN, MARCUS
MCINTYRE, JOYCE J

-



MARTIN ST 2017 (Cont'd)

1025 MEZINIS, BILL J
 MOORE, MARY F
 MULLINS, BONNIE
 NEVIN, ALBERT L
 NUZUM, HELEN L
 PATRICKS, LONNA R
 PHELPS, LINDA
 PIERSON, MICKEY E
 PURDY, DIANE L
 RATTERMAN, RANDALL J
 REYNOLDS, SANDRA M
 SATRE, JANIS L
 SAYERS, ROGER I
 SEALS, SANDRA K
 SMALLEY, THOMAS E
 STBENNO, MICKEY
 SWARTZ, MICHAEL J
 VELASQUEZ, LIZARDO
 WARE, PEGGY L
 WARREN, SUSANNE D
 WIEGLE, DENNIS M
 WOMACK, DORIS J
 ZIMMERMAN, ROCKY C
1050 FOUST, CASEY
1075 ATKINS, RYAN R
 BAKER, DANIEL M
 BELLA VISTA SENIORS
 BISSIG, ROBERT
 BUCKINGHAM PROPERTY MGMT
 CHAMBERLAND, MICHAEL
 CONNOR, JANICE
 EDWARDS, LINDSAY
 FINNIE, MARGARET A
 FOLKS, DOLORES E
 GADDY, STEVE E
 GUZMAN, JEFFREY
 HALDING, VALERIE M
 HART, NEIL A
 HEATH, CYNTHIA
 HICKENBOTTOM, JOEL
 HUGHES, JONI A
 JOHNSON, TROY
 JURRENS, CLARICE
 LOSTETTER, KIM J
 MARSHALL, BETTY L
 MCABEE, ROBIN K
 MCNALLY, CHRIS
 NEIL, VANWINKLE
 RADFORD, WILLIAM
 SALKO, BARBARA R

MARTIN ST

2017

(Cont'd)

1075	SITCHLER, MARY D
	SLOAN, DEVONTE
	TOMASON-HERRINGTON, BRENDA
	TUKE, MORGAN M
	WHITE, KIM C
1080	WIENKE, SHELLEY
1220	COUNTY OF LAKE
1250	JORDAN, DARRON C
	ROCK CREATIONS
1280	HIGDON, MARK E
1350	MUENCH, GARY E
1403	PUETTS GARAGE
1473	WESTCOTT, ROBERT
1476	BAYLOR, VERONICA
1498	EASTHAM, JOSEPH W
1524	BYRNE, MICHAEL D
1546	HOYLES, KAREN
1566	TEVERBAUGH, BRUCE D
1573	TAILWAGGERS
	THOMSEN, GARRETT J
1586	BILES, JIM W
1593	MAGOON, CORRINA
1603	OGNEFF, JESSICA
1623	OLSON, MARK
1626	CANTRELL, DENNIS W
1646	VERTREES, JEFFERY S
1708	ALLEN, STEPHANIE
1733	DAVIS, UTA B
1756	MORTON, DAN T
1826	HARWOOD, KENNETH A
1953	SWARTZ, ROBERT J
1966	FRAZELL MASONRY
	FRAZELL, MARK D
1996	BURTON, JEFF L
	DUNN, JAMIE L
	RAPISURA, CASTOR M
2123	BRAVO, KAI
2132	CRABTREE, FARREN C
2133	DEWEESE, SCOTT A
2152	MATHEWSON, PHILIP H

BEVINS ST 2014

525 ALANIZ, JOSE
AUGUST, EVELYN M
BERG, CHAR
BORGHESANI, FORREST A
DAVIDSON, VIRGINIA C
EDWARDS, J L
HOYT, RICHARD R
JEFFERS, VICKI L
KAFKALOFF, JOHN
KENNY, DIANE K
LAKEVIEW HOUSING
LYNNETTE, SANDOVAL
MARCOUX, JANICE E
MOORE, ARLINE
NORCROSS, CAROL S
PAOLI, MARION
PEDROLI, MIKE
PETERS, SHIRLEY
REHLING, KIRK D
SANDOVAL, LYNNETTE C
SPENCER, HELEN M
STREETER, KATY J
TONE, ROBERT M
WILSON, THOMAS J
535 JACKMAN, LEAH
575 LAKEPORT TRANSMISSION
637 AAA WELDING
681 ARMSTRONG, GENE
727 LAKE COUNTY WELDERS SUPPLY
UKIAH OXYGEN CO
740 HORNBY'S FURNITURE RESTORATION
748 TIME MACHINE MOTORS
WALKER TIRE & AUTOMOTIVE SERVICE
781 FRITOLAY
785 NCO COMMUNITY ACTION
OCCUPANT UNKNOWN,
788 SUPERIOR MOVING & STORAGE
795 BRICE ENGINEERING
801 BERGSEN, RONALD R
808 JOSE RAMIREZ DBA PERFORMANCE PLUS AU
815 HEAD FEATHERS
831 WIC
WOMEN INFANTS & CHILDREN
865 NUTRIBLENDS
871 CITY FITNESS
881 A 1 ALARM & LOCK
891 ENVY TANNING BOUTIQUE
975 SCHALL REAL ESTATE
SCHALL, ROBERT A

MARTIN ST 2014

202 KAUR, RAMANDEEP
 230 THURMAN, ROBERT A
 260 AGUIRRE, CARMEN A
 290 THEIS, GREGG E
 350 OCCUPANT UNKNOWN,
 390 JIMENEZ, HILDA
 401 FAIRGROUNDS LAKE COUNTY FAIR
 KONOCTI CHRISTIAN ACADEMY
 420 CARRILLO, LUCIA
 450 BECKWITH, CRYSTAL
 470 MATSON, DONNA
 490 HOWSER, Y
 550 BERINTI, BETH
 FELGUEREZ, MONICA
 HAINES, TOM C
 HARO, MANUEL
 PREISSLER, CARL
 TINNEY, JESSICA M
 552 HAMPTON, CARLY
 590 KUMARI, RANJNA
 606 MARTINEZ, ARTURO F
 622 FAYLE, EDWARD G
 LOPEZ, AMBAR
 REYES, VESSA R
 SALATA, JULIE E
 644 COBB, STEVE
 KOHLER, MELANIE A
 688 LI, CHAOJI
 MARSCHALL, MICHAEL E
 770 NIETO, TOM A
 870 MCALOON, MICHAEL D
 960 MOSES, DAVE D
 990 GIROD, ANNA R
 1020 OCCUPANT UNKNOWN,
 1025 BALAVENDER, PATRICIA A
 BALL, GERALD R
 BARRON, FILIBERTO
 BAUMAN, WILLIAM R
 BETTY, IRICK
 CASE, EARLE R
 COLE, DAVID B
 DAVIS, CAROL J
 DEAVER, DENCEL L
 DERREBERRY, JOHN A
 EPPERSON, PAULA J
 FAIRGROUNDS VILLAGE SENIOR MOBILE HO
 FERRIERA, NITA
 GAITAN, MICHAEL E
 HAYES, CALVIN G
 HUSTED, SALLY D

MARTIN ST

2014

(Cont'd)

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JOSKOVIC, BRENDA
KIELEY, BETTY A
LANGLEY, DARIN S
LEE, GARY A
LOGUE, RONALD L
MCINTYRE, JOYCE
MEZINIS, BILL J
MOORE, MARY F
NELSON, LEON D
NEVIN, ALBERT L
PATRICKS, LONNA R
PIERSON, MICKEY E
PURDY, DIANE L
REYNOLDS, ALENE R
SATRE, JANIS L
SAYERS, ROGER I
SHIPLEY, JAMES
SMALLEY, THOMAS E
SPURR, GEORGE C
STBENNO, MICKEY
STRASSER, NELSON L
WARE, PEGGY L
WARREN, SUSANNE D
WITT, CHARLES E
WOMACK, DORIS J
1050 FOUST, CASEY
1072 GUERRERO, ALFREDO A
1075 BATES, DOROTHY J
BELLA VISTA SENIORS
BUCKINGHAM PROPERTY MGMT
EDWARDS, LINDSAY
NEIL, VANWINKLE
1080 WIENKE, SHELLEY
1220 NARCOTIC HOTLINE
1250 JORDAN, DARRON C
ROCK CREATIONS
1260 OCCUPANT UNKNOWN,
1270 OCCUPANT UNKNOWN,
1280 HIGDON, MARK E
1350 MUENCH, GARY E
1395 HOLLAND, LANCE M
1403 PUETT, GERALD
PUETTS GARAGE
1453 FEARN, GREGORY L
1476 MCCLOUD, LOUIS S
1487 OCCUPANT UNKNOWN,
1498 OCCUPANT UNKNOWN,
1524 BYRNE, MICHAEL D
1566 TEVERBAUGH, BRUCE D

MARTIN ST**2014****(Cont'd)**

1573	TAILWAGGERS THOMSEN, GARRETT
1583	OCCUPANT UNKNOWN,
1586	BILES, JIM W
1593	EMRY, JOY A
1596	ETINGER, KAREN
1603	STAPLETON, GILDA J
1623	BLAKE, JASON OLSON, MARK
1626	CANTRELL, DENNIS W
1636	OCCUPANT UNKNOWN,
1640	GUNN, GINA C
1646	LOVI, MARGO A
1656	OCCUPANT UNKNOWN,
1706	OCCUPANT UNKNOWN,
1708	ALLEN, PAMELA L
1733	DAVIS, UTA B
1746	EDWARDS, DELBERT M
1756	MORTON, DAN T
1806	OCCUPANT UNKNOWN,
1813	SYLVA, JIM L
1826	HARWOOD, ALICE M
1925	PIERSON, JOYCE
1953	SWARTZ, BOB J
1966	FRAZELL MASONRY FRAZELL, MARK D
1996	BURTON, JEFF L DUNN, JAMIE L OCCUPANT UNKNOWN, WHITE, KENNETH D
2132	CRABTREE, FARREN C
2133	DEWEESE, SCOTT A
2152	MATHEWSON, PHILIP H
2197	AUGENSTEIN, ALFRED D

BEVINS ST 2010

525	ATKINSON, DONNA
	AUGUST, MONA
	BANYASZ, JOSEPH P
	BOLANDER, RUBY
	CENTOBENE, RUTH V
	CHRITENSEN, ROMANCE H
	DAVIDSON, VIRGINIA C
	KAFKALOFF, JOHN
	KENNY, DIANE K
	LAKEVIEW HOUSING
	MOORE, ARLINE
	PETERS, SHIRLEY
	PHETTEPLACE, LUCY
	PRIESTMAN, ILLENE A
	REHLING, KIRK D
	ROBBINS, G
	ROBERTSON, CHARLES E
	RURAL COMMUNITY HOUSING DEV
	SLOCKBOWER, MARY E
	SMITH, LACY L
	SPENCER, HELEN M
	STREETER, KATY J
	TOMPKINS, LOIS R
	TONE, ROBERT M
	VONDERHAAR, ELIZABETH
	ZHONG, HUAI
535	OAKLEY, BETTY D
575	LAKEPORT TRANSMISSION
637	D & S MUFFLER & AUTOMOTIVE RPR
681	G & C REBUILDERS
	HARTZELL, GERALD R
727	LAKE COUNTY WELDERS SUPPLY
740	HORNBYS FURNITURE RESTORATION
	LINDSEY JONES LLC
780	WILDS SIGNS
788	ICE WATER CO
	SUPERIOR MOVING & STORAGE
808	AAA WELDING
	IRON DOCTOR
	NORTH SHORE AUTO BODY & MEDIA
	SEQUOIA REDWOOD PRODUCTS
821	SKYCATCH GYMNASTICS

MARTIN ST 2010

202 OCCUPANT UNKNOWN,
230 LAMKIN, MICHELLE L
260 AGUIRRE, LEONEL J
290 THEIS, GREGG E
350 JOLIN, THOMAS R
WESTSIDE COMMUNITY PARK
390 SYVERTSON, MIKE A
401 AMERICAN RED CROSS
KONOCTI CHRISTIAN ACADEMY
LAKE COUNTY FAIRGROUNDS
OHANA PAANI CTR
420 FUERST, CHARLES
450 MAKKEN, JOSH
470 OCCUPANT UNKNOWN,
490 HANSON, MELANIE J
550 HAINES, SHERRIE L
TINNEY, JESSICA
552 NUNEZ, NINA
591 CORP YARD
LAKEPORT CITY PARKS
LAKEPORT CITY PUBLIC WORKS
LAKEPORT PUBLIC WORKS
LAKEPORT SEWER MAINTENANCE
LAKEPORT WATER MAINTENANCE
606 MARTINEZ, ARTURO F
622 ABLES, JACOB
MAHAN, CHARLOTTE M
644 MARSH, HEATHER
RODIRGUEZ, NATALIE
688 HELLWEGE, CHANELE
LI, ZHAOJI
770 NIETO, TOM A
850 COCCO, CHESTER R
870 MCALOON, MICHAEL D
960 MOSES CONSTRUCTION
MOSES, DAVE D
990 GIROD, ANNA R
1020 OCCUPANT UNKNOWN,
1025 ANTONI, GERALD A
BALL, BOB
BANDY, MARY L
BARRON, FILIBERTO
BAUMAN, WILLIAM R
CASE, EARLE R
DANDY, KIM
DAVIS, CAROL J
DEAVER, DENCEL L
DERREBERRY, JOHN A
DIBBLE, LOUISE M
EPPERSON, PAULA J

MARTIN ST

2010

(Cont'd)

1025 FARIGROUNDS VILLAGE SENIOR
GALE, DONNA L
GRENIER, CHERLINE P
HARMSTON, NORM L
HAYES, CALVIN G
HOCKER, JANET S
HOPPER, PATRICIA M
HUSTED, SALLY D
JOSKOVIC, NANCY L
KING, LINDA
LAPORTE, BARBARA A
LEE, GARY A
MCINTYRE, JOYCE
MEZINIS, PATRICIA R
MILLE, KENNETH L
MOORE, MARY F
PURDY, DIANE L
SNELLING, ANN
THOMAS, JAMES
WARE, PEGGY L
WARREN, SUSANNE D
WATERS, DONIS M
WEAKLEY, WILMA R
WOMACK, DORIS J
ZIMMERMAN, ROCKY C
1050 JONES, MISTY A
1072 GUERRERO, ALFREDO J
1125 NEW LIFE FOURSQUARE CHURCH
1220 LAKE COUNTY EMERGENCY SVC
NARCOTIC HOTLINE
1250 JORDAN, DARRON C
ROCK CREATIONS
1260 GARCIA, MARIA E
1270 OCCUPANT UNKNOWN,
1276 OTIS, DONALD J
1280 HIGDON, MARK E
1403 PUETTS GARAGE
1453 FEARN, GREGORY L
1473 WITT, CHARLES E
1476 MCCLOUD, DON D
1487 OCCUPANT UNKNOWN,
1498 OCCUPANT UNKNOWN,
1524 BYRNE, MICHAEL D
KATHY BYRNE PIANO STUDIO
1546 BOLAND, RICHARD H
1556 POMEROY, IRWIN B
1566 TEVERBAUGH, BRUCE D
1573 OCCUPANT UNKNOWN,
TAILWAGGERS
1586 FLINN, ALLADAN M

MARTIN ST**2010****(Cont'd)**

1596	OCCUPANT UNKNOWN,
1603	STAPLETON, GILDA
1623	BLAKE, JULIUS A
1626	CANTRELL, DENNIS W
1636	ELLIOTT, TOMMY L
1640	VERTREES, JEFFERY S
1646	LOVI, EUGENE R
1706	OCCUPANT UNKNOWN,
1708	ALLEN, JOE
1733	DAVIS, UTA B
1746	OCCUPANT UNKNOWN,
1756	MORTON REINFORCING INC
	MORTON, DAN T
1806	OCCUPANT UNKNOWN,
1813	OCCUPANT UNKNOWN,
1826	HARDWOOD, ALICE
1953	SWARTZ, BOB J
1966	FRAZELL MASONRY
	FRAZELL, MARK D
1996	AMERICAN PUMPING
	GUNTHER, DONNA L
	RAPISURA, SARAH
2132	CRABTREE, VERA
2133	PERRY, KIRSTEN
2197	AUGENSTEIN, KYLE D

BEVINS ST 2005

525 ATKINSON, DONNA
AUGUST, MONA
BATTAGLIA, LANIEVE
BOLANDER, RUBY
CASSELL, CHARLES
CENTOBENE, RUTH V
CHRISTENSEN, ROMANCE
COOK, ALICE I
CRAIG, DOROTHY M
CULLETON, FAYE E
DAVIDSON, VIRGINIA C
FAULKNER, JEAN
GOTHAM, DEAN E
KAFKALOFF, JOHN
LAKEVIEW HOUSING
LAW, RAY
LINNELL, ROSANNE
LOVE, WILLIAM V
MALLERY, ALBERT
MCELROY, MICHAEL W
MOORE, ALTA L
TOMPKINS, LOIS R
TONE, ROBERT M
TRYON, EARL R
535 PARKER, KAREN L
637 D & S MUFFLER & AUTOMOTIVE REPAIR
681 G & C REBUILDERS
727 LAKE COUNTY WELDERS SUPPLY
740 HORNBY'S FURNITURE RESTORATION
764 NITRO RACING
808 GATORAMP INC
NORTH SHORE AUTO BODY & MEDICAL BLAS
THE IRON DR

MARTIN ST 2005

202 PEREZ, LANITA
230 OCCUPANT UNKNOWN,
238 LAMKIN, MICHELLE L
260 AGUIRRE, LEONEL
290 THEIS, GREGG E
350 JOLIN, THOMAS R
WESTSIDE COMMUNITY PARK
390 TURNER, DIANA
401 LAKE COUNTY FAIRGROUNDS
LAKE COUNTY ROLLER RINK AND INDOOR S
LAKEPORT SPEEDWAY
420 FUERST, CHARLES
450 MAKKEN, JOSH
470 WIENKE, DARRYL E
490 JACKSON, CARRIE D
550 HAINES, SHERRIE L
HAINES, THOMAS C
LOGAN, LOUIS D
606 OCCUPANT UNKNOWN,
622 BROWN, CHRISTINA R
FAYLE, EDWARD
RAMOS, HUGO
644 CROUCH, DANNY
JOHNSTON, JUANITA D
MAINER, JILL L
688 MARSCHALL, CHARLES M
NAZARIO, KATHERINE H
PACE, ERIC W
770 NIETO, TOM A
850 COCCO, CHESTER R
870 MUNIS, MIGUEL E
960 MOSES, DAVE D
990 GIROD, ANNA R
1020 BLYTHE, KENNETH W
1025 BAIRD, ELIZABETH S
BARRON, FILIBERTO
BARS, ROBERT J
BAUMAN, WILLIAM R
CASE, EARLE R
CEIDEBURG, BERTHA
DAVIS, CAROL J
DEAVER, DENCEL L
DERREBERRY, JOHN A
EPPERSON, ED S
FAIRGROUNDS MOBILE HOME PARK
FREEMAN, DOROTHY H
GALE, DONNA L
HARMSTON, NORM L
HAUCH, RICHARD E
HAYES, PAT J

MARTIN ST

2005

(Cont'd)

1025 HOPPER, PATRICIA M
JOHN, DERREBERRY
LAPORTE, BARBARA A
MCINTYRE, JOYCE
MEZINIS, PATRICIA R
MIILLE, KENNETH L
NUZUM, CARL J
ROWE, SHIRLEY S
SNELLING, ANN
THOMAS, JAMES
WARE, PEGGY L
WATERS, DONIS M
WEAKLEY, WILMA R
WOMACK, DORIS J
1050 TAYLOR, NORMAN
1072 GUERRERO, ALFREDO A
1125 NEW LIFE FOURSQUARE CHURCH
1220 COUNTY OF LAKE SHERIFF DEPARTMENT
1250 JORDAN, DARRON C
1260 COAKLEY, HAROLD L
1270 SUN, RANDOLPH
1276 OTIS, DONALD J
1280 HIGDON, MARK E
1350 MUENCH, GARY
1395 PUETT, DARREN D
1403 PUETTS GARAGE
1453 FEARN, GREGORY L
1473 WITT, CHARLES E
1476 MCCLOUD, DON
1487 CALLAHAN, ROBERT J
1498 OCCUPANT UNKNOWN,
1503 MCFALL, HARRY
1524 BYRNE, MICHAEL D
1546 DUNN, NEIL B
1566 TEVERBAUGH, BRUCE D
1573 TAILWAGGERS GROOMING
THOMSEN, GEORGE J
1583 OCCUPANT UNKNOWN,
1593 NEUMAN, GERALD H
1596 OCCUPANT UNKNOWN,
1623 BLAKE, JULIUS A
1626 CANTRELL, DENNIS W
1636 ELLIOTT, TOMMY L
1640 VERTREES, JEFFERY S
1646 LOVI, EUGENE R
1656 ROCHE, WILLIAM J
1706 BENTON, GERALD C
1708 OCCUPANT UNKNOWN,
1733 DAVIS, UTA B
1746 OCCUPANT UNKNOWN,

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MARTIN ST 2005 (Cont'd)

1756 HELIT, ANTHONY M
MORTON REINFORCING
MORTON, MARK A
OCCUPANT UNKNOWN,
1806 OCCUPANT UNKNOWN,
1813 SYLVA, FRANK A
1953 SWARTZ, BOB J
1966 FRAZELL MASONRY
FRAZELL, MARK D
1996 GUNTHER, DONNA L
2123 DISNEY, ROY D
2132 OCCUPANT UNKNOWN,
2133 DEWEESE, SCOTT A
2197 AUGENSTEIN, KYLE D

BEVINS ST 2000

525 AUGUST, MONA
BAKER, C
COOK, ALICE I
DODSON, JAMES B
EGAN, BERNARD M
FAULKNER, JEAN
GOTHAM, DEAN E
KAFKALOFF, JOHN
LAKEVIEW HOUSING
LAW, RAY
LOVE, WILLIAM V
MALLERY, ALBERT
REGIN, EDWARD A
SIMON, RICHARD
WARREN, H V
WILLS, I
WILSON, MAC
535 BETTY, D O
OAKLEY, THOMAS L
575 LAKEPORT TRANSMISSION
637 COMPTON, TIM
D & S MUFFLER & AUTOMOTIVE REPAIR
681 BATTERIES R US
G & C REBUILDERS
JIFFY BASE MANUFACTURING COMPANY
WARE HOUSE PRODUCTS
727 LAKE COUNTY WELDERS SUPPLY
764 ROBINSON HEAT & AIR
808 GATORAMP
PULSE, CHARLES

MARTIN ST 2000

230	GRAHAM, SHARON C
290	GREGG, ELEANOR E
350	JOLIN, CHARLES
390	OCCUPANT UNKNOWN,
401	FAIRGROUNDS LAKE COUNTY FAIR LAKE COUNTY FAIRGROUNDS MAIN OFFICE NORTHERN CALIFORNIA RACING ASSOCIATION
450	SMITH, JAN C
470	HUNTER, JASON
490	OCCUPANT UNKNOWN,
550	HAINES, SHERRIE L LOGAN, LOUIS
591	LAKEPORT CITY OF
606	OCCUPANT UNKNOWN,
688	FERNANDEZ, EFRAIN MARSCHALL, CHARLES SWANSON, DEMEAH L
770	NIETO, TOM A
850	GARCIA, EUGENE D
870	GODWIN, RUTH J
960	MOSES, DAVE
1020	BLYTHE, KENNETH W
1025	ABBOTT, JEANIE R BACINETT, H BAIRD, E BRADLEY, THOMAS E CEIDEBURG, JOHN O DAVIS, CAROL J DEAVER, D L DEMARINIS, JOHN DIBBLE, LOUISE M FAIRGROUNDS VILLAGE SENIOR MOBILE HOME PARK FREESE, A M FULTON, L W GISH, ELLE HARMSTON, NORM HOPPER, P LAMB, LEROY LAPORTE, BARBARA NELSON, OSCAR W PATCHEN, C B ROBINSON, VERSIA P SAYERS, ROGER I SLUDER, F F THOMAS, JAMES WEAKLEY, WILMA WOMACK, DORIS J
1050	OCCUPANT UNKNOWN,
1072	GUERRERO, ALFREDO
1080	OCCUPANT UNKNOWN,

MARTIN ST 2000 (Cont'd)

1125 BROWN, MARK
NEW LIFE FOURSQUARE CHURCH
1220 LAKE COUNTY OF SHERIFFS DEPARTMENT
1260 OCCUPANT UNKNOWN,
1270 SUN, R
1276 OTIS, DONALD J
1280 NERLI, EDWARD P
1350 OCCUPANT UNKNOWN,
1395 PUETT, GERALD D
1403 PUETTS GARAGE
1453 FEARN, GREGORY L
1473 WITT, HELEN
1476 MCCLOUD, DON
1498 JONES, ERIC W
1503 MCFALL, HARRY
1506 HARMON, ALBERT W
1524 OCCUPANT UNKNOWN,
1546 DUNN, NEIL B
1556 POMEROY, IRWIN B
1573 TAILWAGGERS GROOMING
THOMSEN, GEORGE J
1583 OCCUPANT UNKNOWN,
1593 NEUMAN, H S
1596 GILLIAM, TOMMY R
1603 OCCUPANT UNKNOWN,
1623 BLAKE, JULIUS
1626 STEPAN, S
1636 OCCUPANT UNKNOWN,
1646 LOVI, EUGENE R
1706 OCCUPANT UNKNOWN,
1708 ALLEN, PAMELA
1733 OCCUPANT UNKNOWN,
1746 EVANS, JOHN D
1756 HELIT, ANTHONY
1806 OCCUPANT UNKNOWN,
1813 LAMBERT, F
1826 OCCUPANT UNKNOWN,
1953 OCCUPANT UNKNOWN,
2132 OCCUPANT UNKNOWN,
2133 INGRAM, E A
2152 CHAUSSEE, M
MONT, ETON O
MONT-ETON, O R
2173 AUGENSTEIN, ALFRED
2197 AUGENSTEIN, ALFRED V

BEVINS ST 1995

525 BOBROWSKE, E
CLOVER, JOHN
DEVICQ, STAN
DIXON, MARY
EGAN, BERNARD M
FAULKNER, JEAN
LAKEVIEW HOUSING
LOVE, W V
SECTION 8 HOUSING PROGRAM
SIMON, RICHARD
STBENNO, DELORIS
WARD, FRED T
WASHBURN, DAVID J
WILSON, MAC
WOOD, ED
535 OAKLEY, THOMAS L
WINEGARNER, JASON
575 LAKEPORT TRANSMISSION
637 D & S MUFFLER & AUTOMOTIVE RPR
681 BATTERIES R US
G & C REBUILDERS
JIFFY BASE MFG CO
MYERS MAINTENANCE & REPAIR
WARE HOUSE PRODUCTS
727 LAKE COUNTY WELDERS SUPPLY
764 TRANSFORMATIONS
808 GATORAMP
TOM BRADLEYS MFG

MARTIN ST 1995

123 TAFFI, ELIOTT
202 EAGAN, DONALD W
230 OCCUPANT UNKNOWNN
260 ANDERSON DENTAL LABORATORY
ANDERSON, STEVEN L
290 GREGG, ELEANOR E
350 JOLIN, CHARLES
390 KEENE, CHARLES A
401 LAKE COUNTY FAIRGROUNDS
NORTHERN CALIFORNIA RACING
US ARMY RECRUITING
420 BANISTER, ERWIN
450 OCCUPANT UNKNOWNN
470 SERRANO, D J
490 BROWN, MARK
550 BAKER, ROBERT
606 OCCUPANT UNKNOWNN
622 LOPEZ, MARCELA
644 JERNIGAN, RUTH A
688 MARSCHALL, CHARLES
770 NIETO, TOM A
870 DAVIS, DARRELL L
960 MOSES, DAVE
1020 BLYTHE, KENNETH W
1025 ABBOTT, ROBERT
ALLEN, REBECCA L
ARROYO, TERESA
BACINETT, H
BETTERS, GAYE C
BRADLEY, THOMAS E
COLLINS, EARL R
CORNELISON, J M
FREEMAN, EDWIN A
FREESE, A M
FULTON, L W
GARVIN, ANNE L
GROVER, LEON SR
HALEY, A R
HARMSTON, NORM
HILL, J I
HOVEY, GRAHAM
HUFFMAN, HOWARD
JOHNSON, JAMES C
KRAUS, GEORGE
LAWSON, ROBERT
MUNCH, ERIC W
NARZISI, ANGELIN
NELSON, RUTH E
OCONNOR, JOHN F
PACE, QUENTIN E

MARTIN ST

1995

(Cont'd)

1025	PATCHEN, C B RASMUSSEN, MILDRED ROBINSON, VERSIA P SAYERS, ROGER I SLUDER, F F TANSON, HOWARD WILBUR, EDWARD E
1050	NUTT, DONALD R
1072	PUENTES, DOLORES M
1080	STEWART, ROBERT H
1125	MIGRANT HEADSTART NEW LIFE FOURSQUARE CHURCH
1220	LAKE COUNTY CHILD PROTECTION LAKE COUNTY SOCIAL SVC
1260	CLIFTON, MAURICE
1270	SUN, R
1276	OTIS, DONALD J
1280	NERLI, DOROTHY A
1350	STOCKWELL, LYLE E
1395	PUETT, GERALD D
1403	PUETTS GARAGE
1453	MILLER, SHARON D
1473	WITT, HELEN
1476	MCCLOUD, DON
1487	MCFALL, HARRY
1498	GOETZ, JAMES
1503	MCFALL, HARRY
1506	HARMON, ALBERT W
1524	SANGALLI, ROBERT
1546	DYE, DEBBIE
1556	POMEROY, IRWIN B
1573	THOMSEN, GEORGE J
1583	NEUMAN, GERALD H
1586	OCCUPANT UNKNOWNN
1593	NEUMAN, H S
1603	PECK, OMER
1623	REYNOLDS, THERESA
1626	BRADLEY, HARRY B
1636	SCHLEY, ARTHUR E
1656	OCCUPANT UNKNOWNN
1706	BENTON, GERALD C
1708	LOCKWENZ, WILLIAM H
1733	DAVIS, RICHARD L
1746	PIANO, BETTY L
1756	HELIT, ANTHONY
1806	MURR, HARRIET J
1813	LAMBERT, F
1953	SWARTZ, ROBERT J
1996	HERREN, ROY D W MOSEGAARD WELL DRILLING

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MARTIN ST 1995 (Cont'd)

2123 DISNEY, ROY D
2132 GLAZIER, STEVEN K
2133 INGRAM, E A
2152 CHAUSSEE, M
MAYS, ALLEN L
MONTETON, O R
2153 BENKELMAN, JOHN F
2173 OCCUPANT UNKNOWNN
2196 OCCUPANT UNKNOWNN
2197 AUGENSTEIN, ALFRED V

BEVINS ST 1992

525 DAMERON, JOHN R
DIXON, MARY
EGAN, BERNARD M
FAULKNER, JEAN
GARZA, JUNE
LAKEVIEW HOUSING
LOVE, W V
MITCHELL, A
SECTION 8 HOUSG PRG
SIMON, RICHARD
WILSON, MAC
535 OAKLEY, THOMAS L
575 LAKEPORT TRANSMISSN
637 D&S MFFLR&ATMTV RPR
681 BATTERIES R US
G&C REBUILDERS
JIFFY BASE MFG CO
MYERS MNTNC&REPAIR
WARE HOUSE PRODUCTS
727 LAKE CO WELDERS SPL
740 R RUSSELL WD PRDCTS
748 CA CLASSIC ROADSTRS
756 HELPFUL FRIEND
764 TRANSFORMATIONS
808 BILLS ATMTV MACH SH
BRADLEYS TOM MFG
GATORAMP

MARTIN ST 1992

260 ANDERSON DENTAL LAB
290 GREGG, ELEANOR E
350 JOLIN, CHARLES
390 KEENE, CHARLES A
401 CA ST NG DET 1 CO C
LAKE CO FAIRGROUNDS
NORTHN CA RACNG ASN
450 GARRETT, THOMAS
470 SERRANO, D J
490 HANCOCK, MARTIN
550 SURRELL, M
591 LAKEPRT CTY CORP YD
622 SULLIVAN, GREGORY
770 NIETO, TOM A
850 VELEZ, CONRAD
960 MOSES, DAVE
1020 BLYTHE, KENNETH W
1025 ARROYO, TERESA
CORNELISON, J M
HALEY, A R
HOVEY, GRAHAM
HUFFMAN, HOWARD
PATCHEN, C B
REYNOLDS, WILLIAM L
TANSON, HOWARD
1050 NUTT, DONALD R
1080 STEWART, ROBERT H
1125 MIGRANT HEADSTART
NEW LIFE FORSQRE CH
1220 LAKE CO CHLD PRTCTV
1260 CLIFTON, MAURICE
1276 SHELDEN, ALAN
1350 STOCKWELL, LYLE E
1395 PUETT, GERALD D
1403 PUETTS GARAGE
1473 WITT, HELEN
1476 MCCLOUD, DON
1498 GOETZ, JAMES
1503 MCFALL H SEPTC TNKS
MCFALL, HARRY
1506 HARMON, ALBERT W
1546 JACKSON, JAN
RILEY, DANIEL
1556 POMEROY, IRWIN B
1583 COLVIN, PAT
1586 BLUE, ROBERT B
1593 NEUMAN, H S
1603 PECK, OMER
1626 BRADLEY, HARRY B
1656 ROCHE, WILLIAM J

MARTIN ST 1992 (Cont'd)

1706	BENTON, GERALD C
1733	DAVIS, RICHARD L
1756	HELIT, ANTHONY
1813	LAMBERT, F
2152	MAYS, ALLEN L
2196	HOWE, JAMES H

APPENDIX E

USER QUESTIONNAIRE AND TITLE REPORT

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Vacant Land

447 Bevins Street, Lakeport, CA 95453

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

1. Environmental cleanup liens that are filed or recorded against the site

Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?

No Yes, please explain _____

2. Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry

Are you aware of any Activity and Use Limitations (AULs), such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

No Yes, please explain _____

3. Specialized knowledge or experience of the person seeking to qualify for the LLP

As the *user* of this *ESA*, do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No Yes, please explain _____

4. Relationship of the purchase price to the fair market value of the *property* if it were not contaminated

Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?

Yes No, there is a difference between the purchase price and the fair market value

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

please explain _____

5. Commonly known or reasonably ascertainable information about the *property*

Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,

(a.) Do you know the past uses of the *property*?

No Yes, please explain _____

(b.) Do you know of specific chemicals that are present or once were present at the *property*?

No Yes, please explain _____

(c.) Do you know of spills or other chemical releases that have taken place at the *property*?

No Yes, please explain _____

(d.) Do you know of any environmental cleanups that have taken place at the *property*?

No Yes, please explain _____

6. The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation

As the *user* of this *ESA*, based on your knowledge and experience related to the *property*, are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?

No Yes, please explain _____

Note: Landowner Liability Protections, or LLPs, is the term used to describe the three types of potential defenses to Superfund liability in EPA's Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability ("Common Elements" Guide) issued on March 6, 2003.

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.
Vacant Land
447 Bevins Street, Lakeport, CA 95453

In addition, certain information should be collected, if available, and provided to *KCE Matrix, Inc.* to conduct the Phase I Environmental Site Assessment. This information is intended to assist *KCE Matrix, Inc.* but is not necessarily required to qualify for one of the *LLPs*. The information includes:

(a) The reason why the Phase I Environmental Site Assessment is required,

Due diligence

(b) The type of *property* and type of *property* transaction, for example, sale, purchase, exchange, etc.,

Purchase

(c) The complete and correct address for the *property* (a map or other documentation showing *property* location and boundaries is helpful)

447 Bevins Street, Lakeport, CA 95453

(d) The scope of services desired for the Phase I (including whether any parties to the *property* transaction may have a required standard scope of services or whether any considerations beyond the requirements of Practice E 1527 are to be considered),

Standard scope

(e) Identification of all parties who will rely on the Phase I report,

Pacific West Communities, Inc

(f) Identification of the site contact and how the contact can be reached,

Don Stattery, dons@tpchousing.com, (208) 908-4873

(g) Any special terms and conditions which must be agreed upon by the *environmental professional*

None

(h) Any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental condition).

None

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Vacant Land

447 Bevins Street, Lakeport, CA 95453

Vapor Encroachment Screening Section

1. **Property Type:**

- Commercial Industrial Multi-Tenant Vacant Land

2. **Are there any building/structures on the property?**

- No Unknown Yes, type construction _____
-

3. **Will buildings/structures be constructed on the property in the future?**

- No Unknown Yes, type construction Apartments
-

4. **If buildings exist or are proposed, do/will they have elevators?**

- Yes No

5. **Type of level below grade (existing or proposed)?**

- Full Basement Crawl Space Slab on Grade Parking Garage Multi-Level

6. **Ventilation in level below grade?**

- Yes No Unknown

7. **Sump pumps, floor drains, or trenches (existing or proposed)?**

- Yes No Unknown

8. **Radon or methane mitigation system installed?**

- Yes No Unknown

9. **Heating system type? (existing or proposed)? (CHECK ALL THAT APPLY)**

- | | | | |
|---|---|---|--|
| <input checked="" type="checkbox"/> Hot Air Circulation | <input type="checkbox"/> Electric Baseboard | <input type="checkbox"/> Hot Air Radiation | <input type="checkbox"/> Heat Pump |
| <input type="checkbox"/> Hot Water Radiation | <input type="checkbox"/> Wood Stove | <input type="checkbox"/> Kerosene Heater | <input type="checkbox"/> Steam Radiation |
| <input type="checkbox"/> Fireplace | <input type="checkbox"/> Coal Furnace | <input type="checkbox"/> Radiant Floor Heat | <input type="checkbox"/> Hot Water Circulation |
| <input type="checkbox"/> Fuel Oil Furnace | <input type="checkbox"/> Gas Furnace | <input type="checkbox"/> Other | |

10. **Type of fuel energy? (existing or proposed)? (CHECK ALL THAT APPLY)**

- | | | | |
|---|--|----------------------------------|-----------------------------------|
| <input checked="" type="checkbox"/> Natural Gas | <input checked="" type="checkbox"/> Electric | <input type="checkbox"/> Propane | <input type="checkbox"/> Fuel Oil |
| <input type="checkbox"/> Kerosene | <input type="checkbox"/> Wood | <input type="checkbox"/> Coal | <input type="checkbox"/> Solar |
| <input type="checkbox"/> Other | | | |

11. **Have there ever been any environmental problems at the property?**

- No Unknown Yes, describe _____
-

12. **Does/will a gas station or dry cleaner operate anywhere on the property?**

- Yes No Unknown

13. **Do any tenants use hazardous chemicals in relatively large quantities on the property?**

- No Unknown Yes, describe _____
-

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Vacant Land

447 Bevins Street, Lakeport, CA 95453

Vapor Encroachment Screening Section Continued:

14. Have any tenants ever complained about odors in the building or experienced health related problems that may have been associated with the building?
 Yes No Unknown
15. Are the operations (or proposed operations to be performed) on the property OSHA regulated?
 Yes No Unknown
16. Are there any existing or proposed underground storage tanks (USTs) or above ground storage tanks (ASTs)?
 Yes No Unknown
17. Are there any sensitive receptors (for example, children, elderly, people in poor health, and so forth) that occupy or will occupy the property?
 Yes No Unknown

Print Name:

Jacob Soroudi

Date:

7/26/21

Amended 5/15/2020



First American Title

First American Title Company

**484 North Prospect Street, Suite C
Porterville, CA 93257**

Order Number: 54076236072 ()

Escrow Officer: Ann Kay
Phone: (559)306-3387
Fax No.: (866)590-2169
E-Mail: akay@firstam.com

E-Mail Loan Documents to: PortervilleEDocs@firstam.com

Buyer: AMG & Associates, LLC
Owner: Robert A. Schall
Property: 447 Bevins St
Lakeport, CA 95453

PRELIMINARY REPORT

In response to the above referenced application for a policy of title insurance, this company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Exhibit A attached. *The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties.* Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of May 01, 2020 at 7:30 A.M.

The form of Policy of title insurance contemplated by this report is:

To Be Determined

A specific request should be made if another form or additional coverage is desired.

Title to said estate or interest at the date hereof is vested in:

ROBERT A. SCHALL

The estate or interest in the land hereinafter described or referred to covered by this Report is:

FEE

The Land referred to herein is described as follows:

(See attached Legal Description)

At the date hereof exceptions to coverage in addition to the printed Exceptions and Exclusions in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2020-2021, a lien not yet due or payable.
2. All taxes - secured, supplemental, defaulted, escaped and including bonds and assessments are not available at this time. Please verify any/all tax amounts and assessment information with the County Tax Collector prior to the close of the contemplated transaction.
3. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
4. An easement for public utilities and incidental purposes in the document recorded October 21, 1988 as BOOK 1434 AT PAGE 648 of Official Records.
5. The fact that the land lies within the boundaries of the LAKEPORT Redevelopment Project Area, as disclosed by the document recorded June 08, 1999 as INSTRUMENT NO. 1999-009719 of Official Records.
6. Any irregularity in the foreclosure proceedings leading up to the Trustee's Deed recorded DECEMBER 19, 2002 as INSTRUMENT NO. 2002028741 of Official Records.
7. A notice of assessment recorded February 22, 2017 as INSTRUMENT NO. 2017002296 of Official Records, executed by KELLY BUENDIA CITY CLERK CITY OF LAKEPORT.

8. Any right, title or interest of the spouse (if any) of any married person herein.
9. Rights of the public in and to that portion of the Land lying within any Road, Street, Alley or Highway.
10. Rights of parties in possession and rights of tenant(s) in the Land, including rights of all parties claiming by, through or under said tenant(s).

We will require an approved declaration signed by the seller/seller's authorized agent and the buyer prior to close of this transaction.

11. Water rights, claims or title to water, whether or not shown by the Public Records.

Prior to the issuance of any policy of title insurance, the Company will require:

12. A deed from the spouse of any married person herein be recorded in the public records, or the joinder of the spouse of any married person named herein on any conveyance, encumbrance or lease to be executed by said married person.

INFORMATIONAL NOTES

Note: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

1. The property covered by this report is vacant land.
2. According to the public records, there has been no conveyance of the land within a period of twenty-four months prior to the date of this report, except as follows:

None

3. We find no outstanding voluntary liens of record affecting subject property. Disclosure should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any possible security interest in the subject property.

NOTE to proposed insured lender only: No Private transfer fee covenant, as defined in Federal Housing Finance Agency Final Rule 12 CFR Part 1228, that was created and first appears in the Public Records on or after February 8, 2011, encumbers the Title except as follows: None

The map attached, if any, may or may not be a survey of the land depicted hereon. First American expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

LEGAL DESCRIPTION

Real property in the City of Lakeport, County of Lake, State of California, described as follows:

PARCEL ONE:

ALL THAT PORTION OF THE NORTHEAST ONE QUARTER OF THE NORTHWEST ONE QUARTER OF SECTION 25, TOWNSHIP 14 NORTH, RANGE 10 WEST, M.D.M., MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY BOUNDARY OF BEVINS STREET, MARKED BY A 3/4" REBAR TAGGED L.S. 3235, SAID POINT BEING IDENTICAL WITH THE NORTHEAST CORNER OF PARCEL "D", AS SAID PARCEL IS SHOWN ON THAT CERTAIN MAP RECORDED JULY 1, 1974, IN BOOK 8 OF PARCEL MAPS, AT PAGE 7; THENCE, LEAVING SAID WESTERLY BOUNDARY OF BEVINS STREET, ALONG THE NORTHERLY BOUNDARY OF SAID PARCEL "D", NORTH 88° 52' 00" WEST, 144.41 FEET TO A SIMILAR REBAR MARKING THE SOUTHEAST CORNER OF THAT LAND AS DESCRIBED IN DEED TO MITCHELL A. WARE, RECORDED FEBRUARY 2, 1977, IN BOOK 865 OF OFFICIAL RECORDS AT PAGE 149; THENCE, ALONG THE EASTERLY BOUNDARY OF SAID WARE LAND, NORTH 02° 03' 00" EAST, 85.37 FEET TO A POINT MARKED BY A SET 1/2" REBAR TAGGED L.S. 3235; THENCE, NORTH 89° 30' 36" WEST, ALONG THE NORTHERLY BOUNDARY OF SAID WARE LAND, 278.06 FEET TO A SIMILAR REBAR IDENTICAL WITH THE NORTHWEST CORNER OF SAID WARE LAND; THENCE, LEAVING SAID WARE LAND, NORTH 00° 48' 45" EAST, 603.55 FEET TO A SIMILAR REBAR AND THE BEGINNING OF A CURVE TO THE RIGHT, SAID POINT ALSO BEING THE SOUTHWESTERLY CORNER OF THE PROPERTY CONTAINED IN THE DEED TO INTERNATIONAL CHURCH OF THE FOURSQUARE GOSPEL, A CALIFORNIA CORPORATION, RECORDED JUNE 7, 1955, IN BOOK 254 OF OFFICIAL RECORDS AT PAGE 288; THENCE ALONG THE SOUTHERLY BOUNDARY OF SAID CHURCH PROPERTY, THE FOLLOWING COURSES AND DISTANCES:

- 1) ALONG SAID CURVE TO THE RIGHT, THE RADIAL LINE OF WHICH BEARS SOUTH 35° 25' 52" WEST AND HAVING A RADIUS OF 335 FEET AND A CENTRAL ANGLE OF 17° 27' 08", A DISTANCE OF 102.04 FEET TO A SIMILAR REBAR;
- 2) SOUTH 37° 07' 00" EAST, 49.89 FEET TO A SIMILAR REBAR;
- 3) ALONG A CURVE TO THE LEFT, THE RADIAL LINE OF WHICH BEARS NORTH 52° 53' 00" EAST AND HAVING A RADIUS OF 100 FEET AND A CENTRAL ANGLE OF 52° 58' 00", A DISTANCE OF 92.44 FEET TO A SIMILAR REBAR;
- 4) NORTH 89° 55' 00" EAST, 144.97 FEET TO A SIMILAR REBAR;
- 5) ALONG A CURVE TO THE LEFT, THE RADIAL LINE OF WHICH BEARS NORTH 00° 05' 00" WEST AND HAVING A RADIUS OF 155 FEET AND A CENTRAL ANGLE OF 31° 28' 00", A DISTANCE OF 85.13 FEET TO A SIMILAR REBAR;
- 6) NORTH 58° 27' 00" EAST, 124.80 FEET TO A POINT ON THE WESTERLY BOUNDARY OF SAID BEVINS STREET MARKED BY A SIMILAR REBAR;

AND THENCE, LEAVING SAID CHURCH PROPERTY, ALONG SAID WESTERLY BOUNDARY OF BEVINS STREET, THE FOLLOWING COURSES AND DISTANCES:

- 1) SOUTH 10° 34' 50" WEST, 28.42 FEET TO A SIMILAR REBAR;
- 2) ALONG A CURVE TO THE RIGHT, THE RADIAL LINE OF WHICH BEARS NORTH 79° 25' 10" WEST, HAVING A RADIUS OF 275 FEET AND A CENTRAL ANGLE OF 20° 47' 30", A DISTANCE OF 99.79 FEET TO A SIMILAR REBAR;

3) SOUTH 31° 22' 20" WEST, 94.65 FEET TO A SIMILAR REBAR;

4) ALONG A CURVE TO THE LEFT, THE RADIAL LINE OF WHICH BEARS SOUTH 58° 37' 40" EAST, HAVING A RADIUS OF 375 FEET AND A CENTRAL ANGLE OF 43° 07' 30", A DISTANCE OF 282.52 FEET TO A SIMILAR REBAR;

5) THENCE SOUTH 11° 45' 10" EAST, 161.58 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO MT. KONOCTI LIGHT AND POWER COMPANY, RECORDED JUNE 24, 1912, IN BOOK 44 OF DEEDS AT PAGE 404.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO LAKEVIEW HOUSING, INC., BY DEED RECORDED MAY 9, 1986, IN BOOK 1311 OF OFFICIAL RECORDS AT PAGE 351.

TRACT TWO:

COMMENCING AT A POINT 1833.00 FEET EAST AND 176-1/2 FEET SOUTH OF THE CORNER OF SECTIONS 23, 24, 25 AND 26, TOWNSHIP 14 NORTH, RANGE 10 WEST, M.D.B.& M., AND RUNNING SOUTH 57° WEST, 86.00 FEET; THENCE NORTH 75° EAST, 83.0 FEET; THENCE NORTH 16° WEST, 26-1/2 FEET TO THE PLACE OF BEGINNING.

APN: 025-431-370-000

NOTICE

Section 12413.1 of the California Insurance Code, effective January 1, 1990, requires that any title insurance company, underwritten title company, or controlled escrow company handling funds in an escrow or sub-escrow capacity, wait a specified number of days after depositing funds, before recording any documents in connection with the transaction or disbursing funds. This statute allows for funds deposited by wire transfer to be disbursed the same day as deposit. In the case of cashier's checks or certified checks, funds may be disbursed the next day after deposit. In order to avoid unnecessary delays of three to seven days, or more, please use wire transfer, cashier's checks, or certified checks whenever possible.

EXHIBIT A
LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (BY POLICY TYPE)

CLTA STANDARD COVERAGE POLICY – 1990
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;

- d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.
- This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
 3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
 4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
 5. Failure to pay value for Your Title.
 6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
 7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
 8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
 9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:
For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.
The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1% of Policy Amount Shown in Schedule A or \$2,500 (whichever is less)	\$10,000
Covered Risk 18:	1% of Policy Amount Shown in Schedule A or \$5,000 (whichever is less)	\$25,000
Covered Risk 19:	1% of Policy Amount Shown in Schedule A or \$5,000 (whichever is less)	\$25,000
Covered Risk 21:	1% of Policy Amount Shown in Schedule A or \$2,500 (whichever is less)	\$5,000

2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;

- (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
 5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
 6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
 7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II, [t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

[PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by a n accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;

- (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 or 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
- (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of: [The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by a n accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.
7. [Variable exceptions such as taxes, easements, CC&R's, etc. shown here.]

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (07-26-10)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.

(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the

Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.

7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.



Privacy Notice

Effective: January 1, 2020

Notice Last Updated: January 1, 2020

This Privacy Notice describes how First American Financial Corporation and its subsidiaries and affiliates (together referred to as "First American," "we," "us," or "our") collect, use, store, and share your information. This Privacy Notice applies to information we receive from you offline only, as well as from third parties. For more information about our privacy practices, please visit <https://www.firstam.com/privacy-policy/index.html>. The practices described in this Privacy Notice are subject to applicable laws in the places in which we operate.

What Type Of Information Do We Collect About You? We collect both **personal** and **non-personal information** about and from you. **Personal information** is non-public information that can be used to directly or indirectly identify or contact you. **Non-personal information** is any other type of information.

How Do We Collect Your Information? We collect your **personal** and **non-personal information**: (1) directly from you; (2) automatically when you interact with us; and (3) from third parties, including business parties and affiliates.

How Do We Use Your Information? We may use your personal information in a variety of ways, including but not limited to providing the services you have requested, fulfilling your transactions, comply with relevant laws and our policies, and handling a claim. We may use your **non-personal information** for any purpose.

How Do We Share Your Personal Information? We do not sell your **personal information** to nonaffiliated third parties. We will only share your **personal information**, including to subsidiaries, affiliates, and to unaffiliated third parties: (1) with your consent; (2) in a business transfer; (3) to service providers; and (4) for legal process and protection. If you have any questions about how First American shares your **personal information**, you may contact us at dataprivacy@firstam.com or toll free at 1-866-718-0097.

How Do We Secure Your Personal Information? The security of your **personal information** is important to us. That is why we take commercially reasonable steps to make sure your **personal information** is protected. We use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your **personal information**.

How Long Do We Keep Your Personal Information? We keep your **personal information** for as long as necessary in accordance with the purpose for which it was collected, our business needs, and our legal and regulatory obligations.

Your Choices We provide you the ability to exercise certain controls and choices regarding our collection, use, storage, and sharing of your **personal information**. In accordance with applicable law, your controls and choices. You can learn more about your choices, and exercise these controls and choices, by sending an email to dataprivacy@firstam.com or toll free at 1-866-718-0097.

International Jurisdictions: Our Products are hosted and offered in the United States of America (US), and are subject to US federal, state, and local law. If you are accessing the Products from another country, please be advised that you may be transferring your **personal information** to us in the US, and you consent to that transfer and use of your **personal information** in accordance with this Privacy Notice. You also agree to abide by the applicable laws of applicable US federal, state, and local laws concerning your use of the Products, and your agreements with us.

We may change this Privacy Notice from time to time. Any and all changes to this Privacy Notice will be reflected on this page, and where appropriate provided in person or by another electronic method. **YOUR CONTINUED USE, ACCESS, OR INTERACTION WITH OUR PRODUCTS OR YOUR CONTINUED COMMUNICATIONS WITH US AFTER THIS NOTICE HAS BEEN PROVIDED TO YOU WILL REPRESENT THAT YOU HAVE READ AND UNDERSTOOD THIS PRIVACY NOTICE.**

Contact Us dataprivacy@firstam.com or toll free at 1-866-718-0097.



For California Residents

If you are a California resident, you may have certain rights under California law, including but not limited to the California Consumer Privacy Act of 2018 ("CCPA"). All phrases used in this section shall have the same meaning as those phrases are used under California law, including the CCPA.

Right to Know. You have a right to request that we disclose the following information to you: (1) the categories of **personal information** we have collected about or from you; (2) the categories of sources from which the **personal information** was collected; (3) the business or commercial purpose for such collection and/or disclosure of your personal information; (4) the categories of third parties with whom we have shared your **personal information**; and (5) the specific pieces of your **personal information** we have collected. To submit a verified request for this information, go to our online privacy policy at www.firstam.com/privacy-policy to submit your request or call toll-free at 1-866-718-0097. You may also designate an authorized agent to submit a request on your behalf by going to our online privacy policy at www.firstam.com/privacy-policy to submit your request or by calling toll-free at 1-866-718-0097 and submitting written proof of such authorization to dataprivacy@firstam.com.

Right of Deletion. You also have a right to request that we delete the **personal information** we have collected from you. This right is subject to certain exceptions available under the CCPA and other applicable law. To submit a verified request for deletion, go to our online privacy policy at www.firstam.com/privacy-policy to submit your request or call toll-free at 1-866-718-0097. You may also designate an authorized agent to submit a request on your behalf by going to our online privacy policy at www.firstam.com/privacy-policy to submit your request or by calling toll-free at 1-866-718-0097 and submitting written proof of such authorization to dataprivacy@firstam.com.

Verification Process. For either a request to know or delete, we will verify your identity before responding to your request. To verify your identity, we will generally match the identifying information provided in your request with the information we have on file about you. Depending on the sensitivity of the personal information requested, we may also utilize more stringent verification methods to verify your identity, including but not limited to requesting additional information from you and/or requiring you to sign a declaration under penalty of perjury.

Right to Opt-Out. We do not sell your personal information to third parties, and do not plan to do so in the future.

Right of Non-Discrimination. You have a right to exercise your rights under California law, including under the CCPA, without suffering discrimination. Accordingly, First American will not discriminate against you in any way if you choose to exercise your rights under the CCPA.

Collection Notice. The following is a list of the categories of personal information we may have collected about California residents in the twelve months preceding the date this Privacy Notice was last updated, including the business or commercial purpose for said collection, the categories of sources from which we may have collected the personal information, and the categories of third parties with whom we may have shared the personal information:

Categories of Personal Information Collected	The categories of personal information we have collected include, but may not be limited to: real name; signature; alias; SSN; physical characteristics or description, including protected characteristics under federal or state law; address; telephone number; passport number; driver's license number; state identification card number; IP address; policy number; file number; employment history; bank account number; credit card number; debit card number; financial account numbers; commercial information; internet or other electronic network activity; geolocation data; audio and visual information; professional or employment information; and inferences drawn from the above categories to create a profile about a consumer.
Categories of Sources	Categories of sources from which we've collected personal information include, but may not be limited to: the consumer directly; public records; governmental entities; non-affiliated third parties; social media networks; affiliated third parties
Business Purpose for Collection	The business purposes for which we've collected personal information include, but may not be limited to: completing a transaction for our Products; verifying eligibility for employment; facilitating employment; performing services on behalf of affiliated and non-affiliated third parties; debugging to identify and repair errors that impair existing intended functionality on our Websites, Applications, or Products; protecting against malicious, deceptive, fraudulent, or illegal activity



Categories of Third Parties Shared	The categories of third parties with whom we've shared personal information include, but may not be limited to: advertising networks; internet service providers; data analytics providers; service providers; government entities; operating systems and platforms; social media networks; non-affiliated third parties; affiliated third parties
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Categories of Personal Information We Have Sold In The Past Year. We have not sold any personal information of California residents to any third party in the twelve months preceding the date this Privacy Notice was last updated.

Categories of Personal Information Disclosed For A Business Purpose In The Past Year. The following is a list of the categories of **personal information** of California residents we may have disclosed for a business purpose in the 12 months preceding the date this Privacy Notice was last updated: The categories of personal information we have collected include, but may not be limited to: real name; signature; alias; SSN; physical characteristics or description, including protected characteristics under federal or state law; address; telephone number; passport number; driver's license number; state identification card number; IP address; policy number; file number; employment history; bank account number; credit card number; debit card number; financial account numbers; commercial information; internet or other electronic network activity; geolocation data; audio and visual information; professional or employment information; and inferences drawn from the above categories to create a profile about a consumer.

APPENDIX F

SITE PHOTOGRAPHS

















APPENDIX G

VAPOR ENCROACHMENT SCREEN

Vacant Land

447 Bevins Street
Lakeport, CA 95453

Inquiry Number: 6566821.2s
August 5, 2021

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

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Record Sources and Currency	GR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Default Area of Concern (Miles)*	property	1/10	> 1/10
Federal NPL site list	1.0	0	0	1
Federal Delisted NPL site list	1.0	0	0	0
Federal CERCLIS list	0.5	0	0	1
Federal CERCLIS NFRAP site list	0.5	0	0	0
Federal RCRA CORRACTS facilities list	1.0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list	0.5	0	0	0
Federal RCRA generators list	0.25	0	0	0
Federal institutional controls / engineering controls registries	0.5	0	0	0
Federal ERNS list	0.001	0	0	-
State- and tribal - equivalent NPL	1.0	0	0	0
State- and tribal - equivalent CERCLIS	1.0	0	0	0
State and tribal landfill and/or solid waste disposal site lists	0.5	0	0	0
State and tribal leaking storage tank lists	0.5	0	0	0
State and tribal registered storage tank lists	0.25	0	0	0
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.5	0	0	0
State and tribal Brownfields sites	0.5	0	0	0

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	1.0	0	1	0
Local Lists of Registered Storage Tanks	0.25	0	0	0
Local Land Records	0.5	0	0	0
Records of Emergency Release Reports	0.5	0	0	0
Other Ascertainable Records	1.0	0	5	1

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records	1.0	0	1	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	1	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

VACANT LAND
447 BEVINS STREET
LAKEPORT, CA 95453

COORDINATES

Latitude (North):	39.03939 - 39° 2' 21.80603"
Longitude (West):	122.925627 - 122° 55' 32.263184"
Elevation:	1361 ft. above sea level

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
SULPHUR BANK MERCURY MINE NPL: NPL SEMS: SEMS PRP: PRP	SULPHUR BANK ROAD	1/2 - 1 ENE	Region	8

ADDITIONAL ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
SULPHUR BANK MERCURY MINE NPL: NPL SEMS: SEMS PRP: PRP	SULPHUR BANK ROAD	1/2 - 1 ENE	Region	
LAKE COUNTY SHERIFFS OFFICE RCRA NonGen / NLR: RCRA NonGen / NLR	1220 MARTIN ST	<1/10 N	▲ 1	18
LAKEPORT TRANSMISSION RCRA NonGen / NLR: RCRA NonGen / NLR	575 BEVINS ST	<1/10 SSE	▲ A2	21
LAKEPORT TRANSMISSION HWTS: HWTS CUPA Listings: CUPA	575 BEVINS ST	<1/10 SSE	▲ A3	25
LAKEPORT TRANSMISSION CERS: CERS CERS HAZ WASTE: CERS HAZ WASTE	575 BEVINS STREET	<1/10 SSE	▲ A5	28
D & S MUFFLER & AUTOMOTIVE REPAIR HWTS: HWTS CUPA Listings: CUPA	637 BEVINS ST	<1/10 SSE	▲ A6	32

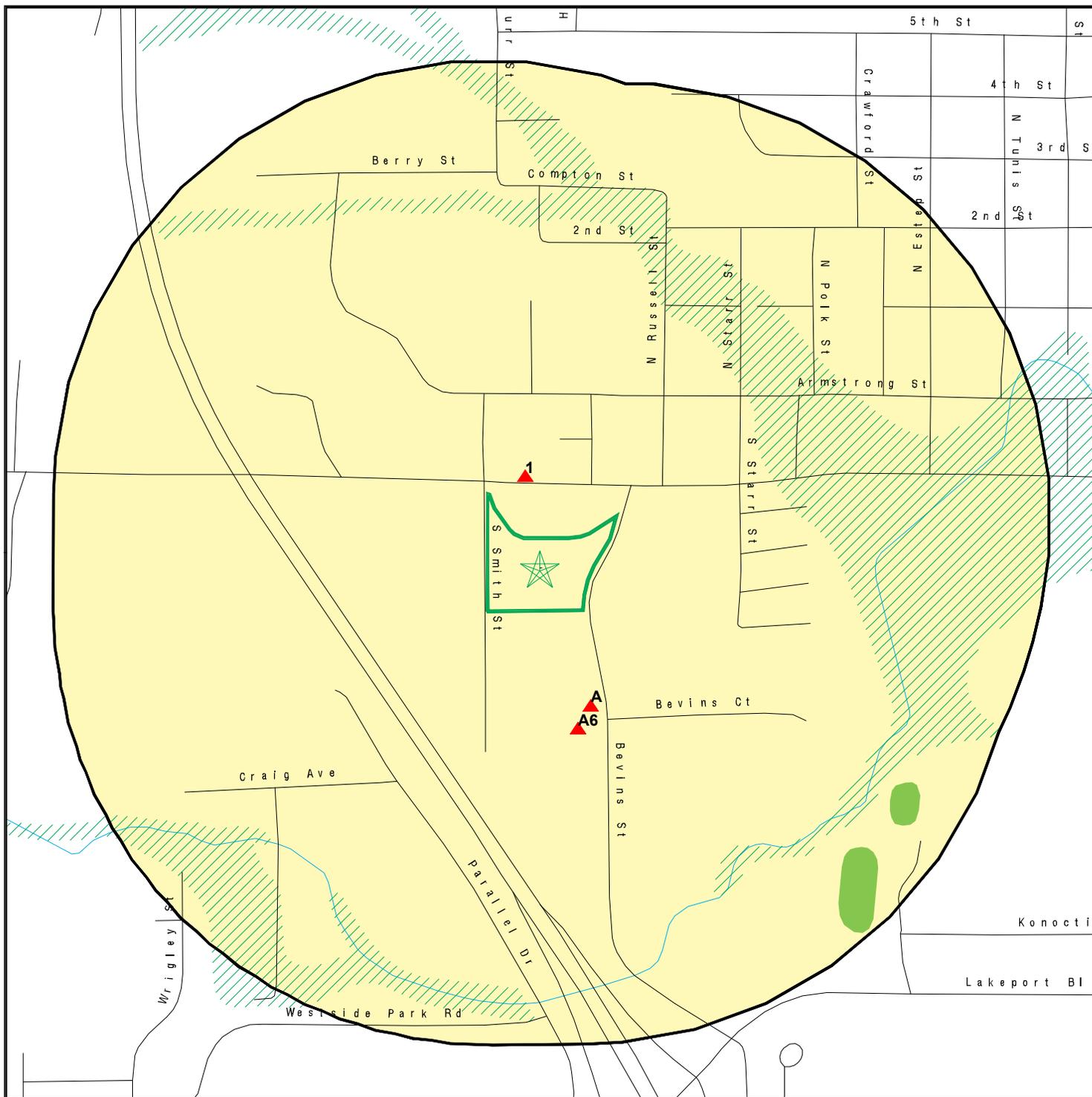
EDR HIGH RISK HISTORICAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
LAKEPORT TRANSMISSION EDR Hist Auto: EDR Hist Auto	575 BEVINS ST	<1/10 SSE	▲ A4	27

EDR RECOVERED GOVERNMENT ARCHIVES

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
Not Reported				

PRIMARY MAP - 6566821.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

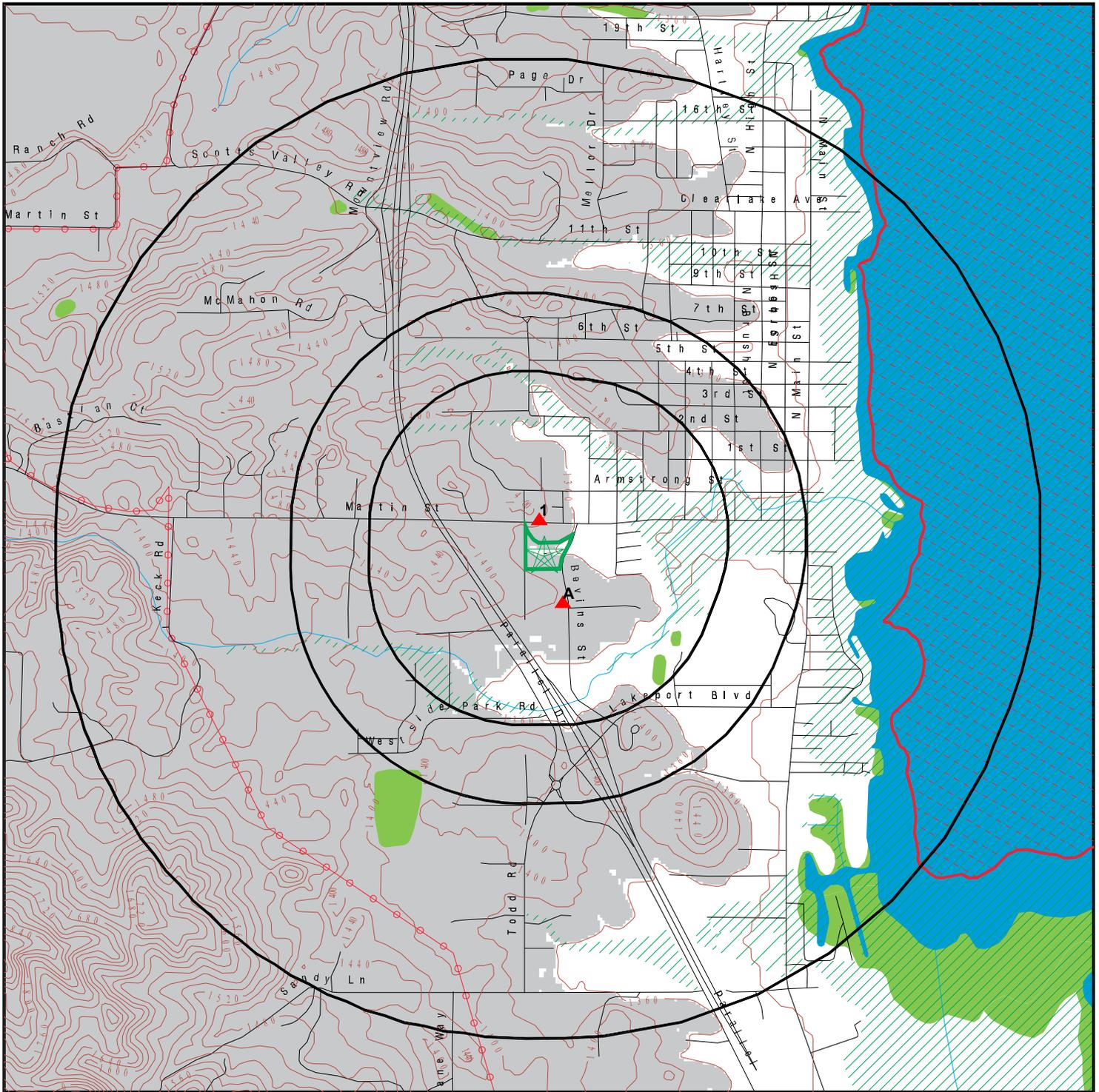
Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land
 ADDRESS: 447 Bevins Street
 Lakeport CA 95453
 LAT/LONG: 39.03939 / 122.925627

CLIENT: KCE Matrix
 CONTACT: Aram Kaloustian
 INQUIRY #: 6566821.2S
 DATE: July 07, 2021 1:35 pm

SECONDARY MAP - 6566821.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Upgradient Area

Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land
 ADDRESS: 447 Bevin Street
 Lakeport CA 95453
 LAT/LONG: 39.03939 / 122.925627

CLIENT: KCE Matrix
 CONTACT: Aram Kaloustian
 INQUIRY #: 6566821.2s
 DATE: July 07, 2021 1:32 pm

MAP FINDINGS

LEGEND

FACILITY NAME FACILITY ADDRESS, CITY, ST, ZIP		EDR SITE ID NUMBER
◆ MAP ID#	Direction Distance Range (Distance feet / miles)	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.
	Relative Elevation Feet Above Sea Level	
Worksheet:		
Comments: Comments may be added on the online Vapor Encroachment Worksheet.		

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

SULPHUR BANK MERCURY MINE SULPHUR BANK ROAD, CLEARLAKE OAKS, CA, 95422		1000707971
Region	ENE 1/2 - 1 (3513 ft. / 0.665 mi.)	Federal NPL site list Federal CERCLIS list Other Ascertainable Records

Worksheet:

NPL: Federal NPL site list

EPA Region: 9
 EPA ID: CAD980893275
 Site ID: 902228
 Name: SULPHUR BANK MERCURY MINE
 Address: SULPHUR BANK ROAD
 City,State,Zip: CLEARLAKE OAKS, CA 95422
 Federal: N
 Final Date: 1990-08-30 00:00:00
 Latitude: 39.00555
 Longitude: -122.6703
 Site Score: 44.420000000000002

NPL:

NPL Status: Currently on the Final NPL
 Substance ID: Not Reported
 CAS Number: Not Reported
 Substance: Not Reported
 Pathway: Not Reported
 Scoring: Not Reported

NPL Status: Currently on the Final NPL
 Substance ID: C460
 CAS Number: 7439-97-6
 Substance: MERCURY

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: C460
CAS Number: 7439-97-6
Substance: MERCURY
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: D004
CAS Number: 7440-38-2
Substance: ARSENIC
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: D004
CAS Number: 7440-38-2
Substance: ARSENIC
Pathway: SURFACE WATER PATHWAY
Scoring: 3

Summary Details:

Conditions at proposal June 24, 1988): The Sulphur Bank Mercury (SBM) Mine is on the east shore of the Oaks Arm of Clear Lake, in Clear Lake, Lake County, California. The area was initially mined for sulfur during 1865-68. Mercury ore was mined by underground methods during 1899-1902 and 1915-18. The majority of the mercury ore was mined using open pit methods during 1922-47 and 1955-57. The mine, once one of the largest producers of mercury in California, has been inactive since 1957 and is presently owned by Bradley Mining Co. (BMC) of San Francisco. Approximately 120 acres of tailings and an open, unlined mine pit called the Herman Pit) are on the property. The mine tailings extend into the Oaks Arm of Clear Lake along 1,320 feet of shoreline. The Herman Pit covers approximately 23 acres and is 750 feet upgradient of the lake. The pit is filled with water to a depth of 150 feet. The California Regional Water Quality Control Board (CRWQCB) is coordinating an ongoing investigation of SBM. Department of Health Services, Department of Fish and Game, and CRWQCB analyses indicate that mercury is present in the tailings and in the biota and bottom sediments in the Oaks Arm of Clear Lake. The levels of mercury in fish from Clear Lake led the State to issue an advisory on May 14, 1986 against consumption of the fish. The lake is a major recreational area. On March 13, 1987, CRWQCB informed BMC

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

that the Herman Pit is regulated under the Toxic Pits Cleanup Act (TPCA). Under the act, BMC is required to submit a Hydrogeologic Assessment Report (HAR). The property owners are conducting a waste characterization study of the site prior to submitting a HAR to determine if the site may be exempt from the TPCA. On November 4, 1987, CRWQCB awarded a contract for a pollution abatement study of the Oaks Arm of Clear Lake and the adjacent mine site. The study is scheduled to be completed in early 1989. An estimated 4,700 people obtain drinking water from Clear Lake Oaks Water District wells about 1 mile from the site. Status August 30, 1990): The property owners submitted their HAR to CRWQCB in July 1988. CRWQCB exempted the Herman Pit from TPCA in April 1990. CRWQCB's study of Clear Lake was completed in late 1989. It indicated that the largest continued input of mercury to Clear Lake is probably from erosion of waste rock and tailings into the lake.

NPL:

NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-<= 10 Feet
Category Value: 6
NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 100

NPL:

NPL Name: SULPHUR BANK MERCURY MINE

NPL:

EPA Region: 09
Site ID: 0902228
Site Status: F
Federal Site: N
Date Deleted: Not Reported
Date Finalized: 08/30/90
Date Proposed: 06/24/88

NPL:

Proposed Date: 06/24/1988
Final Date: 08/30/1990
Deleted Date: Not Reported
NPL Status: Final

SEMS: Federal CERCLIS list

Site ID: 0902228

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

EPA ID: CAD980893275
 Name: SULPHUR BANK MERCURY MINE
 Address: SULPHUR BANK ROAD
 Address 2: Not Reported
 City,State,Zip: CLEARLAKE OAKS, CA 95422
 Cong District: 01,03
 FIPS Code: 06033
 Latitude: +39.005550
 Longitude: -122.670300
 FF: N
 NPL: Currently on the Final NPL
 Non NPL Status: Not Reported

SEMS Detail:

Region: 09
 Site ID: 0902228
 EPA ID: CAD980893275
 Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00
 Action Code: DS
 Action Name: DISCVRY
 SEQ: 1
 Start Date: 1985-04-01 06:00:00
 Finish Date: 4/1/1985 6:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0902228
 EPA ID: CAD980893275
 Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00
 Action Code: SI
 Action Name: SI
 SEQ: 1
 Start Date: 1987-06-01 04:00:00
 Finish Date: 6/1/1987 4:00:00 AM
 Qual: L
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0902228
 EPA ID: CAD980893275
 Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

Action Code:	RC
Action Name:	RVL CRP
SEQ:	1
Start Date:	1992-05-14 04:00:00
Finish Date:	12/29/1992 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1990-07-20 04:00:00
Finish Date:	7/20/1990 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	1990-08-30 04:00:00
Finish Date:	8/30/1990 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	EE
Action Name:	EE/CA
SEQ:	1
Start Date:	1999-09-21 04:00:00
Finish Date:	9/21/1999 4:00:00 AM
Qual:	Not Reported

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1992-05-27 04:00:00
Finish Date:	5/27/1992 4:00:00 AM
Qual:	V
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	EE
Action Name:	EE/CA
SEQ:	2
Start Date:	2005-07-21 04:00:00
Finish Date:	4/6/2006 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	EE
Action Name:	EE/CA
SEQ:	3
Start Date:	2009-05-19 04:00:00
Finish Date:	8/30/2009 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

FF:	N
OU:	00
Action Code:	AS
Action Name:	AIR SRVY
SEQ:	1
Start Date:	1998-04-07 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	3
Start Date:	1991-01-31 05:00:00
Finish Date:	1/31/1991 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1987-06-01 04:00:00
Finish Date:	6/1/1987 4:00:00 AM
Qual:	H
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	RV
Action Name:	RMVL
SEQ:	1
Start Date:	1992-05-14 04:00:00

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

Finish Date:	6/21/1993 4:00:00 AM
Qual:	S
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	RV
Action Name:	RMVL
SEQ:	11
Start Date:	2017-02-27 05:00:00
Finish Date:	5/24/2017 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	RV
Action Name:	RMVL
SEQ:	12
Start Date:	2017-02-21 05:00:00
Finish Date:	2/21/2017 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	1987-06-01 04:00:00
Finish Date:	6/1/1987 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00
 Action Code: RS
 Action Name: RV ASSESS
 SEQ: 1
 Start Date: 1989-08-23 04:00:00
 Finish Date: 8/23/1989 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0902228
 EPA ID: CAD980893275
 Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00
 Action Code: NP
 Action Name: PROPOSED
 SEQ: 1
 Start Date: 1988-06-24 04:00:00
 Finish Date: 6/24/1988 4:00:00 AM
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0902228
 EPA ID: CAD980893275
 Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00
 Action Code: MA
 Action Name: ST COOP
 SEQ: 2
 Start Date: 2010-10-07 04:00:00
 Finish Date: Not Reported
 Qual: Not Reported
 Current Action Lead: EPA Perf

Region: 09
 Site ID: 0902228
 EPA ID: CAD980893275
 Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00
 Action Code: MA
 Action Name: ST COOP

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

SEQ:	1
Start Date:	1990-09-27 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	01
Action Code:	EE
Action Name:	EE/CA
SEQ:	5
Start Date:	2018-06-27 05:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	01
Action Code:	CO
Action Name:	RI/FS
SEQ:	1
Start Date:	1990-09-28 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0902228
EPA ID:	CAD980893275
Site Name:	SULPHUR BANK MERCURY MINE
NPL:	F
FF:	N
OU:	00
Action Code:	TG
Action Name:	TA GRANT
SEQ:	1
Start Date:	2004-03-08 05:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09

MAP FINDINGS

SULPHUR BANK MERCURY MINE, SULPHUR BANK ROAD, CLEARLAKE OAKS, CA 95422 (Continued)

Site ID: 0902228
 EPA ID: CAD980893275
 Site Name: SULPHUR BANK MERCURY MINE
 NPL: F
 FF: N
 OU: 00
 Action Code: CR
 Action Name: CI
 SEQ: 1
 Start Date: 2003-08-20 04:00:00
 Finish Date: Not Reported
 Qual: Not Reported
 Current Action Lead: EPA Perf

PRP: Other Ascertainable Records

PRP Name: BRADLEY MINING COMPANY
 BRADLEY MINING COMPANY
 FREDERICK W. BRADLEY
 NEC ACQUISITION
 WORTHEN BRADLEY TRUST

LAKE COUNTY SHERIFFS OFFICE 1220 MARTIN ST, LAKEPORT, CA, 95453			1025869740
▲ 1	N <1/10	(160 ft. / 0.03 mi.)	Other Ascertainable Records
	25 ft. Higher Elevation	1386 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

Conditions:

Chemicals of Concern: YES

Groundwater Flow Gradient:

Crossgradient: YES

AQUIFLOW: YES

RCRA NonGen / NLR: Other Ascertainable Records

Date Form Received by Agency: 2016-04-01 00:00:00.0
 Handler Name: LAKE COUNTY SHERIFFS OFFICE
 Handler Address: 1220 MARTIN ST
 Handler City,State,Zip: LAKEPORT, CA 95453
 EPA ID: CAL000415829
 Contact Name: ELONA PORTER
 Contact Address: PO BOX 489
 Contact City,State,Zip: LAKEPORT, CA 95453
 Contact Telephone: 707-245-4246
 Contact Fax: 707-262-4235

MAP FINDINGS

LAKE COUNTY SHERIFFS OFFICE, 1220 MARTIN ST, LAKEPORT, CA 95453 (Continued)

Contact Email:	ELONA.PORTER@LAKECOUNTYCA.GOV
Contact Title:	Not Reported
EPA Region:	09
Land Type:	Not Reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not Reported
Biennial Report Cycle:	Not Reported
Accessibility:	Not Reported
Active Site Indicator:	Handler Activities
State District Owner:	Not Reported
State District:	Not Reported
Mailing Address:	PO BOX 489
Mailing City,State,Zip:	LAKEPORT, CA 95453
Owner Name:	LAKE COUNTY SHERIFFS OFFICE
Owner Type:	Other
Operator Name:	ELONA PORTER
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not Reported
Active Site Converter Treatment storage and Disposal Facility:	Not Reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not Reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not Reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not Reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not Reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not Reported
Permit Workload Universe:	Not Reported
Permit Progress Universe:	Not Reported
Post-Closure Workload Universe:	Not Reported

MAP FINDINGS

LAKE COUNTY SHERIFFS OFFICE, 1220 MARTIN ST, LAKEPORT, CA 95453 (Continued)

Closure Workload Universe:	Not Reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not Reported
Full Enforcement Universe:	Not Reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not Reported
Handler Date of Last Change:	2019-06-28 17:07:05.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	LAKE COUNTY SHERIFFS OFFICE
Legal Status:	Other
Date Became Current:	Not Reported
Date Ended Current:	Not Reported
Owner/Operator Address:	1220 MARTIN ST
Owner/Operator City,State,Zip:	LAKEPORT, CA 95453
Owner/Operator Telephone:	707-262-4200
Owner/Operator Telephone Ext:	Not Reported
Owner/Operator Fax:	Not Reported
Owner/Operator Email:	Not Reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	ELONA PORTER
Legal Status:	Other

MAP FINDINGS

LAKE COUNTY SHERIFFS OFFICE, 1220 MARTIN ST, LAKEPORT, CA 95453 (Continued)

Date Became Current: Not Reported
 Date Ended Current: Not Reported
 Owner/Operator Address: PO BOX 489
 Owner/Operator City,State,Zip: LAKEPORT, CA 95453
 Owner/Operator Telephone: 707-245-4246
 Owner/Operator Telephone Ext: Not Reported
 Owner/Operator Fax: Not Reported
 Owner/Operator Email: Not Reported

Historic Generators:

Receive Date: 2016-04-01 00:00:00.0
 Handler Name: LAKE COUNTY SHERIFFS OFFICE
 Federal Waste Generator Description: Not a generator, verified
 State District Owner: Not Reported
 Large Quantity Handler of Universal Waste: No
 Recognized Trader Importer: Not Reported
 Recognized Trader Exporter: Not Reported
 Spent Lead Acid Battery Importer: Not Reported
 Spent Lead Acid Battery Exporter: Not Reported
 Current Record: Yes
 Non Storage Recycler Activity: Not Reported
 Electronic Manifest Broker: Not Reported

List of NAICS Codes and Descriptions:

NAICS Code: 92219
 NAICS Description: OTHER JUSTICE, PUBLIC ORDER, AND SAFETY ACTIVITIES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

LAKEPORT TRANSMISSION 575 BEVINS ST, LAKEPORT, CA, 95453-0000			1024801362
▲ A2	SSE <1/10	(396 ft. / 0.075 mi.)	Other Ascertainable Records
	14 ft. Higher Elevation	1375 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

Conditions:

Chemicals of Concern: YES

Groundwater Flow Gradient:

Downgradient: YES

MAP FINDINGS

AQUIFLOW: YES

RCRA NonGen / NLR: Other Ascertainable Records

Date Form Received by Agency: 2001-08-22 00:00:00.0
 Handler Name: LAKEPORT TRANSMISSION
 Handler Address: 575 BEVINS ST
 Handler City,State,Zip: LAKEPORT, CA 95453-0000
 EPA ID: CAL000229781
 Contact Name: SHIRLEY DEVILBISS
 Contact Address: 575 BEVINS ST
 Contact City,State,Zip: LAKEPORT, CA 95453
 Contact Telephone: 707-263-4922
 Contact Fax: 707-263-6088
 Contact Email: LAKEPORT_TRANS@MEDIACOMBB.NET
 Contact Title: Not Reported
 EPA Region: 09
 Land Type: Not Reported
 Federal Waste Generator Description: Not a generator, verified
 Non-Notifier: Not Reported
 Biennial Report Cycle: Not Reported
 Accessibility: Not Reported
 Active Site Indicator: Handler Activities
 State District Owner: Not Reported
 State District: Not Reported
 Mailing Address: 575 BEVINS ST
 Mailing City,State,Zip: LAKEPORT, CA 95453-0000
 Owner Name: BRUCE DEVILBISS
 Owner Type: Other
 Operator Name: SHIRLEY DEVILBISS
 Operator Type: Other
 Short-Term Generator Activity: No
 Importer Activity: No
 Mixed Waste Generator: No
 Transporter Activity: No
 Transfer Facility Activity: No
 Recycler Activity with Storage: No
 Small Quantity On-Site Burner Exemption: No
 Smelting Melting and Refining Furnace Exemption: No
 Underground Injection Control: No
 Off-Site Waste Receipt: No
 Universal Waste Indicator: Yes
 Universal Waste Destination Facility: Yes
 Federal Universal Waste: No
 Active Site Fed-Reg Treatment Storage and Disposal Facility: Not Reported
 Active Site Converter Treatment storage and Disposal Facility: Not Reported
 Active Site State-Reg Treatment Storage and Disposal Facility: Not Reported
 Active Site State-Reg Handler: ---

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS ST, LAKEPORT, CA 95453-0000 (Continued)

Federal Facility Indicator:	Not Reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not Reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not Reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not Reported
Permit Workload Universe:	Not Reported
Permit Progress Universe:	Not Reported
Post-Closure Workload Universe:	Not Reported
Closure Workload Universe:	Not Reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not Reported
Full Enforcement Universe:	Not Reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not Reported
Handler Date of Last Change:	2018-09-05 15:45:31.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SHIRLEY DEVILBISS

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS ST, LAKEPORT, CA 95453-0000 (Continued)

Legal Status: Other
Date Became Current: Not Reported
Date Ended Current: Not Reported
Owner/Operator Address: 575 BEVINS ST
Owner/Operator City,State,Zip: LAKEPORT, CA 95453
Owner/Operator Telephone: 707-263-4922
Owner/Operator Telephone Ext: Not Reported
Owner/Operator Fax: Not Reported
Owner/Operator Email: Not Reported

Owner/Operator Indicator: Owner
Owner/Operator Name: BRUCE DEVILBISS
Legal Status: Other
Date Became Current: Not Reported
Date Ended Current: Not Reported
Owner/Operator Address: 575 BEVINS ST
Owner/Operator City,State,Zip: LAKEPORT, CA 95453-0000
Owner/Operator Telephone: 707-263-4922
Owner/Operator Telephone Ext: Not Reported
Owner/Operator Fax: Not Reported
Owner/Operator Email: Not Reported

Historic Generators:

Receive Date: 2001-08-22 00:00:00.0
Handler Name: LAKEPORT TRANSMISSION
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not Reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not Reported
Electronic Manifest Broker: Not Reported

List of NAICS Codes and Descriptions:

NAICS Code: 23492
NAICS Description: POWER AND COMMUNICATION TRANSMISSION LINE CONSTRUCTION

NAICS Code: 811113
NAICS Description: AUTOMOTIVE TRANSMISSION REPAIR

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS ST, LAKEPORT, CA 95453-0000 (Continued)

LAKEPORT TRANSMISSION 575 BEVINS ST, LAKEPORT, CA, 954530000			S112444493
▲ A3	SSE <1/10	(396 ft. / 0.075 mi.)	Other Ascertainable Records
	14 ft. Higher Elevation	1375 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

Conditions:

Chemicals of Concern: YES

Groundwater Flow Gradient:

Downgradient: YES

AQUIFLOW: YES

CUPA LAKE: Other Ascertainable Records

Name: LAKEPORT TRANSMISSION
 Address: 575 BEVINS ST
 City,State,Zip: LAKEPORT, CA 95453
 Facility: FA0000103
 Business Type: 1 - CUPA
 Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb)
 Mailing Address: 575 Bevins Street
 Mailing Telephone: 7072634922
 Entered Date: 11/16/2012
 Program Identifier: CUPA-575 BEVINS ST., LAKEPORT
 Record ID: PR0000505
 Billing Status: 01 - ACTIVE, BILLABLE
 Total Fee Amount: 501
 Current Inspection Date: 04/12/2020
 Contact Name: Bruce DeVilbiss-LAKEPORT TRANSMISSION
 Mailing Address: Lakeport, CA 95453
 APN: Not Reported
 Program/Element Code: 2002

Name: LAKEPORT TRANSMISSION
 Address: 575 BEVINS ST
 City,State,Zip: LAKEPORT, CA 95453
 Facility: FA0000103
 Business Type: 1 - CUPA
 Program Element: 2800 - CUPA Hazardous Waste Generator Program
 Mailing Address: 575 Bevins Street
 Mailing Telephone: 7072634922
 Entered Date: 11/16/2012
 Program Identifier: CUPA
 Record ID: PR0000506
 Billing Status: 01 - ACTIVE, BILLABLE
 Total Fee Amount: 0

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS ST, LAKEPORT, CA 954530000 (Continued)

Current Inspection Date: 04/05/2020
Contact Name: Bruce DeVilbiss
Mailing Address: Lakeport, CA 95453
APN: Not Reported
Program/Element Code: 2800

HWTS: Other Ascertainable Records

Name: LAKEPORT TRANSMISSION
Address: 575 BEVINS ST
Address 2: Not Reported
City,State,Zip: LAKEPORT, CA 954530000
EPA ID: CAL000229781
Inactive Date: Not Reported
Create Date: 08/22/2001
Last Act Date: 07/22/2020
Mailing Name: Not Reported
Mailing Address: 575 BEVINS ST
Mailing Address 2: Not Reported
Mailing City,State,Zip: LAKEPORT, CA 954530000
Owner Name: BRUCE DEVILBISS
Owner Address: 575 BEVINS ST
Owner Address 2: Not Reported
Owner City,State,Zip: LAKEPORT, CA 954530000
Contact Name: BRUCE DEVILBISS
Contact Address: 575 BEVINS ST
Contact Address 2: Not Reported
City,State,Zip: LAKEPORT, CA 95453

NAICS:

EPA ID: CAL000229781
Create Date: 2002-03-14 16:36:29.000
NAICS Code: 23492
NAICS Description: Power and Communication Transmission Line Construction
Issued EPA ID Date: 2001-08-22 00:00:00
Inactive Date: Not Reported
Facility Name: LAKEPORT TRANSMISSION
Facility Address: 575 BEVINS ST
Facility Address 2: Not Reported
Facility City: LAKEPORT
Facility County: Not Reported
Facility State: CA
Facility Zip: 954530000

EPA ID: CAL000229781
Create Date: 2013-10-15 15:45:40.993
NAICS Code: 811113
NAICS Description: Automotive Transmission Repair
Issued EPA ID Date: 2001-08-22 00:00:00
Inactive Date: Not Reported
Facility Name: LAKEPORT TRANSMISSION

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS ST, LAKEPORT, CA 954530000 (Continued)

Facility Address: 575 BEVINS ST
 Facility Address 2: Not Reported
 Facility City: LAKEPORT
 Facility County: Not Reported
 Facility State: CA
 Facility Zip: 954530000

LAKEPORT TRANSMISSION 575 BEVINS ST, LAKEPORT, CA, 95453		1020126419
▲ A4	SSE <1/10 (396 ft. / 0.075 mi.)	EDR Exclusive Records
	14 ft. Higher Elevation 1375 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

Conditions:

Chemicals of Concern: YES

Groundwater Flow Gradient:

Downgradient: YES

AQUIFLOW: YES

EDR Hist Auto: EDR Exclusive Records

Year:	Name: / Type:
1989:	LAKEPORT TRANSMISSION / General Automotive Repair Shops
1990:	LAKE PORT TRANSMISSION / Automotive Transmission Repair Shops
1991:	LAKE PORT TRANSMISSION / Automotive Transmission Repair Shops
1991:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
1992:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
1992:	LAKE PORT TRANSMISSION / Automotive Transmission Repair Shops
1993:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
1994:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
1995:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
1996:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
1997:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
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2008:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
2009:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
2010:	LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS ST, LAKEPORT, CA 95453 (Continued)

2011: LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
 2012: LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
 2013: LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops
 2014: LAKEPORT TRANSMISSION / Automotive Transmission Repair Shops

LAKEPORT TRANSMISSION 575 BEVINS STREET, LAKEPORT, CA, 95453		S121742338
▲ A5	SSE <1/10 (396 ft. / 0.075 mi.)	Local Lists of Hazardous waste / Contaminated Sites Other Ascertainable Records
	14 ft. Higher Elevation 1375 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

Conditions:

Chemicals of Concern: YES

Groundwater Flow Gradient:

Downgradient: YES

AQUIFLOW: YES

CERS HAZ WASTE: Local Lists of Hazardous waste / Contaminated Sites

Name: LAKEPORT TRANSMISSION
 Address: 575 BEVINS STREET
 City,State,Zip: LAKEPORT, CA 95453
 Site ID: 129491
 CERS ID: 10135126
 CERS Description: Hazardous Waste Generator

CERS: Other Ascertainable Records

Name: LAKEPORT TRANSMISSION
 Address: 575 BEVINS STREET
 City,State,Zip: LAKEPORT, CA 95453
 Site ID: 129491
 CERS ID: 10135126
 CERS Description: Chemical Storage Facilities

Violations:

Site ID: 129491
 Site Name: Lakeport Transmission
 Violation Date: 03-02-2018
 Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
 Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
 Violation Notes: Returned to compliance on 05/04/2018. OBSERVATION: Owner/Operator failed to submit inventory reports by March 1 to CERS. (Activities, Inventory, Map, Emergency Response and Contingency) CORRECTIVE ACTION: Owner/Operator shall submit inventory reports in CERS within 30 Days of this notice.
 Violation Division: Lake County Environmental Health
 Violation Program: HMRRP
 Violation Source: CERS

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS STREET, LAKEPORT, CA 95453 (Continued)

Site ID: 129491
 Site Name: Lakeport Transmission
 Violation Date: 04-05-2017
 Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
 Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
 Violation Notes: Returned to compliance on 04/05/2017. Excess used transmission oil in unmarked and open drums outside rear of shop. Open bung sealed and drum labeled during inspection. Business owner promised to provide education about hazardous waste storage requirements to employees. Some training materials left.
 Violation Division: Lake County Environmental Health
 Violation Program: HW
 Violation Source: CERS

Site ID: 129491
 Site Name: Lakeport Transmission
 Violation Date: 04-05-2017
 Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
 Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
 Violation Notes: Returned to compliance on 04/05/2017.
 Violation Division: Lake County Environmental Health
 Violation Program: HW
 Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-05-2017
 Violations Found: Yes
 Eval Type: Routine done by local agency
 Eval Notes: Business owner requested some information about proper handling of plastic used transmission filters.
 Eval Division: Lake County Environmental Health
 Eval Program: HW
 Eval Source: CERS

Eval General Type: Other/Unknown
 Eval Date: 04-11-2018
 Violations Found: Yes
 Eval Type: Other, not routine, done by local agency
 Eval Notes: NOV
 Eval Division: Lake County Environmental Health
 Eval Program: HMRRP
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-12-2017
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: no violations noted
 Eval Division: Lake County Environmental Health
 Eval Program: HMRRP

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS STREET, LAKEPORT, CA 95453 (Continued)

Eval Source: CERS
 Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-14-2014
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: Not Reported
 Eval Division: Lake County Environmental Health
 Eval Program: HW
 Eval Source: CERS

 Eval General Type: Compliance Evaluation Inspection
 Eval Date: 04-14-2014
 Violations Found: No
 Eval Type: Routine done by local agency
 Eval Notes: Inspection complete - Accepted CERS - No change to Fee Calc
 Eval Division: Lake County Environmental Health
 Eval Program: HMRRP
 Eval Source: CERS

Enforcement Action:

Site ID: 129491
 Site Name: Lakeport Transmission
 Site Address: 575 BEVINS STREET
 Site City: LAKEPORT
 Site Zip: 95453
 Enf Action Date: 04-05-2017
 Enf Action Type: Notice of Violation (Unified Program)
 Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
 Enf Action Notes: Not Reported
 Enf Action Division: Lake County Environmental Health
 Enf Action Program: HW
 Enf Action Source: CERS

Site ID: 129491
 Site Name: Lakeport Transmission
 Site Address: 575 BEVINS STREET
 Site City: LAKEPORT
 Site Zip: 95453
 Enf Action Date: 04-11-2018
 Enf Action Type: Notice of Violation (Unified Program)
 Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
 Enf Action Notes: Not Reported
 Enf Action Division: Lake County Environmental Health
 Enf Action Program: HMRRP
 Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Document Preparer
 Entity Name: Bruce DeVilbiss

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS STREET, LAKEPORT, CA 95453 (Continued)

Entity Title:	Not Reported
Affiliation Address:	Not Reported
Affiliation City:	Not Reported
Affiliation State:	Not Reported
Affiliation Country:	Not Reported
Affiliation Zip:	Not Reported
Affiliation Phone:	Not Reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Bruce DeVilbiss
Entity Title:	Not Reported
Affiliation Address:	575 Bevins Street
Affiliation City:	Lakeport
Affiliation State:	CA
Affiliation Country:	Not Reported
Affiliation Zip:	95453
Affiliation Phone:	Not Reported
Affiliation Type Desc:	Operator
Entity Name:	Bruce DeVilbiss
Entity Title:	Not Reported
Affiliation Address:	Not Reported
Affiliation City:	Not Reported
Affiliation State:	Not Reported
Affiliation Country:	Not Reported
Affiliation Zip:	Not Reported
Affiliation Phone:	(707) 540-1669
Affiliation Type Desc:	Parent Corporation
Entity Name:	Lakeport Transmission
Entity Title:	Not Reported
Affiliation Address:	Not Reported
Affiliation City:	Not Reported
Affiliation State:	Not Reported
Affiliation Country:	Not Reported
Affiliation Zip:	Not Reported
Affiliation Phone:	Not Reported
Affiliation Type Desc:	CUPA District
Entity Name:	Lake County Environmental Health
Entity Title:	Not Reported
Affiliation Address:	922 Bevins Court
Affiliation City:	Lakeport
Affiliation State:	CA
Affiliation Country:	Not Reported
Affiliation Zip:	95453
Affiliation Phone:	(707) 263-1164
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not Reported
Affiliation Address:	575 Bevins Street

MAP FINDINGS

LAKEPORT TRANSMISSION, 575 BEVINS STREET, LAKEPORT, CA 95453 (Continued)

Affiliation City: Lakeport
 Affiliation State: CA
 Affiliation Country: Not Reported
 Affiliation Zip: 95453
 Affiliation Phone: Not Reported

 Affiliation Type Desc: Identification Signer
 Entity Name: Bruce DeVilbiss
 Entity Title: Owner-Operator
 Affiliation Address: Not Reported
 Affiliation City: Not Reported
 Affiliation State: Not Reported
 Affiliation Country: Not Reported
 Affiliation Zip: Not Reported
 Affiliation Phone: Not Reported

 Affiliation Type Desc: Legal Owner
 Entity Name: Bruce DeVilbiss
 Entity Title: Not Reported
 Affiliation Address: 575 Bevins Street
 Affiliation City: Lakeport
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 95453
 Affiliation Phone: (707) 263-4922

D & S MUFFLER & AUTOMOTIVE REPAIR 637 BEVINS ST, LAKEPORT, CA, 954538731		S112444506
▲ A6	SSE <1/10 (486 ft. / 0.092 mi.)	Other Ascertainable Records
	13 ft. Higher Elevation 1374 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

Conditions:

Chemicals of Concern: YES

Groundwater Flow Gradient:

Downgradient: YES

AQUIFLOW: YES

CUPA LAKE: Other Ascertainable Records

Name: AAA WELDING & FABRICATION
 Address: 637 BEVINS ST
 City,State,Zip: LAKEPORT, CA 95453
 Facility: FA0001014
 Business Type: 1 - CUPA
 Program Element: 2001 - HMRRP Category 1 (55-110 gal, 500-1,000 lbs)
 Mailing Address: 637 BEVINS ST

MAP FINDINGS

D & S MUFFLER & AUTOMOTIVE REPAIR, 637 BEVINS ST, LAKEPORT, CA 954538731 (Continued)

Mailing Telephone: Not Reported
 Entered Date: 12/30/2013
 Program Identifier: CUPA-637 BEVINS STREET, LAKEPORT
 Record ID: PR0002098
 Billing Status: 01 - ACTIVE, BILLABLE
 Total Fee Amount: 415
 Current Inspection Date: 07/07/2020
 Contact Name: CHRIS CAUDLE-AAA WELDING & FABRICATION
 Mailing Address: LAKEPORT, CA 95453
 APN: 025-431-24
 Program/Element Code: 2001

Name: D & S MUFFLER & AUTOMOTIVE REPAIR
 Address: 637 BEVINS ST
 City,State,Zip: LAKEPORT, CA 95453
 Facility: FA0000053
 Business Type: 1 - CUPA
 Program Element: 2002 - HMRRP Category 2 (111-500 gal, 1,001-5,000 lb)
 Mailing Address: 637 Bevins Street
 Mailing Telephone: 7072635133
 Entered Date: 11/13/2012
 Program Identifier: CUPA-637 BEVINS ST., LAKEPORT
 Record ID: PR0000139
 Billing Status: 02 - INACTIVE, NON-BILLABLE
 Total Fee Amount: 391
 Current Inspection Date: 09/10/2016
 Contact Name: Tim Compton
 Mailing Address: Lakeport, CA 95453
 APN: Not Reported
 Program/Element Code: 2002

Name: D & S MUFFLER & AUTOMOTIVE REPAIR
 Address: 637 BEVINS ST
 City,State,Zip: LAKEPORT, CA 95453
 Facility: FA0000053
 Business Type: 1 - CUPA
 Program Element: 2800 - CUPA Hazardous Waste Generator Program
 Mailing Address: 637 Bevins Street
 Mailing Telephone: 7072635133
 Entered Date: 11/13/2012
 Program Identifier: CUPA
 Record ID: PR0000140
 Billing Status: 02 - INACTIVE, NON-BILLABLE
 Total Fee Amount: 0
 Current Inspection Date: 09/10/2016
 Contact Name: Tim Compton
 Mailing Address: Lakeport, CA 95453
 APN: Not Reported
 Program/Element Code: 2800

HWTS: Other Ascertainable Records

MAP FINDINGS

D & S MUFFLER & AUTOMOTIVE REPAIR, 637 BEVINS ST, LAKEPORT, CA 954538731 (Continued)

Name: D & S MUFFLER & AUTOMOTIVE REPAIR
 Address: 637 BEVINS ST
 Address 2: Not Reported
 City,State,Zip: LAKEPORT, CA 954538731
 EPA ID: CAL000325062
 Inactive Date: 06/30/2014
 Create Date: 09/20/2007
 Last Act Date: 11/14/2014
 Mailing Name: Not Reported
 Mailing Address: PO BOX 654
 Mailing Address 2: Not Reported
 Mailing City,State,Zip: LAKEPORT, CA 954530000
 Owner Name: TIM COMPTON
 Owner Address: 637 BEVINS ST
 Owner Address 2: Not Reported
 Owner City,State,Zip: LAKEPORT, CA 954538731
 Contact Name: TIM COMPTON
 Contact Address: 637 BEVINS ST
 Contact Address 2: Not Reported
 City,State,Zip: LAKEPORT, CA 954538731

NAICS:

EPA ID: CAL000325062
 Create Date: 2007-09-20 14:07:32.347
 NAICS Code: 99999
 NAICS Description: Not Otherwise Specified
 Issued EPA ID Date: 2007-09-20 14:07:32.31700
 Inactive Date: 2014-06-30 00:00:00
 Facility Name: D & S MUFFLER & AUTOMOTIVE REPAIR
 Facility Address: 637 BEVINS ST
 Facility Address 2: Not Reported
 Facility City: LAKEPORT
 Facility County: Not Reported
 Facility State: CA
 Facility Zip: 954538731

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl Date	Active Date
ENVIRONMENTAL RECORDS						
<i>Federal NPL site list</i>						
US	NPL	National Priority List	EPA	04/27/2021	05/03/2021	05/19/2021
US	Proposed NPL	Proposed National Priority List Sites	EPA	04/27/2021	05/03/2021	05/19/2021
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
<i>Federal CERCLIS list</i>						
US	SEMS	Superfund Enterprise Management System	EPA	04/27/2021	05/03/2021	05/19/2021
<i>Federal RCRA CORRACTS facilities list</i>						
US	CORRACTS	Corrective Action Report	EPA	03/22/2021	03/23/2021	05/19/2021
<i>Federal RCRA TSD facilities list</i>						
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
<i>Federal RCRA generators list</i>						
US	RCRA-LOG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditional	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
<i>Federal institutional controls / engineering controls registries</i>						
US	LUCIS	Land Use Control Information System	Department of the Navy	02/09/2021	02/11/2021	03/22/2021
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	02/22/2021	02/23/2021	05/19/2021
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	02/22/2021	02/23/2021	05/19/2021
<i>Federal ERNS list</i>						
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	03/22/2021	03/24/2021	06/17/2021
<i>State and tribal - equivalent NPL</i>						
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021
<i>State and tribal - equivalent CERCLIS</i>						
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021
<i>State and tribal landfill / solid waste disposal</i>						
CA	SWF/IF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	02/08/2021	02/09/2021	05/03/2021
<i>State and tribal leaking storage tank lists</i>						
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov. Date	Arvl. Date	Active Date
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/30/2020	12/22/2020	03/12/2021
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	10/01/2020	12/16/2020	03/12/2021
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	10/02/2020	12/18/2020	03/12/2021
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	10/07/2020	12/16/2020	03/12/2021
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	10/01/2020	12/16/2020	03/12/2021
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	10/09/2020	12/16/2020	03/12/2021
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	11/12/2020	12/16/2020	03/12/2021
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
State and tribal registered storage tank lists						
CA	UST	Active UST Facilities	SWRCB	03/08/2021	03/09/2021	03/31/2021
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	03/05/2021	03/09/2021	04/01/2021
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	10/02/2020	12/18/2020	03/12/2021
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	11/12/2020	12/16/2020	03/12/2021
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	10/01/2020	12/16/2020	03/12/2021
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	10/09/2020	12/16/2020	03/12/2021
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	10/01/2020	12/16/2020	03/12/2021
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/30/2020	12/22/2020	03/12/2021
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	10/07/2020	12/16/2020	03/12/2021
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/29/2021	02/17/2021	03/22/2021
State and tribal voluntary cleanup sites						
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Listing	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov_Date	Arvl_Date	Active_Date
State and tribal Brownfields sites						
CA	BROWNFIELDS	Considered Brownfields Sites Listing	State Water Resources Control Board	03/22/2021	03/23/2021	06/10/2021
Other Records						
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2020	01/13/2021	03/22/2021
US	ROD	Records Of Decision	EPA	04/27/2021	05/03/2021	05/19/2021
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	04/27/2021	05/03/2021	05/19/2021
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
CA	SWRCY	Recycler Database	Department of Conservation	03/09/2021	03/31/2021	03/31/2021
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Health	02/11/2021	02/11/2021	05/05/2021
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	10/27/2021	05/03/2021	05/19/2021
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (EPA	04/12/2016	10/26/2016	02/03/2017
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	03/22/2021	03/23/2021	06/17/2021
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	12/07/2020	12/09/2020	03/02/2021
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2019	12/01/2020	02/09/2021
US	Delisted NPL	National Priority List Deletions	EPA	04/27/2021	05/03/2021	05/19/2021
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	04/27/2021	05/03/2021	05/19/2021
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	HMIRS	Hazardous Materials Information Reporting System	Department of Transportation, Office of Pipeline	03/22/2021	03/24/2021	06/17/2021
US	DOT OPS	Incident and Accident Data	Department of Transportation, Office of Pipeline	01/02/2020	01/28/2020	04/17/2020
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	12/07/2020	12/09/2020	03/02/2021
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	03/15/2021	03/16/2021	06/10/2021
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	02/11/2021	02/17/2021	04/05/2021
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	05/27/2021	05/27/2021	06/10/2021
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	02/10/2021	02/24/2021	05/19/2021
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	PRP	Potentially Responsible Parties	EPA	12/30/2020	01/14/2021	03/05/2021
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	08/14/2020	11/04/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov. Date	Arvl. Date	Active Date
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	SSTS	Section 7 Tracking Systems	EPA	01/20/2021	01/21/2021	03/22/2021
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	PADS	PCB Activity Database System	EPA	11/19/2020	01/08/2021	03/22/2021
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	03/08/2021	03/11/2021	05/11/2021
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	FINDS	Facility Index System/Facility Registry System	EPA	02/03/2021	03/03/2021	04/05/2021
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RMP	Risk Management Plans	Environmental Protection Agency	01/22/2021	02/18/2021	05/11/2021
US	BRIS	Biennial Reporting System	EPA/NTIS	12/31/2017	06/22/2020	11/20/2020
US	PWS	Public Water System Data	EPA	12/17/2013	01/09/2014	10/15/2014
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Services, Indian	04/01/2014	08/06/2014	01/29/2015
US	ABANDONED MINES	Abandoned Mines	Department of Interior	03/23/2021	03/25/2021	06/17/2021
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2019	01/20/2021	04/08/2021
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	12/31/2020	01/20/2021	04/08/2021
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	03/22/2021	03/23/2021	06/10/2021
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	03/02/2021	03/03/2021	05/19/2021
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Lisi	South Coast Air Quality Management District	02/23/2021	02/25/2021	05/19/2021
CA	DRYCLEAN AVAQMID	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	02/26/2021	03/02/2021	05/19/2021
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	03/01/2021	03/04/2021	05/20/2021
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2018	06/16/2020	08/28/2020
CA	ENF	Enforcement Action Listing	State Water Resources Control Board	12/31/2020	01/20/2021	04/09/2021
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	04/14/2021	04/15/2021	07/06/2021
CA	Financial Assurance 2	Financial Assurance Information Listing	Department of Toxic Substances Control	02/08/2021	02/12/2021	05/05/2021
CA	HAULERS	Registered Waste Tire Haulers Listing	California Integrated Waste Management Board	11/23/2020	11/23/2020	02/08/2021
CA	HAZNET	Facility and Manifest Data	Integrated Waste Management Board	12/31/2019	04/15/2020	07/02/2020
CA	HIST CORTESE	Hazardous Waste & Substance Site List	California Environmental Protection Agency	04/01/2001	01/22/2009	04/08/2009
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	02/16/2021	02/17/2021	05/10/2021
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	04/05/2021	04/06/2021	06/23/2021
CA	ICE	ICE	Department of Toxic Substances Control	02/16/2021	02/17/2021	05/07/2021
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Quality Control Board	03/08/2021	03/09/2021	03/31/2021
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	03/01/2021	03/03/2021	05/20/2021
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	MINES	Mines Site Location Listing	Department of Conservation	03/08/2021	03/09/2021	05/20/2021
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	01/29/2021	03/03/2021	05/20/2021
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	02/08/2021	02/09/2021	05/04/2021
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	03/02/2021	03/03/2021	05/20/2021
CA	PROC	Certified Processors Database	Department of Conservation	03/09/2021	03/09/2021	03/31/2021
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	03/12/2021	03/16/2021	06/01/2021
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov. Date	Arvl. Date	Active Date
CA	SPIILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	03/08/2021	03/09/2021	03/31/2021
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	11/19/2019	01/07/2020	03/09/2020
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	11/30/2020	12/01/2020	02/12/2021
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	04/04/2021	04/06/2021	06/25/2021
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2018	07/02/2020	09/17/2020
US	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	02/24/2021	02/24/2021	05/14/2021
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	11/03/2020	11/17/2020	02/09/2021
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	02/17/2021	02/17/2021	03/22/2021
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	02/22/2021	03/30/2021	06/17/2021
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	01/20/2021	01/20/2021	04/08/2021
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	03/09/2021	03/09/2021	03/31/2021
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	04/08/2021	04/09/2021	04/20/2021
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	01/20/2021	01/20/2021	04/08/2021
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	03/08/2021	03/09/2021	03/30/2021
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	01/20/2021	01/20/2021	04/08/2021
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
HISTORICAL USE RECORDS						
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl Date	Active Date
COUNTY RECORDS						
CA	CS ALAMEDA	Contaminated Sites	Alameda County Environmental Health Services	01/09/2019	01/11/2019	03/05/2019
CA	UST ALAMEDA	Underground Tanks	Alameda County Environmental Health Services	03/17/2021	03/18/2021	03/25/2021
CA	CUPA AMADOR	CUPA Facility List	Amador County Environmental Health	02/02/2021	02/04/2021	04/23/2021
CA	CUPA BUTTE	CUPA Facility Listing	Public Health Department	04/21/2017	04/25/2017	08/09/2017
CA	CUPA CALVERAS	CUPA Facility Listing	Calveras County Environmental Health	06/15/2021	06/16/2021	07/02/2021
CA	CUPA COLUSA	CUPA Facility List	Health & Human Services	04/06/2020	04/23/2020	07/10/2020
CA	SL CONTRA COSTA	Site List	Contra Costa Health Services Department	01/25/2021	01/26/2021	04/16/2021
CA	CUPA DEL NORTE	CUPA Facility List	Del Norte County Environmental Health Divisio	12/17/2020	01/28/2021	04/16/2021
CA	CUPA EL DORADO	CUPA Facility List	El Dorado County Environmental Management Dep	02/09/2021	02/11/2021	05/05/2021
CA	CUPA FRESNO	CUPA Resources List	Dept. of Community Health	01/14/2021	01/15/2021	04/05/2021
CA	CUPA GLENN	CUPA Facility List	Glenn County Air Pollution Control District	01/22/2018	01/24/2018	03/14/2018
CA	CUPA HUMBOLDT	CUPA Facility List	Humboldt County Environmental Health	05/17/2021	05/18/2021	05/20/2021
CA	CUPA IMPERIAL	CUPA Facility List	San Diego Border Field Office	04/14/2021	04/15/2021	07/06/2021
CA	CUPA INYO	CUPA Facility List	Inyo County Environmental Health Services	04/02/2018	04/03/2018	06/14/2018
CA	CUPA KERN	CUPA Facility List	Kern County Public Health	10/29/2020	10/30/2020	01/15/2021
CA	UST KERN	Underground Storage Tank Sites & Tank Listing	Kern County Environment Health Services Depar	01/19/2021	01/21/2021	01/28/2021
CA	CUPA KINGS	CUPA Facility List	Kings County Department of Public Health	12/03/2020	01/26/2021	04/14/2021
CA	CUPA LAKE	CUPA Facility List	Lake County Environmental Health	02/10/2021	02/12/2021	03/11/2021
CA	CUPA LASSEN	CUPA Facility List	Lassen County Environmental Health	07/31/2020	08/21/2020	11/09/2020
CA	AOCONCERN	Key Areas of Concerns in Los Angeles County	Department of Public Works	03/30/2009	03/31/2009	06/23/2009
CA	HMS LOS ANGELES	HMS: Street Number List	La County Department of Public Works	04/08/2021	04/13/2021	06/28/2021
CA	LF LOS ANGELES	List of Solid Waste Facilities	Engineering & Construction Division	04/12/2021	04/13/2021	06/28/2021
CA	LF LOS ANGELES CITY	City of Los Angeles Landfills	Los Angeles Fire Department	01/01/2021	02/18/2021	05/10/2021
CA	LOS ANGELES AST	Active & Inactive AST Inventory	Los Angeles Fire Department	06/01/2019	06/25/2019	08/22/2019
CA	LOS ANGELES CO LF METHANE	Methane Producing Landfills	Los Angeles County Department of Public Works	02/04/2021	04/16/2021	04/21/2021
CA	LOS ANGELES HM	Active & Inactive Hazardous Materials Inventory	Los Angeles Fire Department	04/19/2021	06/17/2021	06/28/2021
CA	LOS ANGELES UST	Active & Inactive UST Inventory	Los Angeles Fire Department	06/01/2019	06/25/2019	08/22/2019
CA	SITE MIT LOS ANGELES	Site Mitigation List	Community Health Services	03/02/2021	04/16/2021	07/06/2021
CA	UST EL SEGUNDO	City of El Segundo Underground Storage Tank	City of El Segundo Fire Department	01/21/2017	04/19/2017	05/10/2017
CA	UST LONG BEACH	City of Long Beach Underground Storage Tank	City of Long Beach Fire Department	04/22/2019	04/23/2019	06/27/2019
CA	UST TORRANCE	City of Torrance Underground Storage Tank	City of Torrance Fire Department	09/11/2020	10/07/2020	12/23/2020
CA	CUPA MADERA	CUPA Facility List	Madera County Environmental Health	08/10/2020	08/12/2020	10/23/2020
CA	UST MARIN	Underground Storage Tank Sites	Public Works Department Waste Management	09/26/2018	10/04/2018	11/02/2018
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	03/24/2021	04/07/2021	06/24/2021
CA	CUPA MERCED	CUPA Facility List	Merced County Environmental Health	02/04/2021	02/09/2021	02/18/2021
CA	CUPA MONO	CUPA Facility List	Mono County Health Department	02/22/2021	03/02/2021	05/19/2021
CA	CUPA MONTEREY	CUPA Facility Listing	Monterey County Health Department	06/23/2021	06/23/2021	06/24/2021
CA	LUST NAPA	Sites With Reported Contamination	Napa County Department of Environmental Manag	01/09/2017	01/11/2017	03/02/2017
CA	UST NAPA	Closed and Operating Underground Storage Tank Sites	Napa County Department of Environmental Manag	09/05/2019	09/09/2019	10/31/2019
CA	CUPA NEVADA	CUPA Facility List	Community Development Agency	02/03/2021	02/04/2021	04/23/2021
CA	IND_SITE ORANGE	List of Industrial Site Cleanups	Health Care Agency	02/01/2021	02/04/2021	04/23/2021
CA	LUST ORANGE	List of Underground Storage Tank Cleanups	Health Care Agency	03/01/2021	05/03/2021	05/12/2021
CA	UST ORANGE	List of Underground Storage Tank Facilities	Health Care Agency	02/01/2021	02/02/2021	04/20/2021
CA	MS PLACER	Master List of Facilities	Placer County Health and Human Services	05/25/2021	05/26/2021	06/01/2021
CA	CUPA PLUMAS	CUPA Facility List	Plumas County Environmental Health	03/31/2019	04/23/2019	06/26/2019

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov. Date	Arvl. Date	Active Date
CA	LUST RIVERSIDE	Listing of Underground Tank Cleanup Sites	Department of Environmental Health	01/13/2021	01/14/2021	03/10/2021
CA	UST RIVERSIDE	Underground Storage Tank Tank List	Department of Environmental Health	01/13/2021	01/14/2021	03/10/2021
CA	CS SACRAMENTO	Toxic Site Clean-Up List	Sacramento County Environmental Management	03/30/2021	04/01/2021	06/23/2021
CA	ML SACRAMENTO	Master Hazardous Materials Facility List	Sacramento County Environmental Management	03/30/2021	04/01/2021	06/25/2021
CA	CUPA SAN BENITO	CUPA Facility List	San Benito County Environmental Health	04/28/2021	04/29/2021	05/03/2021
CA	PERMITS SAN BERNARDINO	Hazardous Material Permits	San Bernardino County Fire Department Hazardo	05/19/2021	05/19/2021	06/07/2021
CA	HMMD SAN DIEGO	Hazardous Materials Management Division Database	Hazardous Materials Management Division	03/02/2021	03/03/2021	05/21/2021
CA	LF SAN DIEGO	Solid Waste Facilities	Department of Health Services	10/01/2020	11/23/2020	02/08/2021
CA	SAN DIEGO CO LOP	Local Oversight Program Listing	Department of Environmental Health	07/14/2020	07/16/2020	09/29/2020
CA	SAN DIEGO CO SAM	Environmental Case Listing	San Diego County Department of Environmental	03/23/2010	06/15/2010	07/09/2010
CA	CUPA SAN FRANCISCO CO	CUPA Facility Listing	San Francisco County Department of Environmen	02/11/2021	02/11/2021	05/05/2021
CA	LUST SAN FRANCISCO	Local Oversight Facilities	Department Of Public Health San Francisco Cou	09/19/2008	09/19/2008	09/29/2008
CA	UST SAN FRANCISCO	Underground Storage Tank Information	Department of Public Health	02/11/2021	02/11/2021	05/05/2021
CA	UST SAN JOAQUIN	San Joaquin Co. UST	Environmental Health Department	06/22/2018	06/26/2018	07/11/2018
CA	CUPA SAN LUIS OBISPO	CUPA Facility List	San Luis Obispo County Public Health Departme	05/07/2021	05/11/2021	05/14/2021
CA	BI SAN MATEO	Business Inventory	San Mateo County Environmental Health Service	02/20/2020	02/20/2020	04/24/2020
CA	LUST SAN MATEO	Fuel Leak List	San Mateo County Environmental Health Service	03/29/2019	03/29/2019	05/29/2019
CA	CUPA SANTA BARBARA	CUPA Facility Listing	Santa Barbara County Public Health Department	09/08/2011	09/09/2011	10/07/2011
CA	CUPA SANTA CLARA	Cupa Facility List	Department of Environmental Health	02/24/2021	02/26/2021	05/19/2021
CA	HIST LUST SANTA CLARA	HIST LUST - Fuel Leak Site Activity Report	Santa Clara Valley Water District	03/29/2005	03/30/2005	04/21/2005
CA	LUST SANTA CLARA	LOP Listing	Department of Environmental Health	03/03/2014	03/05/2014	03/18/2014
CA	SAN JOSE HAZMAT	Hazardous Material Facilities	City of San Jose Fire Department	11/03/2020	11/05/2020	01/26/2021
CA	CUPA SANTA CRUZ	CUPA Facility List	Santa Cruz County Environmental Health	01/21/2017	02/22/2017	05/23/2017
CA	CUPA SHASTA	CUPA Facility List	Shasta County Department of Resource Manageme	06/15/2017	06/19/2017	08/09/2017
CA	LUST SOLANO	Leaking Underground Storage Tanks	Solano County Department of Environmental Man	06/04/2019	06/06/2019	08/13/2019
CA	UST SOLANO	Underground Storage Tanks	Solano County Department of Environmental Man	03/23/2021	03/25/2021	06/10/2021
CA	CUPA SONOMA	Cupa Facility List	County of Sonoma Fire & Emergency Services De	12/15/2020	12/16/2020	12/23/2020
CA	LUST SONOMA	Leaking Underground Storage Tank Sites	Department of Health Services	04/01/2021	04/01/2021	06/23/2021
CA	UST STANISLAUS	CUPA Facility List	Stanislaus County Department of Environmenta	02/09/2021	02/11/2021	05/05/2021
CA	UST SUTTER	Underground Storage Tanks	Sutter County Department of Health Services	03/01/2021	03/02/2021	05/19/2021
CA	CUPA TEHAMA	CUPA Facility List	Tehama County Department of Environmental Hea	01/13/2021	01/14/2021	04/06/2021
CA	CUPA TRINITY	CUPA Facility List	Department of Toxic Substances Control	04/14/2021	04/15/2021	07/06/2021
CA	CUPA TULARE	CUPA Facility List	Tulare County Environmental Health Services D	02/02/2021	02/04/2021	04/23/2021
CA	CUPA TUOLUMNE	CUPA Facility List	Divison of Environmental Health	04/23/2018	04/25/2018	06/25/2018
CA	BWT VENTURA	Business Plan, Hazardous Waste Producers, and Operating Unde	Ventura County Environmental Health Division	12/28/2020	01/29/2021	04/22/2021
CA	LF VENTURA	Inventory of Illegal Abandoned and Inactive Sites	Environmental Health Division	12/01/2011	12/01/2011	01/19/2012
CA	LUST VENTURA	Listing of Underground Tank Cleanup Sites	Environmental Health Division	05/29/2008	06/24/2008	07/31/2008
CA	MED WASTE VENTURA	Medical Waste Program List	Ventura County Resource Management Agency	03/29/2021	04/21/2021	04/23/2021
CA	UST VENTURA	Underground Tank Closed Sites List	Environmental Health Division	03/01/2021	03/09/2021	03/31/2021
CA	UST YOLO	Underground Storage Tank Comprehensive Facility Report	Yolo County Department of Health	03/26/2021	04/01/2021	06/23/2021
CA	CUPA YUBA	CUPA Facility List	Yuba County Environmental Health Department	04/21/2021	04/22/2021	05/12/2021

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St_Acronym Full Name Government Agency Gov Date Arvl Date Active Date

STREET AND ADDRESS INFORMATION

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APPENDIX H

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

ARAM B. KALOUSTIAN, P.E.
Principal

Mr. Aram Kaloustian has diversified experience in environmental, mechanical and civil engineering including indoor air quality surveys for mold and ventilation systems, asbestos and lead-based paint assessments, Phase I environmental surveys, subsurface environmental site assessments, remedial design, remediation system installation and operation, negotiations with regulatory agencies, computer modeling, research of new environmental investigative and remedial technologies, safety engineering and project management.

Mr. Kaloustian has conducted numerous assessments involving indoor air quality, asbestos and lead-based paint surveys and associated remediation projects by establishing investigative protocol, implementing efficient assessment strategies, and applying the site specific and appropriate remedial recommendations to all assessed projects. Mr. Kaloustian has also designed a variety of protocols for remedial and post-remedial monitoring services for a wide variety of project sites.

Mr. Kaloustian has conducted numerous historical and background Phase I investigations involving review of files located at various county health departments, water quality control boards, state departments of health, air quality management districts, city building departments, city departments of public works and city fire departments. These investigations also involved searches of state and federal databases for hazardous waste sites, generators, transporters and treatment/storage/disposal facilities, title searches, aerial photo reviews and visual site inspections.

Mr. Kaloustian has extensive subsurface site assessment experience involving underground storage tanks, exploratory borings and monitoring wells, implementation of monitoring and sampling programs, evaluation of monitoring and sampling data, review of historical site and site vicinity information, agency negotiations, and assessment and remediation recommendations.

Mr. Kaloustian's remedial design experience includes various vapor extraction and groundwater remediation systems for remediation of soil and groundwater impacted by hydrocarbon contamination. Mr. Kaloustian has designed and implemented vapor extraction treatment systems that have included internal combustion engines, catalytic thermal oxidizers and carbon adsorption. Groundwater treatment systems have included spray aeration tanks, carbon adsorption and air strippers.

Regulatory compliance experience includes obtaining permits for removal of underground storage tanks, drilling exploratory borings, installation of monitoring wells, and installation of vapor extraction treatment systems and groundwater treatment systems. This has required working with local county health departments, city departments of public works, city fire departments, air quality management districts, a number of publicly owned treatment works and the California Regional Water Quality Control Board.

Mr. Kaloustian has also constructed and evaluated various computer models for site assessment and remediation including models used to evaluate the vacuum influence of vapor extraction systems, the radius of influence of groundwater extraction, fate and transport analysis of contaminant's, and aquifer test data.

Mr. Kaloustian has also participated and has been the lead engineer in the research and development of new investigative and remedial techniques involving indoor air quality, horizontal drilling; and treatment of contaminated soil and sludge materials using remedial surfactants, bioremediation, soil washing, encapsulation and modified oxidation. Additional research experience includes participation in the South Coast Air Quality Survey in 1987 for research involving atmospheric chemistry.

Throughout the years, Mr. Kaloustian has also maintained certification and continuing education for Hazardous Waste Operations and Emergency Response (29CFR1910.120) and supervisory training; and has developed site specific health and safety plans for site assessment and remediation. Mr. Kaloustian has also been responsible for the development and implementation of a safety procedures manual for environmental assessment and remediation firms.

Registrations: Registered Professional Civil Engineer, State of California
Registered Professional Civil Engineer, State of Arizona
Registered Professional Civil Engineer, State of Hawaii
Registered Professional Civil Engineer, State of Texas
Registered Professional Civil Engineer, State of Utah
Registered Environmental Assessor, State of California (1994-1999)

Affiliations: American Industrial Hygiene Association – Consultant Member
National Society of Professional Engineers – Member
California Ground Water Association - Member

Education: M.S., Construction Engineering and Management, Stanford University
B.S., Engineering and Applied Science, California Institute of Technology
Indoor Air Quality Certification from the American Industrial Hygiene Association
OSHA 40-Hour Hazardous Waste Operations Training and Certification
Certified AHERA asbestos building inspector and management planner

APPENDIX D

CULTURAL RESOURCES STUDY

**Cultural Resources Study for the
Bevins Street Senior Apartments
447 Bevins Street
Lakeport, Lake County, California**

Eileen Barrow, M.A./R.P.A.
and
Lena Murphy, B.A.

February 22, 2022



**Cultural Resources Study for the
Bevins Street Senior Apartments
447 Bevins Street
Lakeport, Lake County, California**

Prepared by:

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and
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Prepared for:

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February 22, 2022

ABSTRACT

Tom Origer & Associates conducted a cultural resources study for the Bevins Street Senior Apartments at 447 Bevins Street, Lakeport, Lake County, California. The study was requested by Eliza Shevchuk and authorized by Cindy Gnos, both of Raney Planning & Management, Inc. This study was conducted to meet the requirements of the California Environmental Quality Act, the City of Lakeport, Section 106 of the National Historic Preservation Act, and the United States Department of Housing and Urban Development. The purpose of this report is to identify resources that could be eligible for inclusion on the National Register of Historic Places, as outlined in 36 CFR 800, and to identify potential historical resources other than Tribal Cultural Resources, as defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B) and discussed in the Regulatory Context section). Tribal Cultural Resources are defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B).

The proposed project is the development of 40 affordable residential housing units and related infrastructure.

This study included archival research at the Northwest Information Center, Sonoma State University, examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the Area of Potential Effects. No historic properties were identified during this study.

Synopsis

Project: Bevins Street Senior Apartments
Location: 447 Bevins Street, Lakeport, Lake County
APN: 025-431-37
Quadrangles: Lakeport 7.5' series
Study Type: Intensive
Scope: 3.1 acres
Field Hours: 1.5 person-hours
NWIC #: 21-1257
TOA #: 2022-007
Finds: No historic properties were found within the Area of Potential Effects.

Key Personnel

Eileen Barrow

Ms. Barrow provided project oversight for this project and co-authored the report. Mrs. Barrow has been with Tom Origer & Associates since 2005. She holds a Master of Arts in cultural resources management from Sonoma State University. Mrs. Barrow's experience includes work that has been completed in compliance with local ordinances, CEQA, NEPA, and Section 106 (NHPA) requirements. Her professional affiliations include the Society for American Archaeology, the Society for California Archaeology, the Cotati Historical Society, the Sonoma County Historical Society, the Western Obsidian Focus Group, and the Register of Professional Archaeologists (#989269).

Lena Murphy

Ms. Murphy conducted the field work and prepared the report for this project. Ms. Murphy holds a Bachelor of Arts in Anthropology from Sonoma State University. In addition to her experience in local archaeology, Mrs. Murphy has previous archaeological experience working on the 14th century Ballintober Castle excavation project with Castles in Communities, located in Roscommon County, Ireland. Mrs. Murphy is also associated with the Society for California Archaeology as well as the Society for American Archaeology.

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INTRODUCTION

This report describes a cultural resources study for the Bevins Street Senior Apartments at 447 Bevins Street, Lakeport, Lake County, California (Figure 1). The study was requested by Eliza Shevchuk and authorized by Cindy Gnos, both of Raney Planning & Management, Inc. The project consists of the construction of 40 affordable housing residential units and associated infrastructure. The project proponent has applied for federal funds to build affordable housing within the Area of Potential Effects (APE); therefore, this project is subject to Section 106 of the National Historic Preservation Act (Section 106) and the United States Department of Housing and Urban Development as well as the California Environmental Quality Act (CEQA) and the City of Lakeport. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2022-007S).

REGULATORY CONTEXT

Under Section 106, when a federal agency is involved in an undertaking, it must take into account the effects of the undertaking on historic properties (36CFR Part 800). Compliance with Section 106 requires that agencies make an effort to identify historic properties that might be affected by a project.

The State of California requires that cultural resources be considered during the environmental review process. This process is outlined in CEQA and accomplished by an inventory of resources within a study area and by assessing the potential that historical resources could be affected by development. The term “Historical Resources” encompasses all forms of cultural resources including prehistoric and historical archaeological sites and built environment resources (e.g., buildings, bridges, canals), that would be eligible for inclusion on the California Register of Historical Resources (California Register).



Figure 1. Project vicinity (adapted from the 1979 Ukiah 1:250,000-scale USGS map).

An additional category of resources is defined in CEQA under the term “Tribal Cultural Resources” (Public Resources Code Section 21074). They are not addressed in this report because Tribal Cultural Resources are resources that are of specific concern to California Native American tribes, and knowledge of such resources is limited to tribal people. Pursuant to CEQA, as revised in July 2015, such resources are to be identified by tribal people in direct, confidential consultation with the lead agency (PRC §21080.3.1).

The term, cultural resources, will be used in this report to describe historical resources under CEQA and cultural resources under Section 106.

Pursuant to Section 106 and the CEQA Guidelines, the goals of this study were to 1) identify cultural resources within the project’s APE; 2) provide an evaluation of the significance of identified resources; 3) determine resource vulnerability to adverse impacts that could arise from project activities; and 4) offer recommendations designed to protect cultural resource values, as warranted.

Resource Definitions

The National Register of Historic Places (National Register) defines a historic property as a district, site, building, structure, or object significant in American history, architecture, engineering, archaeology, and culture, and that may be of value to the nation as a whole or important only to the community in which it is located. The National Park Service (NPS) describes these resources as follows (NPS 1995:4-5).

Site. A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.

Building. A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.

Structure. The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

Object. The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

District. A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Significance Criteria

When a project might affect a cultural resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. For purposes of the National Register,

the importance of a resource is evaluated in terms of criteria put forth in 36CFR60 (see below). Eligibility criteria for the California Register (Title 14 CCR, §4852) are very similar and will not be presented here.

The quality of significance is present in properties that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, eligibility for both the California Register and the National Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

The OHP advocates that all resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

PROJECT SETTING

Area of Potential Effects Location and Description

The APE lies 0.6 miles from the western shore of Clear Lake, the largest natural freshwater lake wholly within the state of California and the oldest lake in North America. This part of Lake County was once volcanically active but has seen reduced activity since approximately the beginning of the Holocene Epoch.

The APE is located at 447 Bevins Street, Lakeport, Lake County, as shown on the Lakeport 7.5' USGS topographic map (Figure 2). Lakeport is one of only two incorporated cities in Lake County and is the older of the two, established in 1888. The APE consists of 3.1 acres of moderately (4-15%) sloping land. Figure 3 provides an overview of the APE, which is currently undeveloped. The architectural APE includes the subject parcel and parcels that immediately surround the APE (Figure 4).

The closest water source is Forbes Creek, approximately 345 meters southeast of the APE.

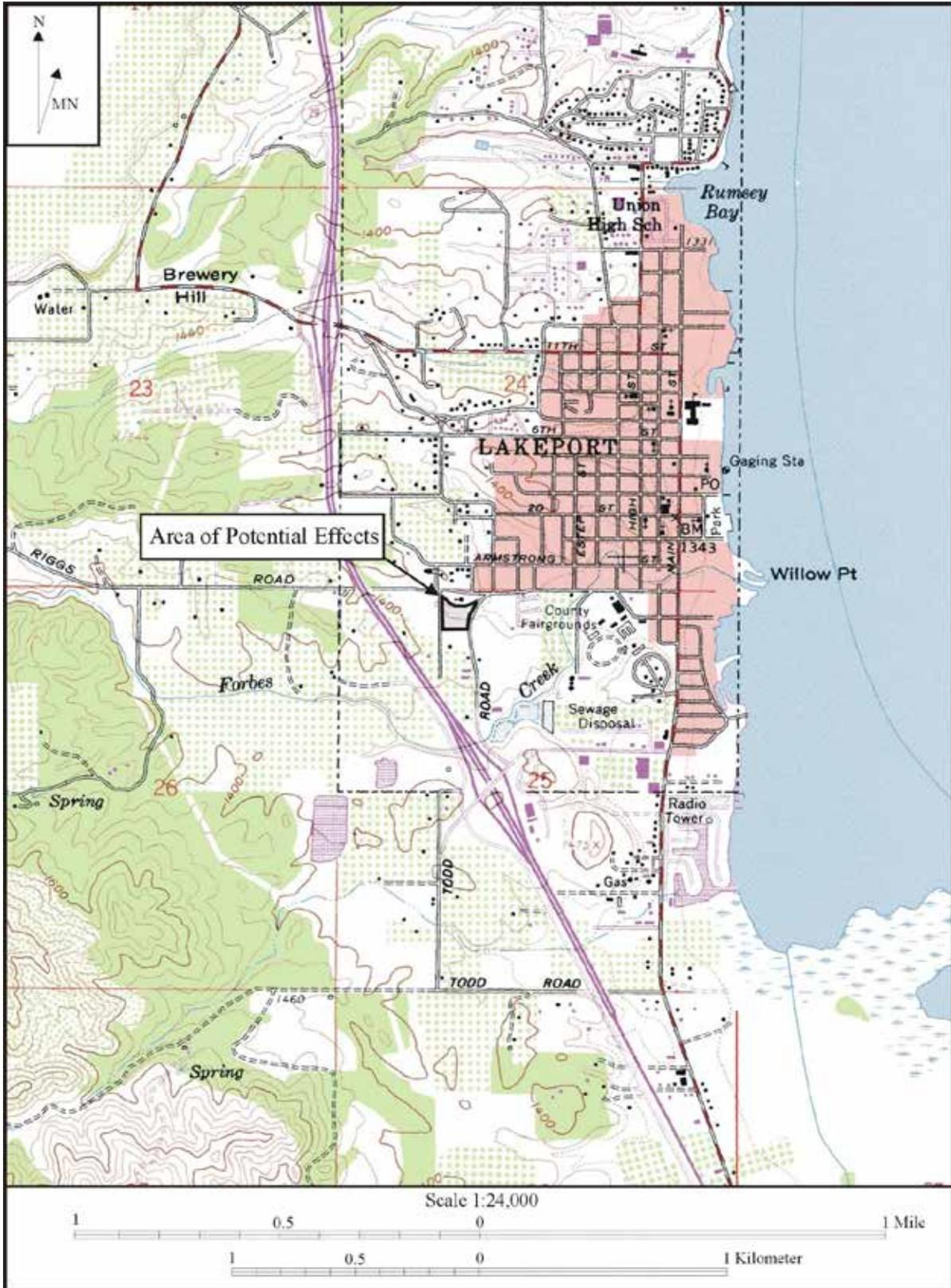


Figure 2. Area of Potential Effects location (adapted from the 1994 Lakeport 7.5' USGS topographic map).

The geology of the APE consists of serpentine deposits formed during the Jurassic to early Cretaceous Periods (~201 million to 100.5 million years ago) (McNitt 1968).

Soils within the APE belong to the Henneke-Montara-Rock Outcrop series (Smith and Broderson 1989: Sheet 15). Henneke-Montara-Rock Outcrop soils are excessively draining gravelly loams that are found on hills and mountains. In a natural state, these soils support the growth of brush, scattered conifers, and sparse annual grasses. Historically these soils have been for wildlife habitat or for watersheds (Smith and Broderson 1989:49-50).



Figure 3. Overview photo of the Area of Potential Effects, facing south.



Figure 4. Archaeological APE (outlined in red) and parcels included in architectural APE (outlined in blue).

Cultural Setting

Prehistory

Although archaeological work began as early as the 1900s in the San Francisco Bay Area (Moratto 1984:505; Nelson 1909), no archaeological work was performed in northwestern California until 1955 when Clement Meighan excavated CA-MEN-500 near Willits (Meighan 1955). Meighan, along with Richard Beardsley (1954), was the first to publish studies regarding cultural sequences in the area north of San Francisco Bay. In 1973, David Fredrickson synthesized prior work, and in combination with his own research, he developed a regional chronology that is used to this day, albeit modified for locality-specific circumstances. Fredrickson's scheme shows that native peoples have occupied the region for over 11,000 years (which is supported by Erlandson *et al.* 2007), and during that time, shifts took place in their social, political, and ideological regimes (Fredrickson 1973).

The most recent summary of data related to the identification of patterns within the temporal periods identified by Fredrickson comes from Hildebrandt (2007). Patterns represent a set of traits that were adopted by a number of separate cultures over an appreciable period of time and within an appreciable space (Bennyhoff and Fredrickson 1994:20-21). Hildebrandt analyzed data from excavations throughout the North Coastal Region of California, which extends from the Oregon border south to southern Sonoma County, and from the Pacific Ocean east to the eastern slopes of the North Coast Ranges (Hildebrandt 2007; Moratto 2004:472). Hildebrandt found that while cultural patterns in the southern North Coastal Region resembled those of the San Francisco Bay Area, those to the north followed a different trajectory represented by the Post, Borax Lake, Mendocino, and Gunther patterns. Hildebrandt (2007) summarizes artifact types and time spans for each pattern found in northern California; Table 2 provides a comparison of Hildebrandt's and Fredrickson's chronologies.

In 1960, the first study of obsidian hydration as a dating tool for archaeologists was published (Friedman and Smith 1960). This study showed that the chemical composition of the obsidian and temperature affect the hydration process. It was not until the 1980s that research into this dating method was conducted for the North Coastal Region which has four major obsidian sources. In 1987, Thomas Origer devised a hydration chronology for the North Coastal Region (Origer 1987). This chronology was developed by pairing micron readings taken from obsidian specimens and pairing them with radiocarbon-dated artifacts and features. Origer was able to develop a hydration rate for Annadel and Napa Valley obsidian sources as a result of his study. Later, Tremaine (1989, 1993) was able to develop comparison constants among the four primary obsidian sources in the North Coastal Region. The concept of comparison constants allows for the calculation of dates from hydration band measurements taken from obsidian specimens from sources with unknown hydration rates.

The development of obsidian hydration rates for the four, primary North Coastal Region obsidian sources provided archaeologists with the ability to obtain relative dates from sites that could not previously be dated due to lack of diagnostic artifacts or organic material suitable for radiocarbon dating. Origer was able to support and refine Fredrickson's chronology dating tools diagnostic of certain periods (Origer 1987).

Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire-affected stones.

Table 1. Northwestern California Chronology

Fredrickson's Temporal Periods ¹	Approximate Time Range ¹	Hildebrandt's Pattern - North ²	Approximate Time Range ²	Hildebrandt's Pattern - South ²	Approximate Time Range ²
Historical	< AD 1800				
Upper Emergent	AD 1800 to AD 1500	Gunther	AD 1800 to AD 500	Augustine	AD 1800 to AD 500
Lower Emergent	AD 1500 to AD 1000	Mendocino	AD 500 to 2500 BC		
Upper Archaic	AD 1000 to 500 BC				
Middle Archaic	500 BC to 3000 BC	Borax Lake	2500 BC to 8000 BC	Mendocino	AD 500 to BC 6500
Lower Archaic	3000 BC to 6000 BC			Berkeley	
Paleo-Indian	6000 BC and older			Borax Lake	
				Post	
			8000 BC and older	Post	8000 BC and older

¹ based on Fredrickson (1994)

² based on Hildebrandt (2007)

Ethnography

Linguists and ethnographers tracing the evolution of languages have found that most of the indigenous languages of the California region belong to one of five widespread North American language groups (the Hokan and Penutian phyla, and the Uto-Aztecan, Algic, and Athabaskan language families). The distribution and internal diversity of four of these groups suggest that their original centers of dispersal were outside, or peripheral to, the core territory of California, that is, the Central Valley, the Sierra Nevada, the Coast Range from Cape Mendocino to Point Conception, and the Southern California coast and islands. Only languages of the Hokan phylum can plausibly be traced back to populations inhabiting parts of this core region during the Archaic period, and there are hints of connections between certain branches of Hokan, such as that between Salinan and Seri, that suggest that at least some of the Hokan

languages could have been brought into California by later immigrants, primarily from the Southwest and northwestern Mexico (Golla 2011).

At the time of Euroamerican settlement, people inhabiting this area spoke Eastern Pomo, one of seven mutually unintelligible Pomoan languages belonging to the Hokan language stock. The Eastern Pomo's aboriginal territory falls within present-day Lake County. Also known as the Clear Lake Pomo (Kroeber 1925), their aboriginal territory was comprised around the main body of Clear Lake, extending north to Horse Mountain above Upper Lake, south to Cobb Mountain, west to Scott's Creek, with Mt. Konocti serving as the eastern boundary (McLendon and Oswalt 1978). However, their main villages were set back from the shores of the lake, settling near creeks and streams instead (Kroeber 1925). The Habenapo Pomo, or "rock people," was a subdivision of the Eastern Pomo that occupied the Kelseyville region near the Kelsey Creek drainage. The Eastern Pomo were entirely reliant on hunting and gathering for sustenance, temporary sites were visited to procure resources that were especially abundant or available only during certain seasons.

The Eastern Pomo population were largely spared from the rise and expansion of Spanish missions in California (McLendon and Lowy 1978). However, they suffered greatly following the introduction of Spanish and white settlers during the mid-19th century, as forced labor, land skirmishes, and disease took their toll. Ethnic identity was severely impacted in the Clear Lake region as they struggled to hold on and re-establish. It is reported that in 1912, the Southeastern and Eastern Pomo populations were reduced to approximately 431, from an estimated 3,000 just 40 years before in 1871 (McLendon and Lowy 1978) For more information about the Pomo, see Bean and Theodoratus (1978), Kniffen (1939), and Stewart (1943).

History

Euro-American people began arriving in Lake County in the 1850s to settle the valley lands first and the hills and mountains second as valley land became unavailable; due to the remoteness and ruggedness of the county, it has remained rural. Lake County's primary attraction for settlers was agriculture, however, southern Lake County is home to several mineral springs and tourism became an industry as early as the 1870s. Around this same time, mining took off as an important industry and included sulfur, quicksilver, and borax (Bishop Sanderson and Garcia Carpenter 2005; Hoberg 2007; Simoons 1954).

Lakeport was originally called Forbestown after William Forbes, who deeded 40 acres of land for the establishment of the city (Hoover *et al.* 2002:146; Menefee 1873:238). Due to Lake County's abundant natural resources pioneers started to settle around the shores of Clear Lake in the 1850s. The first place of business within the county was a dry-goods store that was opened just south of Lakeport in 1856 (Hoover *et al.* 2002:146). By 1861, the County of Lake was established, and Lakeport held the county seat (Hoover *et al.* 2002:146). The city of Lakeport started to grow as the courthouse was built and more businesses were established. By 1871, Lakeport had six stores, two saloons, two hotels, one livery stable, two blacksmith and wagon shops, one gun shop, one jeweler, three churches, Lodges of the Masonic, Odd Fellow and Good Templar societies, and one public school house, all of which was supported by a population of approximately 300 people (Menefee 1873).

The APE was once part of a larger 160-acre parcel that was owned by Lanson (also seen spelled Lance and Lansing) Trigg Musick (GLO 1872). Between 1854 and 1855, the Musick family along with Joseph Willard and his family migrated west to California, settling near present-day Upper Lake just east of Clover Creek (Carpenter and Millberry 1914; Palmer 1888). Musick began farming, hunting, trapping, and owned some livestock (Carpenter and Millberry 1914). Almost immediately after settling, Musick became very active in his community and began his political career. In 1855, he was elected Constable

of the Clearlake Township; in 1859 and 1860 he was elected to the Third District seat of the Napa County Board of Supervisors; again in 1861, he was elected as Constable of the Clearlake Township; then, in 1868 and 1869 he was elected Coroner of Lake County (Palmer 1888). Not only was he a politician, but by 1866, Musick owned and operated the very first hotel in Lakeport (Carpenter and Millberry 1914).

There are several books on the history of Lake County. For more information, see Carpenter and Millberry (1914), Klages (1991), Menefee (1873), Paleno (2016) Slocum, Bowen & Co., Publishers (1881), W. W. Elliott Lithographer and Publisher (1885).

Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

STUDY PROCEDURES AND FINDINGS

Native American Contact

A request was sent to the State of California's Native American Heritage Commission (NAHC) seeking information from the Sacred Lands File and the names of Native American individuals and groups that would be appropriate to contact regarding this project. Letters were also sent to the following groups:

Big Valley Rancheria of Pomo Indians
Elem Indian Colony Pomo Tribe
Koi Nation of Northern California
Middletown Rancheria of Pomo Indians of California
Scotts Valley Band of Pomo Indians

This contact does not constitute consultation with tribes.

Native American Contact Results

No responses have been received as of the date of this report. A log of contact efforts is appended to this report, along with copies of correspondence (see Appendix A).

Archival Research Procedures

Archival research included examination of the library and project files at Tom Origer & Associates. This research is meant to assess the potential to encounter archaeological sites and built environment within the APE. Research was also completed to determine the potential for buried archaeological deposits.

A review (NWIC File No. 21-1257) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park by Eileen Barrow on February 9, 2022. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of

Historical Interest as listed in the OHP’s *Historic Property Directory* (2012) and the *Built Environment Resources Directory* (2021).

The OHP has determined that structures in excess of 45 years of age could be important historical resources, and former building and structure locations could be important archaeological sites. Archival research included an examination of 19th and 20th-century maps and aerial photographs to gain insight into the nature and extent of historical development in the general vicinity, and especially within the APE.

Ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the “Materials Consulted” section of this report.

A model for predicting a location’s sensitivity for buried archaeological sites was formulated by Byrd *et al.* (2017) based on the age of the landform, slope, and proximity to water. A location is considered to have the highest sensitivity if the landform dates to the Holocene, has a slope of five percent or less, is within 150 meters of fresh water, and 150 meters of a confluence. Note, the Holocene Epoch is the current period of geologic time, which began about 11,700 years ago, and coincides with the emergence of human occupation of the area. A basic premise of the model is that archaeological deposits will not be buried within landforms that predate human colonization of the area. Calculating these factors using the buried site model (Byrd *et al.* 2017:Tables 11 and 12), a location’s sensitivity is scored on a scale of 1 to 10 and classed as follows: lowest (<1); low (1-3); moderate (3-5.5); high (5.5-7.5); highest (>7.5). Incorporating King’s (2004) analysis of buried site potential, the probability of encountering buried archaeological deposits for each class is as follows:

<u>Sensitivity Score</u> ¹	<u>Classification</u> ¹	<u>Probability</u> ²
<1	Lowest	<1 %
1-3	Low	1-2 %
3-5.5	Moderate	2-3%
5.5-7.5	High	3-5%
>7.5	Highest	5-20%

¹ Byrd *et al.* 2017

² King 2004

Archival Research Findings

Archival research found that the APE had been previously subjected to a cultural resources survey (Flaherty 1991). Six studies have been conducted within a quarter-mile of the APE (see Table 2). No cultural resources have been recorded within or within a quarter-mile of the APE.

Table 2. Studies within a Quarter-mile of the Area of Potential Effects

Author	Date	S#
Flaherty	2001	25901
Flaherty	2004	31293
Haney	2009	35818
Napton	2012	45005
Origer	1999	22514
Peak	2010	43934

There are two houses listed on the *Built Environment Resource Directory* within a quarter-mile of the APE. They were both determined ineligible for the National Register, but they have not been evaluated for the California Register or local listing.

The ethnographic villages of *bōo'mlí* and *kací'badōn* are reportedly within one mile of the APE (Barrett 1908:195-196). The ethnographic village of *bōo'mlí*, was located on a knoll in the town of Lakeport. Its name, meaning to hunt around, named due to the plentiful deer that roamed the mountains to the west (Barret 1908; 195-196). The ethnographic village of *kací'badōn*, was located on a knoll on the western shore of Clear Lake near the southern limits of Lakeport. Its name was derived from a water plant that looks similar to bamboo, this village was also known to have established the first trading post in the Clearlake area (Barrett 1908; 196).

A review of maps and aerial photos shows one outbuilding within the APE as early as 1958 (GLO 1868, 1876, USGS 1938, 1951, 1958). A review of aerial photos shows that the outbuilding was demolished between 1983 and 1993 (HistoricAerials.com 1983; GoogleEarth 1993). Early 20th-century maps also show the original alignment of Martin Street followed the northern boundary of the APE (USGS 1938). Review of aerial photos shows that it was decommissioned by 1958 and moved north to create a straight alignment of the road (USGS 1958).

Based on landform age, our analysis of the environmental setting, and incorporating Byrd *et al.*'s (2017) analysis of sensitivity for buried sites, there is a very low potential (<1) for buried archaeological site indicators within the APE because it lies on a landform that predates human occupation of California and is a location that is not subject to soil deposition.

Field Survey Procedures

An intensive field survey of the APE was completed by Lena Murphy on January 28, 2022. One and one-half person hours were spent in the field and field conditions were clear, warm, and sunny. Surface examination consisted of walking in 15-meter transects when possible and a hoe was used as needed to expose the ground surface. Ground visibility ranged from excellent to poor, with vegetation being the primary hindrance.

During the survey of the archaeological APE, a review of the architectural APE was also conducted.

Field Survey Findings

Archaeology

No cultural resources were found during the course of the survey.

One natural cobble of obsidian was noted within the APE. This obsidian piece was not culturally modified, nor is it thought to be transported from elsewhere as this material does occur naturally in the region.

Built Environment

The architectural APE consists of the subject parcel and five surrounding parcels. A description of the surrounding parcels that comprise the architectural APE are listed in Table 3, with numbers that correspond to their location as shown on Figure 4. Construction dates provided for each parcel were

derived from county data and examination of aerial images (GoogleEarth 1993, Historicalaerial.com 1983; UCSB 1958; USGS 1977).

Project Parcel. There are no buildings within the subject parcel. A concrete foundation was observed at the location of the outbuilding seen on aerial photos and maps. The foundation measures 32 by 25 feet and there is a 10 by 10-foot concrete pad adjacent to it.

The remains of the original alignment of Martin Street were observed along the northern boundary of the APE. This consists of a graded dirt alignment that skirts along the northern boundary of the APE.

Adjacent Parcels. Parcels adjacent to the subject property contain a mix of commercial, single-family and multi-family residential buildings dating from 1952 to 2018. Map numbers 3 and 5 are vacant lots. The buildings on the neighboring parcels, with the exception of Map number 2, are less than 50 years old and will not be described further. A brief description of the buildings on Map number 2 are provided below. Appendix B contains photos of the buildings examined during this study.

Table 3. List of Parcels Examined

Map #	Address	APN	Description	Year
A	477 Bevins Street	025-431-37	Vacant	
1	1255 Martin Street	025-431-39	Martin Street Apartments	2018
2	1125 Martin Street	025-431-04	Church and House	1952-1958; 1958-1977
3	519 Smith Street	025-461-41	Vacant	
4	525 Bevins Street	025-461-36	Lakeview Apartments	Between 1983 & 1993
5	400 Bevins Street	025-451-01	Vacant	

Map number 2 appears to contain a house, a church, an outbuilding, a small gabled structure, and a small dog kennel. The gabled structure and the dog kennel appear to be modern and will not be described further.

The house was constructed sometime between 1958 and 1977 (UCSB 1958; USGS 1977). The house is two-story building on a rectangular plan. The first story consists of a two-car garage which is partially cut into the hill upon which the house is located. The second story contains the house which has a cross-gabled roof comprised of composite shingles. The windows appear to be a combination of aluminum and vinyl horizontal sliders.

There is a small, chain-link fence dog kennel just west of the house.

The church was constructed between 1952 and 1958 (UCSB 1952, 1958). It is a one-story building on an L-shaped plan. There is a small, front-gabled addition on the front of the building. On the west side of the building the roof extends far enough to create a covered walkway. Not all of the windows were visible, but those that were are a combination of aluminum and vinyl frames, and a combination of horizontal and vertical sliders. A pyramidal spire is at the roof apex on the north end of the building. The church appears to be clad with stucco. There is a small, shed awning on the southside of the building.

Near the southwest corner of the church is a small, wood-framed, gabled outbuilding. Just east of the church is a small gabled structure. It appears to be constructed of aluminum. There are no walls and may be a shade structure.

DISCUSSION AND RECOMMENDATIONS

No archaeological site indicators were found during this study. Application of the buried sites model indicates that there is a low potential for buried sites within the APE.

The concrete foundation is the remains of a barn that was demolished on the property prior to 1993. The surrounding area once contained agricultural properties, but many of these buildings have been demolished. Since this foundation is a lone, isolated foundation with no associated agricultural features remaining, it would not meet criteria for inclusion on the National or California Registers.

Isolated segments of bypassed or abandoned roads are not considered historically important (The California Department of Transportation 2016:152).

The architectural APE contains two buildings that are more than 50 years old. They are of simple construction and do not exemplify a particular style. Archival research did not show that the buildings are associated with an important person or historic event; these buildings are unlikely to meet criteria for inclusion on the National Register or the California Register.

Archaeological Recommendations

No recommendations are warranted.

Built Environment Recommendations

No recommendations are warranted.

Accidental Discovery

If buried materials are encountered, all soil disturbing work should be halted at the location of any discovery until a qualified archaeologist completes a significance evaluation of the find(s) pursuant to Section 106 of the National Historic Preservation Act (36CFR60.4). Prehistoric archaeological site indicators expected within the general area include: chipped chert and obsidian tools and tool manufacture waste flakes; grinding and hammering implements that look like fist-size, river-tumbled stones; and for some rare sites, locally darkened soil that generally contains abundant archaeological specimens. Historical remains expected in the general area commonly include items of ceramic, glass, and metal. Features that might be present include structure remains (e.g., cabins or their foundations) and pits containing historical artifacts.

The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the NAHC. The NAHC will identify the person or persons believed to be most likely descended from the deceased Native American.

The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SUMMARY

Tom Origer & Associates completed a cultural resources study for the Bevins Street Senior Apartments at 447 Bevins Street, Lakeport, Lake County, California. The study was requested by Eliza Shevchuk and authorized by Cindy Gnos, both of Raney Planning & Management, Inc. This project is subject to Section 106, the United States Department of Housing and Urban Development, CEQA, and the City of Lakeport. No historic properties were identified within the APE and no resource-specific recommendations are warranted. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2022-007S).

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APPENDIX A

Native American Contact

Copies of Correspondence

**Native American Contact Efforts
 Bevins Street Senior Apartments
 447 Bevins Street
 Lakeport, Lake County**

Organization	Contact	Action	Results
Native American Heritage Commission		Email 1/21/22	No response received as of the date of this report.
Big Valley Rancheria of Pomo Indians	Anthony Jack	Letter 1/21/22	No response received as of the date of this report.
Elem Indian Colony Pomo Tribe	Agustin Garcia	Letter 1/21/22	No response received as of the date of this report.
Koi Nation of Northern California	Darin Beltran	Email 1/21/22	No response received as of the date of this report.
Middletown Rancheria of Pomo Indians of California	Michael Rivera Jose Simon, III	Email 1/21/22	No response received as of the date of this report.
Scotts Valley Band of Pomo Indians	Shawn Davis	Email 1/21/22	No response received as of the date of this report.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Bevins Street Senior Apartments
County: Lake

USGS Quadrangles
Name: Lakeport
Township T14N Range R10W Section(s) 25 MDBM

Date: January 21, 2022
Company/Firm/Agency: Tom Origer & Associates
Contact Person: Eileen Barrow

Address: P.O. Box 1531
City: Rohnert Park Zip: 94927
Phone: (707) 584-8200 Fax: (707) 584-8300
Email: eileen@origer.com

Project Description: The project proponent is in the planning stages of constructing a 40-unit senior housing project with related infrastructure and parking. This project will be subject to compliance with the California Environmental Quality Act as well as Section 106 of the National Historic Preservation Act.

Tom Origer & Associates

Archaeology / Historical Research

January 21, 2022

Anthony Jack
Big Valley Rancheria of Pomo Indians
2726 Mission Rancheria Road
Lakeport, CA 95453

RE: Bevins Street Senior Apartments, Lakeport, Lake County

Dear Mr. Jack:

I am writing to notify you of a proposed project within the County of Lake, for which our firm is conducting a cultural resources study. The project proponent is in the planning stages of constructing a 40-unit senior housing project with related infrastructure and parking. This project will be subject to compliance with the California Environmental Quality Act as well as Section 106 of the National Historic Preservation Act.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Lakeport, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

January 21, 2022

Agustin Garcia
Elem Indian Colony Pomo Tribe
P.O. Box 757
Lower Lake, CA 95457

RE: Bevins Street Senior Apartments, Lakeport, Lake County

Dear Mr. Garcia:

I am writing to notify you of a proposed project within the County of Lake, for which our firm is conducting a cultural resources study. The project proponent is in the planning stages of constructing a 40-unit senior housing project with related infrastructure and parking. This project will be subject to compliance with the California Environmental Quality Act as well as Section 106 of the National Historic Preservation Act.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Lakeport, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

January 21, 2022

Darin Beltran
Koi Nation of Northern California
P.O. Box 3162
Santa Rosa, CA 95402

RE: Bevins Street Senior Apartments, Lakeport, Lake County

Dear Mr. Beltran:

I am writing to notify you of a proposed project within the County of Lake, for which our firm is conducting a cultural resources study. The project proponent is in the planning stages of constructing a 40-unit senior housing project with related infrastructure and parking. This project will be subject to compliance with the California Environmental Quality Act as well as Section 106 of the National Historic Preservation Act.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Lakeport, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

January 21, 2022

Michael Rivera
Middletown Rancheria of Pomo Indians of California
P.O. Box 1035
Middletown, CA 95461

RE: Bevins Street Senior Apartments, Lakeport, Lake County

Dear Mr. Rivera:

I am writing to notify you of a proposed project within the County of Lake, for which our firm is conducting a cultural resources study. The project proponent is in the planning stages of constructing a 40-unit senior housing project with related infrastructure and parking. This project will be subject to compliance with the California Environmental Quality Act as well as Section 106 of the National Historic Preservation Act.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Lakeport, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

January 21, 2022

Jose Simon III
Middletown Rancheria of Pomo Indians of California
P.O. Box 1035
Middletown, CA 95461

RE: Bevins Street Senior Apartments, Lakeport, Lake County

Dear Mr. Simon:

I am writing to notify you of a proposed project within the County of Lake, for which our firm is conducting a cultural resources study. The project proponent is in the planning stages of constructing a 40-unit senior housing project with related infrastructure and parking. This project will be subject to compliance with the California Environmental Quality Act as well as Section 106 of the National Historic Preservation Act.

This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Lakeport, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

January 21, 2022

Shawn Davis
Scotts Valley Band of Pomo Indians
1005 Parallel Drive
Lakeport, CA 95453

RE: Bevins Street Senior Apartments, Lakeport, Lake County

Dear Mr. Davis:

I am writing to notify you of a proposed project within the County of Lake, for which our firm is conducting a cultural resources study. The project proponent is in the planning stages of constructing a 40-unit senior housing project with related infrastructure and parking. This project will be subject to compliance with the California Environmental Quality Act as well as Section 106 of the National Historic Preservation Act.

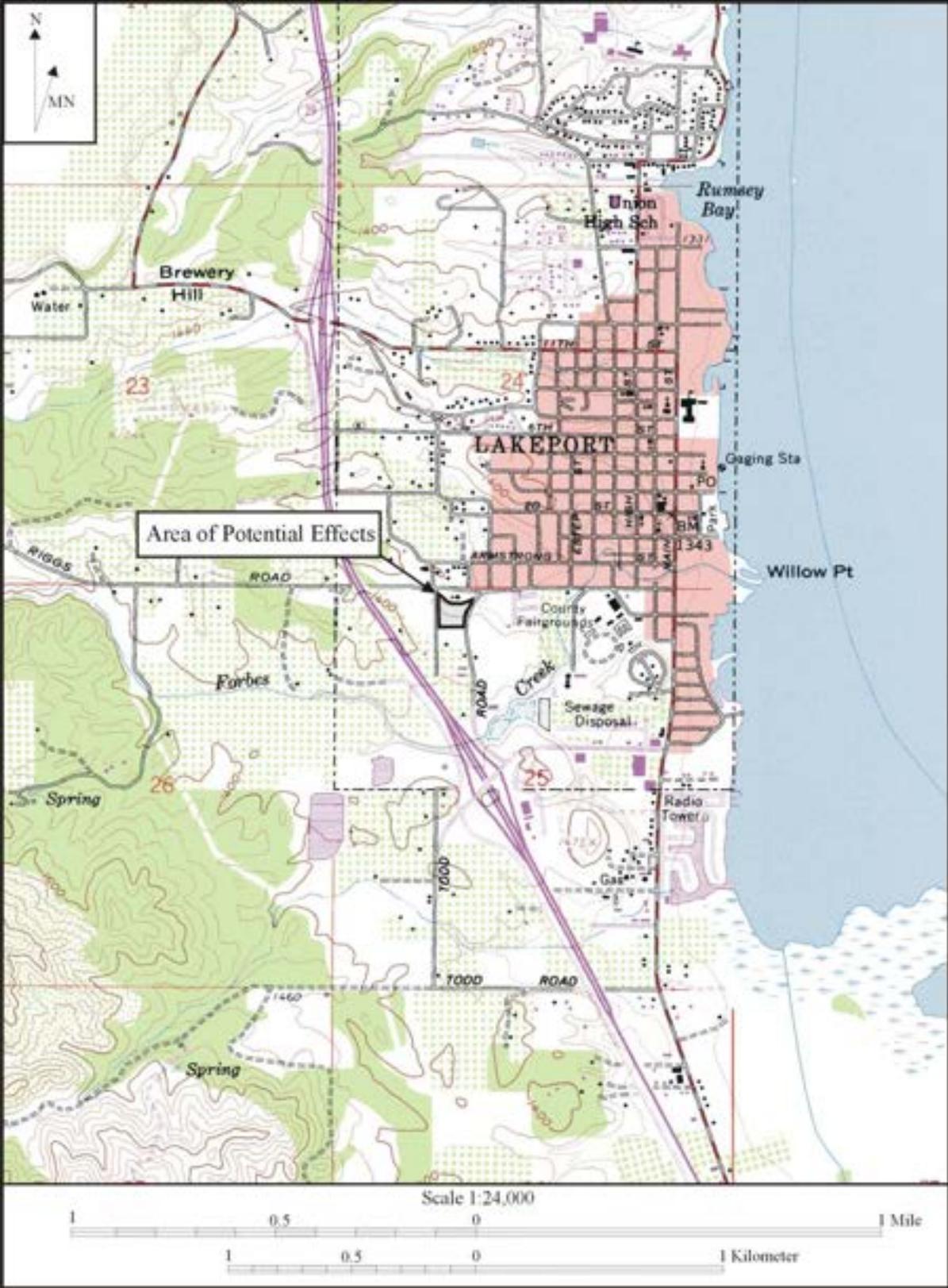
This letter serves as notification of our study and does not constitute consultation.

Enclosed is a portion of the Lakeport, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate



APPENDIX B

Photographs



Figure 1. View of church at 1125 Martin Street with small outbuilding on the left side of the photo (Map number 2)



Figure 2. View of house at 1125 Martin Street (Map number 2)

APPENDIX E

ADDITIONAL SOURCES

Appendix E Contents:

1. Airnav.com. *Lampson Field Airport*. Available at: <https://www.airnav.com/airport/102>. Accessed January 2022. (Appendix E).
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Lakeport, California, USA


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FAA INFORMATION EFFECTIVE 30 DECEMBER 2021

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Location

FAA Identifier: 102

 Lat/Long: 38-59-26.2000N 122-54-02.6000W
 38-59.436667N 122-54.043333W
 38.9906111,-122.9007222
 (estimated)

Elevation: 1380.1 ft. / 420.7 m (surveyed)

Variation: 16E (1990)

From city: 3 miles S of LAKEPORT, CA

Time zone: UTC -8 (UTC -7 during Daylight Saving Time)

Zip code: 95453



Airport Operations

Airport use: Open to the public

Activation date: 10/1941

Control tower: no

ARTCC: OAKLAND CENTER

FSS: OAKLAND FLIGHT SERVICE STATION

NOTAMs facility: OAK (NOTAM-D service available)

Attendance: UNATNDD

Pattern altitude: 2180.1 ft. MSL

Wind indicator: lighted

Segmented circle: yes

Lights: ACTVT MIRL RWY 10/28 - CTAF.

Beacon: white-green (lighted land airport)

Operates sunset to sunrise.


 Road maps at: [MapQuest](#) [Bing](#) [Google](#)

Aerial photo

WARNING: Photo may not be current or correct

Airport Communications

CTAF/UNICOM: 122.8

WX AWOS-3: 118.35 (707-262-0380)

WX ASOS at UKI (16 nm NW): 119.275 (707-462-7343)

- APCH/DEP CTL SVC PRVDD BY OAKLAND ARTCC (ZOA) ON FREQS 127.8/353.5 (UKIAH RCAG).

Nearby radio navigation aids

VOR radial/distance	VOR name	Freq	Var
ENI r086/17.8	MENDOCINO VORTAC	112.30	16E

Airport Services

Fuel available: 100LL
 Parking: tiedowns
 Airframe service: MAJOR
 Powerplant service: MAJOR
 Bottled oxygen: NONE
 Bulk oxygen: NONE

Runway Information

Runway 10/28

Dimensions: 3600 x 60 ft. / 1097 x 18 m
 Surface: asphalt, in good condition
 Weight bearing capacity: Single wheel: 30.0
 Runway edge lights: medium intensity

RUNWAY 10	RUNWAY 28
Latitude: 38-59.580570N	38-59.292057N
Longitude: 122-54.374978W	122-53.711147W
Elevation: 1380.1 ft.	1370.8 ft.
Traffic pattern: left	right
Runway heading: 103 magnetic, 119 true	283 magnetic, 299 true
Displaced threshold: no	85 ft.
Markings: basic, in good condition	basic, in good condition

Visual slope indicator:

Runway end identifier lights: no
 Touchdown point: yes, no lights
 Obstructions: 30 ft. trees, 700 ft. from runway, 290 ft. right of centerline, 16:1 slope to clear

2-light PAPI on left (4.00 degrees glide path)
 no
 yes, no lights
 15 ft. road, 236 ft. from runway, 133 ft. right of centerline, 2:1 slope to clear
 APCH RATIO TO DSPLCD THR 21:1.

Airport Ownership and Management from official FAA records

Ownership: Publicly-owned
 Owner: LAKE COUNTY
 255 N FORBES ST
 LAKEPORT, CA 95453
 Phone 707-263-2341



Photo by Nikhil Kalyankar
 Photo taken 11-Oct-2009

Do you have a better or more recent aerial photo of Lampson Field Airport that you would like to share? If so, please [send us your photo](#).

Sectional chart



Airport distance calculator

Flying to Lampson Field Airport? Find the distance to fly.

From to 102

Sunrise and sunset

Times for 07-Jan-2022

	Local (UTC-8)	Zulu (UTC)
Morning civil twilight	07:02	15:02
Sunrise	07:32	15:32
Sunset	17:04	01:04
Evening civil twilight	17:34	01:34

Current date and time

Zulu (UTC) 07-Jan-2022 21:31:12
 Local (UTC-8) 07-Jan-2022 13:31:12

METAR

KUKI 072056Z AUTO 0000KT 10SM
 16nm NW FEW021 BKN029 BKN036 13/09
 A2992 RMK AO2 RAE25 SLP128
 P0001 60001 T01330094 58008

KSTS 707-573-8393
 30nm S 072119Z 0000KT 10SM BKN010
 BKN030 13/10 A2992 RMK AO2
 T01330100

Manager: CELIA A. HOBERG
 255 N FORBES ST #309
 LAKEPORT, CA 95453
 Phone 707-263-2341
 PRINCIPAL CIVIL ENGINEER; OFFICE IN LAKEPORT, CA.

TAF

KUKI 071737Z 0718/0818 17009KT 5SM
 16nm NW -SHRA BR SCT015 BKN025 OVC030
 FM072000 29008KT P6SM SCT030
 BKN050 TEMPO 0720/0724 6SM -
 SHRA BKN030 FM080300 VRB03KT
 P6SM FEW003 SCT015 FM080600
 VRB03KT 4SM BR SCT004 BKN015
 FM081500 VRB03KT 2SM BR
 OVC004

Airport Operational Statistics

Aircraft based on the field: 31	Aircraft operations: avg 209/day *
Single engine airplanes: 22	48% transient general aviation
Gliders airplanes: 9	48% local general aviation
	3% military
	* for 12-month period ending 31 December 2017

NOTAMs

 [Click for the latest NOTAMs](#)

NOTAMs are issued by the DoD/FAA and will open in a separate window not controlled by AirNav.

Additional Remarks

- FOR CD CTC OAKLAND ARTCC AT 510-745-3380.

Instrument Procedures

NOTE: All procedures below are presented as PDF files. If you need a reader for these files, you should [download](#) the free Adobe Reader.

NOT FOR NAVIGATION. Please procure official charts for flight.

FAA instrument procedures published for use from 30 December 2021 at 0901Z to 27 January 2022 at 0900Z.

IAPs - Instrument Approach Procedures

RNAV (GPS)-A ****CHANGED**** [download](#) (361KB)

Departure Procedures

LAKEPORT THREE (RNAV) ****CHANGED**** [download](#) (137KB)

NOTE: Special Take-Off Minimums/Departure Procedures apply ****CHANGED**** [download](#) (347KB)

Other nearby airports with instrument procedures:

[O60](#) - Cloverdale Municipal Airport (14 nm S)

[KUKI](#) - Ukiah Municipal Airport (16 nm NW)

[KSTS](#) - Charles M Schulz - Sonoma County Airport (29 nm S)

[O28](#) - Willits Municipal Airport - Ells Field (35 nm NW)

[KLLR](#) - Little River Airport (43 nm NW)

Would you like to see your business listed on this page?

If your business provides an interesting product or service to pilots, flight crews, aircraft, or users of the Lampson Field Airport, you should consider listing it here. To start the listing process, click on the button below

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KSUU Travis Air Force Base

Fairfield, California, USA



GOING TO FAIRFIELD?

[Reserve a Hotel Room](#)

FAA INFORMATION EFFECTIVE 30 DECEMBER 2021

[Loc](#) | [Ops](#) | [Rwys](#) | [IFR](#) | [FBO](#) | [Links](#)
[Com](#) | [Nav](#) | [Sves](#) | [Stats](#) | [Notes](#)

Location

FAA Identifier: SUU

Lat/Long: 38-15-52.3320N 121-55-26.8733W

38-15.872200N 121-55.447888W

38.2645367,-121.9241315

(estimated)

Elevation: 63.4 ft. / 19.3 m (surveyed)

Variation: 13E (2020)

From city: 3 miles E of FAIRFIELD, CA

Time zone: UTC -8 (UTC -7 during Daylight Saving Time)

Zip code: 94535



Airport Operations

Airport use: Private use. Permission required prior to landing

Activation date: 05/1941

Control tower: yes

ARTCC: OAKLAND CENTER

FSS: RANCHO MURIETA FLIGHT SERVICE STATION

NOTAMs facility: SUU (NOTAM-D service available)

Attendance: CONTINUOUS

Segmented circle: no

Beacon: white-green (lighted land airport)

Operates sunset to sunrise.

International operations: international airport of entry

US CUSTOMS USER FEE ARPT.

Road maps at: [MapQuest](#) [Bing](#) [Google](#)

Airport Communications

TRAVIS GROUND: 121.8 289.4

TRAVIS TOWER: 120.75 254.4 239.05

TRAVIS APPROACH: 119.9 ;SOUTH 126.6 ;NORTH 281.45
;NORTH 322.325 ;SOUTH 128.4 139.9
398.2

Aerial photo

WARNING: Photo may not be current or correct

TRAVIS DEPARTURE: 119.9 281.45 ;NORTH 306.9 ;NORTH 322.325 ;SOUTH 126.6

CLEARANCE DELIVERY: 127.55 335.8

BMBER STAR: 119.9 ;SOUTH 126.6 ;NORTH 306.9 ;NORTH 322.325 ;SOUTH 124.8

COMD POST: 141.9 349.4

D-ATIS: 135.55 292.125

EMERG: 121.5 243.0

PMSV METRO: 271.1

PTD: 342.5

RADAR: 132.1X 294.7X 318.1X 339.1X 392.0X

WX ASOS at VCB (7 nm N): 134.75 (707-448-1594)

WX AWOS-AV at O88 (11 nm E): 127.075 (707-374-5396)

WX ASOS at APC (17 nm W): PHONE 707-252-7916

WX AWOS-3 at EDU (17 nm N): 119.025 (530-754-6839)

WX ASOS at CCR (18 nm S): PHONE 925-689-2077

WX AWOS-3P at DWA (19 nm N): 125.775 (530-750-2759)

- COMMUNICATIONS: SFA REMARKS: ON REQ.
- ILS/RADAR-RADAR: LIMITATION BETWEEN TACAN (SUU) 075 AND 185 RADIALS, BEGINNING 3 DME OUT TO 13 DME ALL ALTITUDES. TRAFFIC ADVISORIES AVAILABLE ON TRANSPONDER EQUIPPED AIRCRAFT ONLY.
- WX SVC AVBL 24/7 AT DSN 837-3003/5549, C707-424-3003/5549. AN/FMQ-19 AUTOMATED OBSERVING SYS IN USE; AUGMENTED BY HUMAN OBSN WHEN NEC. DUR WX FLT CLOSURE OR EVAC, REMOTE BRIEFING SVC AVBL FR 25 OP WX SQ DSN 228-6598/6599/6588, C520-228-6598/6599/6588. WHEN AUTO OBSN SYS INOP, OBST AT 350-020° AND 210-280° MAY IMPACT DERIVED PREVAILING VIS. RVR INFO NOT AVBL RWY 21R APCH.
- COMMUNICATIONS: TRAVIS AERO CLUB - 122.725 REMARKS: LCTD AT RIO VISTA MUNI O88.
- (ATIS DESCRIPTION) DSN 837-8247. DIGITAL-ATIS.
- COMD POST VHF FREQ UNSVC.
- COMM/NAV/WEATHER REMARKS: ASR-11/DASR - NO-NOTAM MP 0701-1300Z++ MON THRU FRI. ILS/RADAR-RADAR: RADAR COVERAGE LTD IN AREA BOUNDED BY SUU075/004, SUU115/013, SUU157/011, SUU185/003. TFC ADZY MAY NOT BE AVBL TO NON-TRANSPONDER EQPT ACFT.

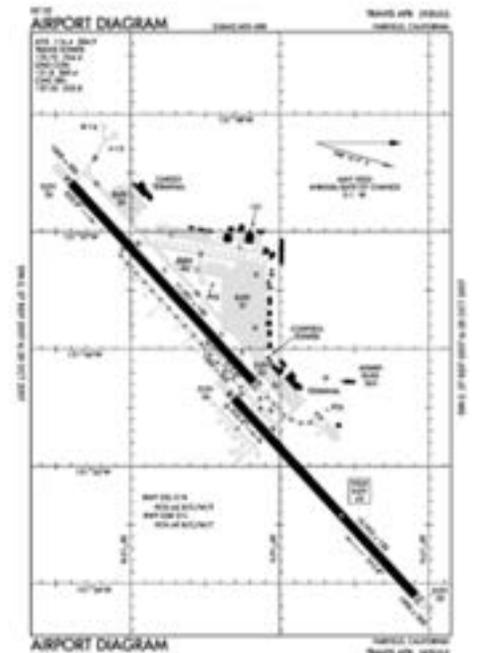


Do you have a better or more recent aerial photo of Travis Air Force Base that you would like to share? If so, please [send us your photo](#).

Sectional chart



Airport diagram



[Download PDF](#) of official airport diagram from the FAA

Nearby radio navigation aids

VOR radial/distance	VOR name	Freq	Var
CCR r006/14.4	CONCORD VOR/DME	117.00	17E
SAC r221/20.6	SACRAMENTO VORTAC	115.20	17E
SGD r059/21.8	SCAGGS ISLAND VORTAC	112.10	17E
MCC r208/34.4	MC CLELLAN VOR/DME	109.20	17E
OAK r007/35.3	OAKLAND VOR/DME	116.80	17E
SAU r032/37.5	SAUSALITO VOR/DME	116.20	17E

Airport Services

- Fuel available: A++
- Parking: hangars
- Airframe service: MAJOR
- Powerplant service: MAJOR
- Bottled oxygen: NONE
- Bulk oxygen: HIGH/LOW

Runway Information

Airport distance calculator

Runway 3R/21L

Dimensions: 10995 x 150 ft. / 3351 x 46 m
 Surface: concrete
 Weight bearing capacity: PCN 72 /R/B/W/T
 Runway edge lights: high intensity

	RUNWAY 3R	RUNWAY 21L
Latitude:	38-15.688000N	38-16.907500N
Longitude:	121-55.591000W	121-53.892000W
Elevation:	53.2 ft.	53.3 ft.
Traffic pattern:	left	left
Runway heading:	034 magnetic, 047 true	214 magnetic, 227 true
Markings:	precision, in good condition	precision, in good condition
Visual slope indicator:	4-light PAPI on left (2.50 degrees glide path)	4-light PAPI on left (2.80 degrees glide path)
RVR equipment:	touchdown, midfield, rollout	touchdown, midfield, rollout
Approach lights:		ALSF2: standard 2,400 foot high intensity approach lighting system with centerline sequenced flashers (category II or III)
Runway end identifier lights:	no	no
Centerline lights:	yes	yes
Touchdown point:	yes, no lights	yes, lighted
Instrument approach:		ILS

Runway 32/212

Dimensions: 3500 x 90 ft. / 1067 x 27 m
 Surface: concrete
 Weight bearing capacity: PCN 57 /R/B/W/T
 Runway edge lights: medium intensity

	RUNWAY 32	RUNWAY 212
Latitude:	38-16.428833N	38-16.817000N
Longitude:	121-54.413167W	121-53.872167W
Elevation:	57.4 ft.	51.6 ft.
Traffic pattern:	left	left

Runway 3L/21R

Dimensions: 11001 x 300 ft. / 3353 x 91 m
 Surface: PEM
 Weight bearing capacity: PCN 82 /R/C/W/T

Flying to Travis Air Force Base? Find the distance to fly.

From to KSUU

T CALCULATE DISTANCE

Sunrise and sunset

Times for 07-Jan-2022

	Local (UTC-8)	Zulu (UTC)
Morning civil twilight	06:57	14:57
Sunrise	07:26	15:26
Sunset	17:02	01:02
Evening civil twilight	17:32	01:32

Current date and time

Zulu (UTC) 07-Jan-2022 21:32:39
Local (UTC-8) 07-Jan-2022 13:32:39

METAR

KSUU 072058Z AUTO 18005KT 10SM OVC017 13/10 A2994 RMK AO2 CIG 016 RWY03R CIG 016 RWY21R SLP145 T01290101 58014 \$

KVCB 072102Z AUTO 22011KT 10SM 7nm N FEW011 FEW021 13/09 A2994 RMK AO2 T01280094

KCCR 072053Z 21010KT 10SM OVC021 17nm S 13/09 A2994 RMK AO2 SLP125 T01330094 58011

KEDU 072115Z AUTO 16010KT 9SM 17nm N OVC013 12/12 A2993 RMK AO1

KAPC 072057Z 20010KT 10SM BKN007 17nm W BKN036 12/11 A2994 RMK AO2 T01220106

KDWA 072115Z AUTO 17008KT 10SM 19nm N OVC017 13/11 A2994 RMK AO2

TAF

KSUU 071855Z 0719/0901 VRB06KT 9999 BKN020 OVC050 QNH2993INS TEMPO 0719/0723 -SHRA BKN015 BECMG 0802/0803 VRB06KT 8000 BR BKN015 OVC030 QNH2998INS BECMG 0811/0812 VRB06KT 3200 BR OVC008 QNH3009INS TX13/0723Z TN08/0812Z

KAPC 072004Z 0720/0818 22007KT P6SM 17nm W VCSH SCT007 BKN015 FM072200 22006KT P6SM SCT008 BKN025 FM080200 29005KT P6SM FEW010 FM080800 VRB03KT 6SM BR BKN003 FM081000 VRB03KT 1SM BR BKN003 FM081200 VRB03KT 1/2SM FG SCT003

NOTAMs

[Click for the latest NOTAMs](#)

NOTAMs are issued by the DoD/FAA and will open in a separate window not controlled by AirNav.

Runway edge lights: high intensity	RUNWAY 3L	RUNWAY 21R
Latitude: 38-14.597833N		38-15.818500N
Longitude: 121-57.418667W		121-55.719667W
Elevation: 32.7 ft.		50.4 ft.
Traffic pattern: left		left
Runway heading: 034 magnetic, 047 true		214 magnetic, 227 true
Markings: precision, in good condition		precision, in good condition
Visual slope indicator: 4-light PAPI on left (2.50 degrees glide path)		4-light PAPI on left (2.80 degrees glide path)
RVR equipment: touchdown		rollout
Runway end identifier lights: no		no
Touchdown point: yes, no lights		yes, no lights
Instrument approach: LOC/GS		LOC/GS

Airport Ownership and Management from official FAA records

Ownership: U.S. Air Force
 Owner: USAF
 TRAVIS AFB
 FAIRFIELD, CA 94535
 Manager: BASE OPERATIONS (USAF)
 TRAVIS AFB
 FAIRFIELD, CA 94535
 Phone 707-424-2836

Airport Operational Statistics

Aircraft based on the field: 3
 Military aircraft: 3

Additional Remarks

- BEARING STRENGTH RWY 03L/21R: S81 T122 ST175 SBTT590 TT332 TDT837 DDT760 TRT580.
- CAUTION: RWY EDGE LGTS FOR BOTH RWYS LCTD MORE THAN 10 FT FROM EDGE OF USABLE RWY SFC.
- CAUTION: EXTV LGT ACFT OPR. POSSIBLE RF INTFC ALL FREQS 9 NM NE OVER VOA TRANS. EXP WIND SHEAR BLW 2000 FT ON APCH TO ALL RWYS. HVY C5 JET TFC IN IMMED VCNTY. HI DENSITY VFR TFC CROS FINAL APCH AND DEP CRS.
- CAUTION: ARR ACFT EXP HVY JET ACFT CROS RWY TO PARL TWY. AVOID OVFT OF FRNG RNG LCTD 550 FT RGT OF CNTRLNE AND 1 NM PRIOR TO APCH END RWY 21R WHEN RED BCN IS ON OR RED FLAG IS DISPLAYED.
- BEARING STRENGTH RWY 03R/21L: S81 T122 ST175 SBTT590 TT332 TDT837 DDT760 TRT580.
- MISC: ALL ACFT CARRYING DV WILL NOTIFY COMD POST NO LATER THAN 24 HR PRIOR WITH ARR TIME AND RQR AT DSN 837-5517 OR C707-424-5517. ACFT WITH DV CODE 7 OR ABV AND ALL INBD PAX/CARGO ACFT MUST CTC COMD POST 30 MIN PRIOR TO LDG AND CONFIRM BLOCK TIME.
- MISC: FIRST 2175 FT RWY 03R AND FIRST 1000 FT RWY 21L CONC; 75 FT KEEL SECTION IS CONC, RMNG WIDTH IS REINFORCED ASPH, 38 FT ON EITHER SIDE OF KEEL. FIRST 1000 FT RWY 21R AND FIRST 2900 FT RWY 03L CONC, MID 7100 FT ASPH.
- RSTD: MAX PERFORMANCE CLIMBS ARE PROH FOR HI PERFORMANCE ACFT. WHEN RWY 03L-21R NOT AVBL, AIRCREW SHOULD REQ 15 MIN EARLY ENG

- START FOR RQR BACK TAXI OPR. B52 ACFT TAXI OPR LTD TO TWY G, N AND M ONLY.
- CAUTION: TAKE-OFF OBSTS RWY 3L: 122 FT MSL (58 FT AGL) PARKED KC10 TAILS 966 TO 1870 FT FROM DEP END OF RWY, 738 TO 958 FT LEFT OF CNTRLN.
 - RWY-LGTS: RWY 21L SF.
 - RSTD: ACFT LARGER THAN C17, TOW ONLY ON TWY L.
 - TFC PAT REVISE TO: RECTANGULAR 1600 FT, OVERHEAD 2100 FT.
 - CAUTION: TWY N MAY BE TMPRY CLSD WO NTC S OF 900 RAMP DUE TO C17 COMBAT OFF-LOAD/STAR TRNG.
 - CAUTION: OUTBOARD ENGINES RESTRICTED TO IDLE ON TWY A, B, D, AND M RY 03R/21L & RY 03L/21R FOR B747 AND LARGER.
 - CAUTION: NO C17 COMBAT OFFLOADS AUTHORIZED ON TWY DELTA EAST OF RWY 21L/3R.
 - MISC: BACKING OPS PROH ON SPOTS 511 THRU 515. SHOULDERS ARE NON-LOAD SFCS. RWY 21L/03R GROOVED 148 FT ENTIRE RY.
 - SERVICE-LGT: RWY 21R THLD LGTS GATED.
 - CAUTION: RWY 03L/21R AND RWY 03R/21L EDGE LGTS HAVE GAPS OF MORE THAN 400 FT ON THE APCH/DEP END OF THE RWYS.
 - RSTD: 180 DEG TURN RSTD TO END OF RWY/THLD AREAS.
 - CAUTION: BA ON RWYS 03L/21R AND 03R/21L MAY BE IMPAIRED DUE TO HVY RUBBER DEPOSITS. RWY 03L/21R PAVEMENT SFC DEGRADED, AIRCREWS SHOULD EXER CTN WHEN STANDING WATER IS PRESENT, EXP RDCD BRKG PER AND/OR POSS HYDROPLANING.
 - CSTMS/AG/IMG - DUE TO LTD. CSTMS, PN/COORD RQR FOR ARR OUTSIDE NML WKD HR. FOR NGT, SAT, SUN AND HOL ARR, 1 HR PN RQR. MSN COORD THRU TRAVIS COMD POST AT DSN 837-5517 OR C707-424-5517.
 - CAUTION: RVR UNAVBL FOR APCH END RWY 21R/DEP END RWY 3L.
 - RWY: RWY 21L/03R GROOVED 148 FT ENTIRE RWY. RWY 21R FIRST 1000 FT CONC NOT GROOVED. RWY 03L FIRST 4800 FT CONC, GROOVED ONLY BTN 8900 FT AND 5200 FT REMAINING. RWY 21R ASPH BTN 10000 FT AND 4800 FT REMAINING.
 - SERVICE LGT: PAPI INTENSITY NOT ADJUSTABLE. PAPI COINCIDENTAL WITH ILS GS RWY 03L VIS DESCENT PT FOR HGT GP 4 ACFT ONLY. RWY 21R PROVIDES PROPER TCH FOR HGT GP 4 ACFT ONLY.
 - CAUTION: RWY 3L OVERRUN 150 FT.
 - PPR DSN 837-2836/2837 C707-424-2836/2837.
 - JASU - 1(MA-1) 6(MA-1A) 1(MC-1A) 1(MC-2A) 8(A/M32A-86) 1(707 STARTING UNIT).
 - MISC: TRAVIS CRASH FIRE RESPONSE (CFR) IS ARFF CAT 6 WITH 13100 GALLONS OF CAPABILITY. THE STEADY ARFF COND FOR TRAVIS AFB IS OPTIMUM LEVEL OF SERVICE (OLS) FOR CATEGORIES 1-6.
 - MISC: DAVID GRANT MEDICAL CENTER HELIPAD LCTD 3816.12N/12158.12W, ELEV 59 FT. HELIPAD NOT VISIBLE FROM TWR. HELIPAD EQUIPPED WITH PILOT CTL LGT (VHF 120.75) LDG/DEP WILL BE AT YOUR OWN RISK.
 - RSTD: TRANS ACFT REQ IFR AND/OR VFR TRANSITION, CTC CURRENT OPS FOR SCHED/APVL DSN 837-2381/7597 NO LATER THAN 2200++ DUTY DAY PRIOR.
 - MISC: RAMP 900 RAMP B747 AND C5 ACFT ON SPOT 902 WILL OFFSET 5 FT NW OF EXISTING TAXI LINE DUE TO WINGTIP CLNC.
 - RSTD: DUE TO DEGRADED PAVEMENT AFLD MGMT HAS RSTD FTR TYPE ACFT FR UTILIZING RWY 03L/21R (LOW APCH ONLY). FTR TYPE ACFT APR TO TAXI ACROSS RWY03L/21R VIA TWY GOLF AND HOTEL.
 - RSTD: AMC SKED MSNS (EXC FOR CIV DOD CONTR, DV, AND MEDEVAC MSNS) DO NOT RQR PPR. ALL OTR TSNT ACFT RQR PPR. TSNT ACFT REQ TO CONDUCT LCL SORTIE MSN CTC AFLD MGR AT C707-424-0028. NOTE: ACFT CARRYING DV'S, EMERG AIR EVAC, AND SPL AIR MSN (SAM) RQR PPR FOR COMMAND POST NOTIFICATION AND TRKG PURPOSES.
 - MISC: CTC AFLD MGMT FOR CUR BIRD WATCH COND. BASH PHASE II IS FROM 01 OCT - 30 NOV AND 01 FEB - 30 APR. SEE AP1 FOR FURTHER INFO.
 - RSTD: ATC WILL NOT ISSUE LDG CLNC TO FTR TYPE ACFT ON RWY 03L/21R.
 - RSTD: RWY 03L/21R RSTD TO ARR AND DEP ONLY; TOUCH AND GOES UNAUTHD.
 - MISC: RWY 03L/21R MKD 150 FT WIDE, PAVEMENT 300 FT WIDE.
 - CAUTION: POTENTIAL FOR UAS OPS IN VCNTY OF TRAVIS AFB.
 - MISC: ALL AIRCREW UTILIZING GND TRNSPN ARE RQRD TO WEAR MASKS THRUT DUR OF TRNSP. AIRCREW AND PAX TRNSPN LTD TO INITIAL PICKUP, FINAL DROP-OFF, AND MSN PLANNING AT BASE OPS. ALL OTR GND TRNSPN

REQS WILL BE MET BASED ON MSN PRIORITY. FAILURE TO COMPLY MAY RESULT IN LOSS OF TRNSPN SUPPORT.

- OIL - O-128-133-148-156.
- TRAN ALERT - SVC 24 HR DLY. EXP EXTV SVC DELAY WKEND AND HOL. TRAN ACFT, EXC AMC MSN, CTC COMD POST NOT LATER THAN 15 MIN OUT FOR SVC REQ. FLEET SVC AVBL.
- REMARKS: HVY CONCENTRATION OF BLACKBIRDS, GULLS, AND OTR MIGRATORY BIRDS IN THE APCH AND DEP RTES AND ALG INFIELD AREAS FROM 1 OCT-30 NOV AND FROM 1 FEB-30 APR (PHASE II).

Instrument Procedures

NOTE: All procedures below are presented as PDF files. If you need a reader for these files, you should [download](#) the free Adobe Reader.

NOT FOR NAVIGATION. Please procure official charts for flight.

FAA instrument procedures published for use from 30 December 2021 at 0901Z to 27 January 2022 at 0900Z.

STARs - Standard Terminal Arrivals

BMBER ONE (RNAV)	2 pages: [1] [2] (341KB)
OSVEE ONE (RNAV)	download (201KB)
PEBL ONE (RNAV)	download (184KB)
SEATO FOUR	download (203KB)
SQUAW VALLEY THREE	download (254KB)
SUTHU ONE (RNAV)	download (199KB)
WEBGO ONE (RNAV)	download (232KB)

IAPs - Instrument Approach Procedures

ILS OR LOC RWY 03L	download (148KB)
ILS OR LOC RWY 21L **CHANGED**	download (146KB)
ILS RWY 21L (CAT II) **CHANGED**	download (131KB)
RNAV (GPS) RWY 03L	download (126KB)
RNAV (GPS) RWY 21L	download (142KB)
RNAV (GPS) RWY 21R	download (133KB)
TACAN RWY 03L	download (122KB)
TACAN RWY 21L	download (133KB)
TACAN RWY 21R	download (133KB)

Departure Procedures

BESSA ONE (RNAV)	download (104KB)
REJOY ONE (RNAV)	download (88KB)
NOTE: Special Take-Off Minimums/Departure Procedures apply	download (356KB)

Other nearby airports with instrument procedures:

- [KVCB](#) - Nut Tree Airport (7 nm N)
- [O88](#) - Rio Vista Municipal Airport (11 nm E)
- [KAPC](#) - Napa County Airport (17 nm W)
- [KEDU](#) - University Airport (17 nm N)
- [KCCR](#) - Buchanan Field Airport (18 nm S)
- [KDWA](#) - Yolo County Airport (19 nm N)

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Bevins Street Senior Apartments Project

Personal Communications Log

Date: January 25, 2022

Parties: AT&T Environmental Health and Safety Department Representative; Jesse Fahrney, Associate, Raney Planning & Management

I called the AT&T Environmental Health and Safety Department hotline at (800) 566-9347 regarding the Aboveground Storage Tank located at 555 Lakeport Boulevard, Lakeport CA 95453. According to the representative I spoke to, the Aboveground Storage Tank is approximately 1,500 gallons. I asked about the diked area surrounding the tank and was told that that the representative did not possess any further information regarding the Aboveground Storage Tank beyond the size of the tank.

Date: January 25, 2022

Parties: Michelle Humphrey, City of Lakeport Public Works Department; Jesse Fahrney, Associate, Raney Planning & Management

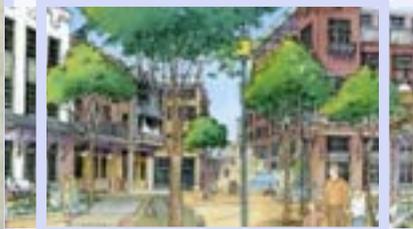
I called Michelle Humphrey at the City of Lakeport Public Works Department to obtain more information regarding the Aboveground Storage Tanks located at the City's Corporation Yard – 591 Martin Street, Lakeport CA 95453. Based on the discussion, Michelle indicated that four tanks are located on-site, and none of the tanks have a diked area surrounding them. The descriptions of the tanks are as follows:

- 1,000-gallon double barrel clear diesel tank;
- 1,000-gallon double barrel dyed diesel tank;
- 1,000-gallon double barrel gasoline tank; and
- 250-gallon double barrel used oil tank.



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

California Environmental Quality Act Air Quality Guidelines



*Note: This May 2017 version of the Guidelines includes revisions made to the Air District's 2010 Guidelines to address the California Supreme Court's 2015 opinion in *Cal. Bldg. Indus. Ass'n vs. Bay Area Air Quality Mgmt. Dist.*, 62 Cal.4th 369. **The May 2017 CEQA Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The Air District is currently working to update any outdated information in the Guidelines.** Please see the CEQA webpage at <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa> for status updates on the Air District's CEQA Guidelines or contact Jaclyn Winkel at jwinkel@baaqmd.gov for further information.*

May 2017



California Environmental Quality Act

Air Quality Guidelines

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MAY 2017



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ACRONYMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AB	Assembly Bill
AB 1807	Tanner Air Toxics Act
AB 2588	Air Toxics Hot Spots Information and Assessment Act of 1987
ABAG	Association of Bay Area Governments
AMS	American Meteorological Society
APS	Alternative Planning Strategy
AQP	Air Quality Plan
ARB	California Air Resources Board
ATCM	air toxics control measures
BAAQMD	Bay Area Quality Management District
BACT	Best Available Control Technology
BMPs	Best Management Practices
CCA	Community Choice Aggregation
CAAQS	California Ambient Air Quality Standards
CALINE4	California Line Source Dispersion Model
CAP	criteria air pollutants
CARE	Community Air Risk Evaluation
CAPCOA	California Air Pollution Control Officers Association
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CalRecycle	The California Department of Resources Recycling and Recovery (formally the California Integrated Waste Management Board)
CFC	Chlorofluorocarbon
CH ₄	methane
CHAPIS	Community Health Air Pollution Information System
CO	carbon monoxide
CO Protocol	Carbon Monoxide Protocol
CO ₂	Carbon dioxide
CO _{2e}	carbon dioxide equivalent
CRA	California Resources Agency



DOE	Department of Energy
du	dwelling units
EIR	Environmental Impact Report
EMFAC	On-Road Mobile-Source Emission Factors
EPA	U.S. Environmental Protection Agency
FAR	Floor Area Ratio
FCAA	Federal Clean Air Act
FCAAA	Federal Clean Air Act Amendments of 1990
GHG	greenhouse gas(es)
GRP	General Reporting Protocol
GVW	gross vehicle weight
GWP	global warming potential
H ₂ S	hydrogen sulfide
HEPA	High Efficiency Particulate Arresting (filter)
HI	Hazard Index
HRA	health risk assessment
HVAC	Heating, Ventilation, and Air Conditioning System
IPCC	Intergovernmental Panel on Climate Change
ISR	Indirect Source Review
ksf	thousand square feet
kwh	Kilowatt hour
lb/acre-day	pound per disturbed acre per day
lb/day	pounds per day
lb/kwh	pounds per kilowatt hour
LCFS	Low-Carbon Fuel Standard
LVW	loaded vehicle weight
MACT	maximum available control technology
mg	million gallons
MMT	million metric tons
mph	miles per hour
MPO	Metropolitan Planning Organizations
MT	metric tons
MTC	Metropolitan Transportation Commission
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards

NESHAP	national emissions standards for hazardous air pollutants
NH ₃	mercaptan, ammonia
NOA	Naturally Occurring Asbestos
NOP	Notice of Preparation
NO _x	oxides of nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
PM	particulate matter
PM ₁₀	respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less
PM _{2.5}	fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less
ppm	parts per million
PUC	Public Utilities Commission
RoadMod	Roadway Construction Emissions Model
ROG	reactive organic gases
RTP	Regional Transportation Plan
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SP	Service Population
SSIM	Sustainable Systems Integration Model
TAC	toxic air contaminant
T-BACT	Toxic Best Available Control Technology
TBPs	Toxic Best Practices
tpy	tons per year
UC	University of California
URBEMIS	Urban Land Use Emissions Model
VMT	vehicle miles traveled
VT	vehicle trips
yd ³	cubic yards
yr	Year



1. INTRODUCTION

1.1. PURPOSE OF GUIDELINES

The purpose of the Bay Area Air Quality Management District (BAAQMD or District) California Environmental Quality Act (CEQA) Guidelines is to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the San Francisco Bay Area Air Basin (SFBAAB). The Guidelines provides BAAQMD-recommended procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements. These revised Guidelines supersede the BAAQMD's previous CEQA guidance titled *BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans* (BAAQMD 1999).

Land development plans and projects have the potential to generate harmful air pollutants that degrade air quality and increase local exposure. The Guidelines contain instructions on how to evaluate, measure, and mitigate air quality impacts generated from land development construction and operation activities. The Guidelines focus on criteria air pollutant, greenhouse gas (GHG), toxic air contaminant, and odor emissions generated from plans or projects.

The Guidelines are intended to help lead agencies navigate through the CEQA process. The Guidelines for implementation of the Thresholds are for information purposes only to assist local agencies. Recommendations in the Guidelines are advisory and should be followed by local governments at their own discretion. These Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or the Air District to any specific course of regulatory action. The Guidelines offer step-by-step procedures for a thorough environmental impact analysis of adverse air emissions due to land development in the Bay Area.

1.1.1. BAAQMD's Role in Air Quality

BAAQMD is the primary agency responsible for assuring that the National and California Ambient Air Quality Standards (NAAQS and CAAQS, respectively) are attained and maintained in the Bay Area. BAAQMD's jurisdiction includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara counties, and the southern portions of Solano and Sonoma counties, as shown in Figure 1-1. The Air District's responsibilities in improving air quality in the region include: preparing plans for attaining and maintaining air quality standards; adopting and enforcing rules and regulations; issuing permits for stationary sources of air pollutants; inspecting stationary sources and responding to citizen complaints; monitoring air quality and meteorological conditions; awarding grants to reduce mobile emissions; implementing public outreach campaigns; and assisting local governments in addressing climate change.

BAAQMD takes on various roles in the CEQA process, depending on the nature of the proposed project, including:

Lead Agency – BAAQMD acts as a Lead Agency when it has the primary authority to implement or approve a project, such as when it adopts air quality plans for the region, issues stationary source permits, or adopts rules and regulations.

Responsible Agency – BAAQMD acts as a Responsible Agency when it has limited discretionary authority over a portion of a project, but does not have the primary discretionary authority of a Lead Agency. As a Responsible Agency, BAAQMD may coordinate the environmental review process with the lead agency regarding BAAQMD's permitting process, provide comments to the Lead Agency regarding potential impacts, and recommend mitigation measures.





Source: ESRI Satellite 2009

Bay Area Air Quality Management District Jurisdictional Boundaries

Figure 1-1

Commenting Agency – BAAQMD may act as a Commenting Agency when it is not a Lead or Responsible Agency (i.e., it does not have discretionary authority over a project), but when it may have concerns about the air quality impacts of a proposed project or plan. As a Commenting Agency, BAAQMD may review environmental documents prepared for development proposals and plans in the region, such as local general plans, and provide comments to the Lead Agency regarding the adequacy of the air quality impact analysis, determination of significance, and mitigation measures proposed.

BAAQMD prepared the CEQA Guidelines to assist lead agencies in air quality analysis, as well as to promote sustainable development in the region. The CEQA Guidelines support lead agencies in analyzing air quality impacts and offers numerous mitigation measures and general plan policies to implement smart growth and transit oriented development, minimize construction emissions, and reduce population exposure to air pollution risks.

1.2. GUIDELINE COMPONENTS

The recommendations in the CEQA Guidelines should be viewed as minimum considerations for analyzing air quality impacts. Lead agencies are encouraged to tailor the air quality impact analysis to meet the needs of the local community and may conduct refined analysis that utilize more sophisticated models, more precise input data, innovative mitigation measures, and/or other features. The Guidelines contain the following sections:

Introduction – Chapter 1 provides a summary of the purpose of the Guide, and an overview of BAAQMD responsibilities.

Thresholds of Significance – Chapter 2 outlines the current thresholds or significance for determining the significance of air quality impacts.

Screening Criteria – Chapter 3 provides easy reference tables to determine if your project may have potentially significant impacts requiring a detailed analysis.

Assessing and Mitigating Impacts – Chapters 4 through 9 describe assessment methods and mitigation measures for operational-related, local community risk and hazards, local carbon monoxide (CO), odors, construction-related, and plan-level impacts.

Appendix A – Provides construction assessment tools.

Appendix B – Provides detailed air quality modeling instructions.

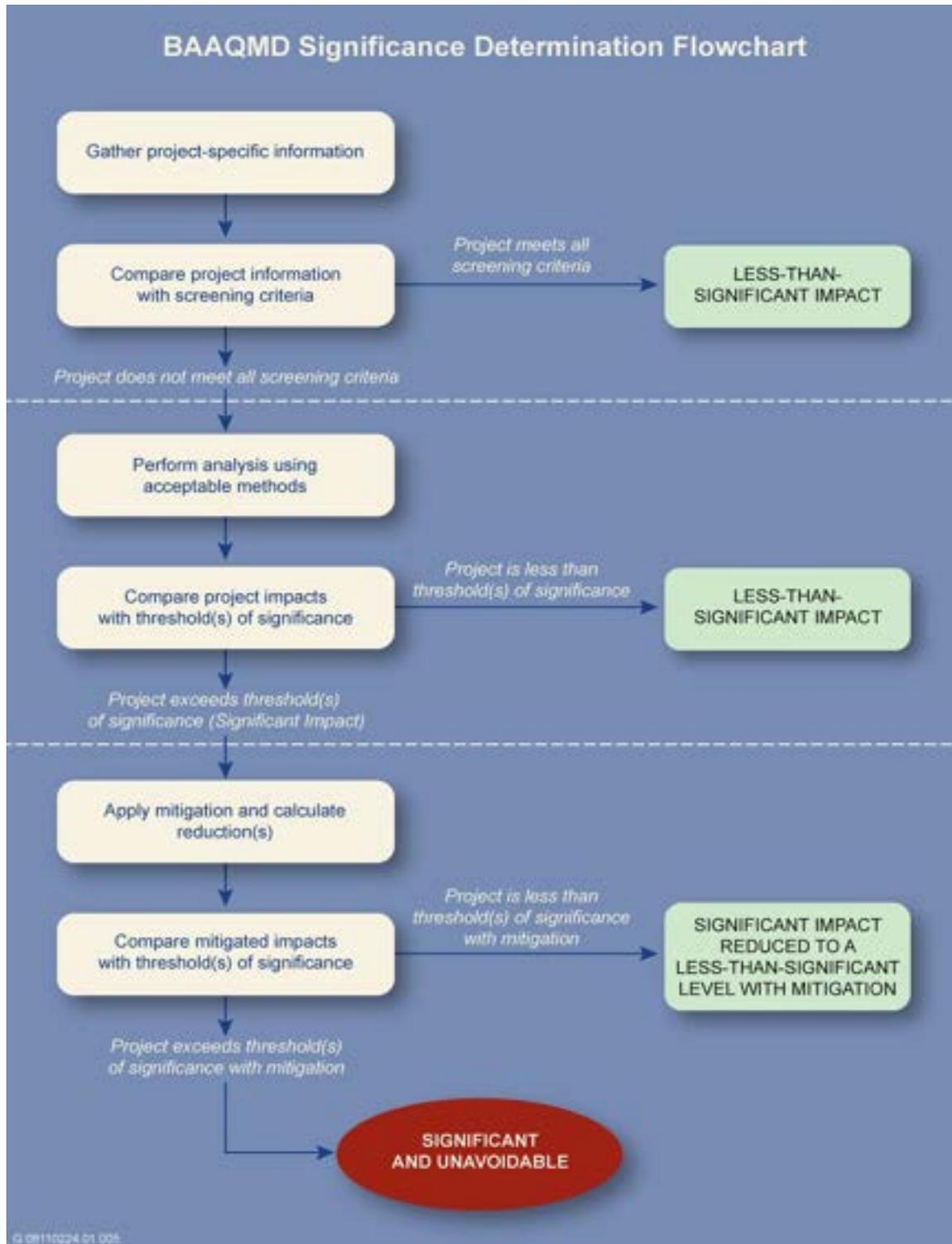
Appendix C – Outlines sample environmental setting information.

Appendix D – Contains justification statements for BAAQMD-adopted thresholds of significance.

Appendix E – Provides a glossary of terms used throughout this guide.

1.2.1. How To Use The Guidelines

Figure 2-1 illustrates general steps for evaluating a project or plan's air quality impacts. The first step is to determine whether the air quality evaluation is for a project or plan. Once identified, the project should be compared with the appropriate construction and operational screening criteria listed in Chapter 2. There are no screening criteria for plans.



General Steps for Determining Significance of Air Quality Impacts

Figure 1-2



If the project meets the screening criteria and is consistent with the methodology used to develop the screening criteria, then its air quality impacts may be considered less than significant. Otherwise, lead agencies should evaluate potential air quality impacts of projects (and plans) as explained in Chapters 4 through 9. These Chapters describe how to analyze air quality impacts from criteria air pollutants, GHGs, local community risk and hazards, and odors associated with construction activity and operations of a project or plan.

If, after proper analysis, the project or plan's air quality impacts are found to be below the significance thresholds, then the air quality impacts may be considered less than significant. If not, the Lead Agency should implement appropriate mitigation measures to reduce associated air quality impacts. Lead agencies are responsible for evaluating and implementing all feasible mitigation measures in their CEQA document.

The mitigated project or plan's impacts are then compared again to the significance thresholds. If a project succeeded in mitigating its adverse air quality impacts below the corresponding thresholds, air quality impacts may be considered less than significant. If a project still exceeds the thresholds, the Air District strongly encourages the lead agency to consider project alternatives that could lessen any identified significant impact, including a no project alternative in accordance with CEQA Guidelines section 15126.6(e).

1.2.2. Early Consultation

The District encourages local jurisdictions and project applicants to address air quality issues as early as possible in the project planning stage. Addressing land use and site design issues while a proposed project is still in the conceptual stage increases opportunities to incorporate project design features to minimize land use compatibility issues and air quality impacts. By the time a project enters the CEQA process, it is usually more costly and time-consuming to redesign the project to incorporate mitigation measures. Early consultation may be achieved by including a formal step in the jurisdiction's development review procedures or simply by discussing air quality concerns at the planning counter when a project proponent makes an initial contact regarding a proposed development. Regardless of the specific procedures a local jurisdiction employs, the objective should be to incorporate features into a project that minimize air quality impacts before significant resources (public and private) have been devoted to the project.

The following air quality considerations warrant particular attention during early consultation between Lead Agencies and project proponents:

1. land use and design measures to encourage alternatives to the automobile, conserve energy and reduce project emissions;
2. land use conflicts and exposure of sensitive receptors to odors, toxics and criteria pollutants; and,
3. applicable District rules, regulations and permit requirements.



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PART I: THRESHOLDS OF SIGNIFICANCE & PROJECT SCREENING

2. THRESHOLDS OF SIGNIFICANCE

The SFBAAB is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. SFBAAB's nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The analysis to assess project-level air quality impacts should be as comprehensive and rigorous as possible.

Similar to regulated air pollutants, GHG emissions and global climate change also represent cumulative impacts. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. Climate change impacts may include an increase in extreme heat days, higher concentrations of air pollutants, sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts.



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BAAQMD's approach to developing a *Threshold of Significance* for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. Refer to Table 2-1 for a summary of Air Quality CEQA Thresholds and to Appendix D for *Thresholds of Significance* documentation.

Table 2-1 Air Quality CEQA Thresholds of Significance*			
Pollutant	Construction-Related	Operational-Related	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs – Projects other than Stationary Sources	None	Compliance with Qualified GHG Reduction Strategy OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr (residents+employees)	
GHGs –Stationary Sources	None	10,000 MT/yr	
Risk and Hazards for new sources and receptors (Individual Project)*	Same as Operational Thresholds**	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor	
Risk and Hazards for new sources and receptors (Cumulative Threshold)*	Same as Operational Thresholds**	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM _{2.5} : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor	
Accidental Release of Acutely Hazardous Air Pollutants*	None	Storage or use of acutely hazardous materials locating near receptors or new receptors locating near stored or used acutely hazardous materials considered significant	
Odors*	None	5 confirmed complaints per year averaged over three years	



Table 2-1 Air Quality CEQA Thresholds of Significance*		
Pollutant	Construction-Related	Operational-Related
Plan-Level		
Criteria Air Pollutants and Precursors	None	1. Consistency with Current Air Quality Plan control measures, and 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
GHGs	None	Compliance with Qualified GHG Reduction Strategy OR 6.6 MT CO ₂ e/SP/yr (residents + employees)
Risks and Hazards*	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and 2. Overlay zones of at least 500 feet from all freeways and high volume roadways
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Odors*	None	Identify the location, and include policies to reduce the impacts, of existing or planned sources of odors
Regional Plans (Transportation and Air Quality Plans)		
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions
<p>CEQA = California Environmental Quality Act; CO = carbon monoxide; CO₂e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO₂ = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr = year; TBD: to be determined.</p> <p>*The receptor thresholds were the subject of litigation in <i>California Building Industry Association v. Bay Area Air Quality Management District</i> (2015) 62 Cal. 4th 369. The use of the receptor thresholds is discussed in section 2.8 of these Guidelines.</p> <p>** The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.</p>		

2.1. CRITERIA AIR POLLUTANTS AND PRECURSORS – PROJECT LEVEL

Table 2-2 presents the *Thresholds of Significance* for operational-related criteria air pollutant and precursor emissions. These represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If daily average or annual emissions of operational-

related criteria air pollutants or precursors would exceed any applicable *Threshold of Significance* listed in Table 2-2, the proposed project would result in a cumulatively significant impact.

Pollutant/Precursor	Maximum Annual Emissions (tpy)	Average Daily Emissions (lb/day)
ROG	10	54
NO _x	10	54
PM ₁₀	15	82
PM _{2.5}	10	54

Notes: tpy = tons per year; lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; tpy = tons per year.
Refer to Appendix D for support documentation.

2.2. GREENHOUSE GASES – PROJECT LEVEL

The *Thresholds of Significance* for operational-related GHG emissions are:

- For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per year (MT/yr) of CO_{2e}; or 4.6 MT CO_{2e}/SP/yr (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.
- For stationary-source projects, the threshold is 10,000 metric tons per year (MT/yr) of CO_{2e}. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate.

If annual emissions of operational-related GHGs exceed these levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change.

2.3. LOCAL COMMUNITY RISK AND HAZARD IMPACTS – PROJECT LEVEL

The *Thresholds of Significance* for local community risk and hazard impacts are identified below, which apply to the siting of a new source. Local community risk and hazard impacts are associated with TACs and PM_{2.5} because emissions of these pollutants can have significant health impacts at the local level. If emissions of TACs or fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less (PM_{2.5}) exceed any of the *Thresholds of Significance*





listed below, the proposed project would result in a significant impact.

- Non-compliance with a qualified risk reduction plan; or
- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be a cumulatively considerable contribution; or
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) annual average $\text{PM}_{2.5}$ would be a cumulatively considerable contribution.

Cumulative Impacts

A project would have a cumulative considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000 foot radius from the fence line of a source plus the contribution from the project, exceeds the following:

- Non-compliance with a qualified risk reduction plan; or
- An excess cancer risk levels of more than 100 in one million or a chronic non-cancer hazard index (from all local sources) greater than 10.0; or
- 0.8 $\mu\text{g}/\text{m}^3$ annual average $\text{PM}_{2.5}$.

A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

2.4. LOCAL CARBON MONOXIDE IMPACTS – PROJECT LEVEL

Table 2-3 presents the *Thresholds of Significance* for local CO emissions, the 1- and 8-hour California Ambient Air Quality Standards (CAAQS) of 20.0 parts per million (ppm) and 9.0 ppm, respectively. By definition, these represent levels that are protective of public health. If a project would cause local emissions of CO to exceed any of the *Thresholds of Significance* listed below, the proposed project would result in a significant impact to air quality.

Table 2-3 Thresholds of Significance for Local Carbon Monoxide Emissions	
CAAQS Averaging Time	Concentration (ppm)
1-Hour	20.0
8-Hour	9.0
Refer to Appendix D for support documentation.	

2.5. ODOR IMPACTS – PROJECT LEVEL

The *Thresholds of Significance* for odor impacts are qualitative in nature. A project that would result in the siting of a new source should consider the screening level distances and the complaint history of the odor sources:

- Projects that would site a new odor source farther than the applicable screening distance shown in Table 3-3 from an existing receptor, would not likely result in a significant odor impact.

- A type of odor source with five (5) or more confirmed complaints in the new source area per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3.

Facilities that are regulated by the CalRecycle agency (e.g. landfill, composting, etc) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency’s discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CalRecycle regulated facilities with an adopted OIMP. Refer to *Chapter 7 Assessing and Mitigating Odor Impacts* for further discussion of odor analysis.

2.6. CONSTRUCTION-RELATED IMPACTS – PROJECT LEVEL

2.6.1. Criteria Air Pollutants and Precursors

Table 2-4 presents the *Thresholds of Significance* for construction-related criteria air pollutant and precursor emissions. If daily average emissions of construction-related criteria air pollutants or precursors would exceed any applicable *Threshold of Significance* listed in Table 2-4, the project would result in a significant cumulative impact.



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Pollutant/Precursor	Daily Average Emissions (lb/day)
ROG	54
NO _x	54
PM ₁₀	82*
PM _{2.5}	54*

* Applies to construction exhaust emissions only.
 Notes: CO = carbon monoxide; lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; SO₂ = sulfur dioxide.
 Refer to Appendix D for support documentation.

2.6.2. Greenhouse Gases

The District does not have an adopted *Threshold of Significance* for construction-related GHG emissions. However, the Lead Agency should quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. The Lead Agency is encouraged to incorporate best management practices to reduce GHG emissions during construction, as feasible and applicable.

2.6.3. Local Community Risk and Hazards

The *Threshold of Significance* for construction-related local community risk and hazard impacts is the same as that for project operations. Construction-related TAC and PM impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site receptors, as applicable. The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

2.7. THRESHOLDS OF SIGNIFICANCE FOR PLAN-LEVEL IMPACTS

The *Thresholds of Significance* for plans (e.g., general plans, community plans, specific plans, regional plans, congestion management plans, etc.) within the SFBAAB are summarized in Table 2-5 and discussed separately below.

Criteria Air Pollutants and Precursors	Construction: none Operational: Consistency with Current AQP and projected VMT or vehicle trip increase is less than or equal to projected population increase.
GHGs	Construction: none Operational: 6.6 MT CO ₂ e/SP/yr (residents & employees) or a Qualified GHG Reduction Strategy. The efficiency threshold should only be applied to general plans. Other plans, e.g. specific plans, congestion management plans, etc., should use the project-level threshold of 4.6 CO ₂ e/SP/yr.
Local Community Risk and Hazards	Land use diagram identifies special overlay zones around existing and planned sources of TACs and PM _{2.5} , including special overlay zones of at least 500 feet (or Air District-approved modeled distance) on each side of all freeways and high-volume roadways, and plan identifies goals, policies, and objectives to minimize potentially adverse impacts.
Odors	Identify locations of odor sources in plan; identify goals, policies, and objectives to minimize potentially adverse impacts.
Regional Plans (transportation and air quality plans)	No net increase in emissions of GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants. Threshold only applies to regional transportation and air quality plans.
<p>* The receptor thresholds were the subject of litigation in <i>California Building Industry Association v. Bay Area Air Quality Management District</i> (2015) 62 Cal. 4th 369. The use of the receptor thresholds is discussed in section 2.8 of these Guidelines.</p> <p>Notes: AQP = Air Quality Plan; CO₂e = carbon dioxide equivalent; GHGs = greenhouse gases; MT = metric tons; SP = service population; TACs = toxic air contaminants; yr = year; PM_{2.5} = fine particulate matter Refer to Appendix D for support documentation.</p>	

2.7.1. Criteria Air Pollutants and Precursor Emissions

Proposed plans (except regional plans) must show the following over the planning period of the plan to result in a less than significant impact:

- Consistency with current air quality plan control measures.
- A proposed plan's projected VMT or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase.

2.7.2. Greenhouse Gases

The *Threshold of Significance* for operational-related GHG impacts of plans employs either a GHG efficiency-based metric (per Service Population [SP]), or a GHG Reduction Strategy option, described in Section 4.3.



The *Thresholds of Significance* options for plan level GHG emissions are:

- A GHG efficiency metric of 6.6 MT per SP per year of carbon dioxide equivalent (CO₂e). If annual maximum emissions of operational-related GHGs exceed this level, the proposed plan would result in a significant impact to global climate change.
- Consistency with an adopted GHG Reduction Strategy. If a proposed plan is consistent with an adopted GHG Reduction Strategy that meets the standards described in Section 4.3, the plan would be considered to have a less than significant impact. This approach is consistent with the plan elements described in the State CEQA Guidelines, Section 15183.5.

2.7.3. Local Community Risk and Hazards

The *Thresholds of Significance* for plans with regard to community risk and hazard impacts are:

1. The land use diagram must identify:
 - a. Special overlay zones around existing and planned sources of TACs and PM (including adopted risk reduction plan areas); and
 - b. Special overlay zones of at least 500 feet (or Air District-approved modeled distance) on each side of all freeways and high-volume roadways.
2. The plan must also identify goals, policies, and objectives to minimize potential impacts and create overlay zones around sources of TACs, PM, and hazards.

Although the Risk and Hazard Thresholds recommend evaluating the impacts of locating new development in areas subject to high levels of TACs and PM, the California Supreme Court determined in 2015 that, as a general rule, CEQA does not require this analysis. Section 2.8 below discusses the Supreme Court's decision with respect to the use of the Risk and Hazard Thresholds.

2.7.4. Odors

The *Thresholds of Significance* for plans with regard to odor impacts are to identify locations of odor sources in a plan and the plan must also identify goals, policies, and objectives to minimize potentially adverse impacts.

2.7.5. Regional Plans

The *Thresholds of Significance* for regional plans is to achieve a no net increase in emissions of criteria pollutants and precursors, GHG, and toxic air contaminants. This threshold applies only to regional transportation and air quality plans.



2.8 Receptor Thresholds

The Receptor Thresholds in these Guidelines address the analysis of exposing new receptors to existing sources of toxic air pollution and odors. These Thresholds were the subject of litigation brought by the California Building Industry Association. The California Supreme Court's decision in that litigation states that: "CEQA generally does not require an analysis of how existing environmental conditions will impact a project's future users or residents . . . Despite the statute's evident concern with protecting the environment and human health, its relevant provisions are best read to focus almost entirely on how projects affect the environment." The Supreme Court upheld "evaluating a project's potentially significant exacerbating effects on existing environmental hazards . . . Because this type of inquiry still focuses on the project's impacts on the environment—how a project might worsen existing conditions—directing an agency to evaluate how such worsened conditions could affect a project's future users or residents is entirely consistent with this focus and with CEQA as a whole."

The Supreme Court also determined that CEQA requires an analysis of exposing new receptors to existing environmental hazards "in several specific contexts involving certain airport (§ 21096) and school construction projects (§ 21151.8), and some housing development projects (§§ 21159.21, subds. (f), (h), 21159.22, subds. (a), (b)(3), 21159.23, subd. (a)(2)(A), 21159.24, subd. (a)(1), (3), 21155.1, subd. (a)(4), (6))." These provisions "constitute specific exceptions to CEQA's general rule requiring consideration only of a project's effect on the environment, not the environment's effects on project users."

The Supreme Court also indicated that nothing in CEQA prevents local agencies from considering the impact of locating new development in areas subject to existing environmental hazards. However, the Court of Appeal explained "CEQA cannot be used by a lead agency to require a developer or other agency to obtain an EIR or implement mitigation measures solely because the occupants or users of a new project would be subjected to the levels of emissions specified, an agency may do so voluntarily on its own project and may use the Receptor Thresholds for guidance." The Court of Appeal also explained that, under CEQA, the Receptor Thresholds should not be applied to "routinely assess the effect of existing environmental conditions on future users or occupants of a project." The courts did not address the extent to which agencies could rely on their police power, general plans, or other regulatory authority outside of CEQA to require mitigation to address existing environmental hazards. For more information on planning approaches to addressing the impacts of locating new development in areas subject to existing air pollution, please see "Planning Healthy Places."

<http://www.baaqmd.gov/plans-and-climate/planning-healthy-places>

Under the appropriate circumstances described above, the District recommends the following Receptor Thresholds:

Table 2-6
Receptor Thresholds

<p>Risks and Hazards (Individual Project)</p>	<p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM2.5 increase: >0.3 µg/m3 annual average <u>Zone of Influence:</u> 1,000-foot radius from property line of receptor</p>
<p>Risks and Hazards (Cumulative Threshold)</p>	<p>Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM2.5: > 0.8 µg/m3 annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from property line of receptor</p>
<p>Accidental Release of Acutely Hazardous Air Pollutants</p>	<p>New receptors locating near stored or used acutely hazardous materials considered significant</p>
<p>Odors</p>	<p>5 confirmed complaints per year averaged over three years</p>



3. SCREENING CRITERIA

The screening criteria identified in this section are **not thresholds of significance**. The Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. In addition, the screening criteria in this section do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, and/or proximate to transit service and local services, emissions would be less than the greenfield type project that these screening criteria are based on.

If a project includes emissions from stationary source engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations, the screening criteria should not be used. The project's stationary source emissions should be analyzed separately from the land use-related indirect mobile- and area-source emissions. Stationary-source emissions are not included in the screening estimates given below and, for criteria pollutants, must be added to the indirect mobile- and area-source emissions generated by the land use development and compared to the appropriate Thresholds of Significance. Greenhouse gas emissions from permitted stationary sources should not be combined with operational emissions, but compared to a separate stationary source greenhouse gas threshold.

3.1. OPERATIONAL-RELATED IMPACTS

3.1.1. Criteria Air Pollutants and Precursors

The screening criteria developed for criteria pollutants and precursors were derived using the default assumptions used by the Urban Land Use Emissions Model (URBEMIS). If the project has sources of emissions not evaluated in the URBEMIS program the screening criteria should not be used. If the project meets the screening criteria in Table 3-1, the project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* shown in Table 2-2. Operation of the proposed project would therefore result in a less-than-significant cumulative impact to air quality from criteria air pollutant and precursor emissions.

3.1.2. Greenhouse Gases

The screening criteria developed for greenhouse gases were derived using the default emission assumptions in URBEMIS and using off-model GHG estimates for indirect emissions from electrical generation, solid waste and water conveyance. If the project has other significant sources of GHG emissions not accounted for in the methodology described above, then the screening criteria should not be used. Projects below the applicable screening criteria shown in Table 3-1 would not exceed the 1,100 MT of CO₂e/yr GHG threshold of significance for projects other than permitted stationary sources.

If a project, including stationary sources, is located in a community with an adopted qualified GHG Reduction Strategy, the project may be considered less than significant if it is consistent with the GHG Reduction Strategy. A project must demonstrate its consistency by identifying and implementing all applicable feasible measures and policies from the GHG Reduction Strategy into the project.

**Table 3-1
Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes**

Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
Single-family	325 du (NOX)	56 du	114 du (ROG)
Apartment, low-rise	451 du (ROG)	78 du	240 du (ROG)
Apartment, mid-rise	494 du (ROG)	87 du	240 du (ROG)
Apartment, high-rise	510 du (ROG)	91 du	249 du (ROG)
Condo/townhouse, general	451 du (ROG)	78 du	240 du (ROG)
Condo/townhouse, high-rise	511 du (ROG)	92 du	252 du (ROG)
Mobile home park	450 du (ROG)	82 du	114 du (ROG)
Retirement community	487 du (ROG)	94 du	114 du (ROG)
Congregate care facility	657 du (ROG)	143 du	240 du (ROG)
Day-care center	53 ksf (NOX)	11 ksf	277 ksf (ROG)
Elementary school	271 ksf (NOX)	44 ksf	277 ksf (ROG)
Elementary school	2747 students (ROG)	-	3904 students (ROG)
Junior high school	285 ksf (NOX)	-	277 ksf (ROG)
Junior high school	2460 students (NOX)	46 ksf	3261 students (ROG)
High school	311 ksf (NOX)	49 ksf	277 ksf (ROG)
High school	2390 students (NOX)	-	3012 students (ROG)
Junior college (2 years)	152 ksf (NOX)	28 ksf	277 ksf (ROG)
Junior college (2 years)	2865 students (ROG)	-	3012 students (ROG)
University/college (4 years)	1760 students (NOX)	320 students	3012 students (ROG)
Library	78 ksf (NOX)	15 ksf	277 ksf (ROG)
Place of worship	439 ksf (NOX)	61 ksf	277 ksf (ROG)
City park	2613 acres (ROG)	600 acres	67 acres (PM10)
Racquet club	291 ksf (NOX)	46 ksf	277 ksf (ROG)
Racquetball/health	128 ksf (NOX)	24 ksf	277 ksf (ROG)
Quality restaurant	47 ksf (NOX)	9 ksf	277 ksf (ROG)
High turnover restaurant	33 ksf (NOX)	7 ksf	277 ksf (ROG)
Fast food rest. w/ drive thru	6 ksf (NOX)	1 ksf	277 ksf (ROG)
Fast food rest. w/o drive thru	8 ksf (NOX)	1 ksf	277 ksf (ROG)
Hotel	489 rooms (NOX)	83 rooms	554 rooms (ROG)
Motel	688 rooms (NOX)	106 rooms	554 rooms (ROG)
Free-standing discount store	76 ksf (NOX)	15 ksf	277 ksf (ROG)
Free-standing discount superstore	87 ksf (NOX)	17 ksf	277 ksf (ROG)
Discount club	102 ksf (NOX)	20 ksf	277 ksf (ROG)
Regional shopping center	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Electronic Superstore	95 ksf (NOX)	18 ksf	277 ksf (ROG)
Home improvement superstore	142 ksf (NOX)	26 ksf	277 ksf (ROG)
Strip mall	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Hardware/paint store	83 ksf (NOX)	16 ksf	277 ksf (ROG)
Supermarket	42 ksf (NOX)	8 ksf	277 ksf (ROG)
Convenience market (24 hour)	5 ksf (NOX)	1 ksf	277 ksf (ROG)
Convenience market with gas pumps	4 ksf (NOX)	1 ksf	277 ksf (ROG)
Bank (with drive-through)	17 ksf (NOX)	3 ksf	277 ksf (ROG)
General office building	346 ksf (NOX)	53 ksf	277 ksf (ROG)



**Table 3-1
Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes**

Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
Office park	323 ksf (NOX)	50 ksf	277 ksf (ROG)
Government office building	61 ksf (NOX)	12 ksf	277 ksf (ROG)
Government (civic center)	149 ksf (NOX)	27 ksf	277 ksf (ROG)
Pharmacy/drugstore w/ drive through	49 ksf (NOX)	10 ksf	277 ksf (ROG)
Pharmacy/drugstore w/o drive through	48 ksf (NOX)	10 ksf	277 ksf (ROG)
Medical office building	117 ksf (NOX)	22 ksf	277 ksf (ROG)
Hospital	226 ksf (NOX)	39 ksf	277 ksf (ROG)
Hospital	334 beds (NOX)	84 ksf	337 beds (ROG)
Warehouse	864 ksf (NOX)	64 ksf	259 ksf (NOX)
General light industry	541 ksf (NOX)	121 ksf	259 ksf (NOX)
General light industry	72 acres (NOX)	-	11 acres (NOX)
General light industry	1249 employees (NOX)	-	540 employees (NOX)
General heavy industry	1899 ksf (ROG)	-	259 ksf (NOX)
General heavy industry	281 acres (ROG)	-	11 acres (NOX)
Industrial park	553 ksf (NOX)	65 ksf	259 ksf (NOX)
Industrial park	61 acres (NOX)	-	11 acres (NOX)
Industrial park	1154 employees (NOX)	-	577 employees (NOX)
Manufacturing	992 ksf (NOX)	89 ksf	259 ksf (NOX)

Notes: du = dwelling units; ksf = thousand square feet; NO_x = oxides of nitrogen; ROG = reactive organic gases. Screening levels include indirect and area source emissions. Emissions from engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations embedded in the land uses are not included in the screening estimates and must be added to the above land uses. Refer to Appendix D for support documentation. Source: Modeled by EDAW 2009.

3.2. COMMUNITY RISK AND HAZARD IMPACTS

Please refer to Chapter 5 for discussion of screening criteria for local community risk and hazard impacts.

3.3. CARBON MONOXIDE IMPACTS

This preliminary screening methodology provides the Lead Agency with a conservative indication of whether the implementation of the proposed project would result in CO emissions that exceed the *Thresholds of Significance* shown in Table 2-3.

The proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria is met:

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.

2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

3.4. ODOR IMPACTS

Table 3-3 presents odor screening distances recommended by BAAQMD for a variety of land uses. Projects that would site a new odor source or a new receptor farther than the applicable screening distance shown in Table 3-3 from an existing receptor or odor source, respectively, would not likely result in a significant odor impact. The odor screening distances in Table 3-3 should not be used as absolute screening criteria, rather as information to consider along with the odor parameters and complaint history. Refer to *Chapter 7 Assessing and Mitigating Odor Impacts* for comprehensive guidance on significance determination.

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Metal Smelting Plants	2 miles
Refer to Appendix D for support documentation.	

Facilities that are regulated by CalRecycle (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency's discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CalRecycle regulated facilities with an adopted OIMP.



3.5. CONSTRUCTION-RELATED IMPACTS

3.5.1. Criteria Air Pollutants and Precursors

This preliminary screening provides the Lead Agency with a conservative indication of whether the proposed project would result in the generation of construction-related criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* shown in Table 2-4.

If all of the following *Screening Criteria* are met, the construction of the proposed project would result in a less-than-significant impact from criteria air pollutant and precursor emissions.

1. The project is below the applicable screening level size shown in Table 3-1; and
2. All *Basic Construction Mitigation Measures* would be included in the project design and implemented during construction; and
3. Construction-related activities would not include any of the following:
 - a. Demolition;
 - b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
 - c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
 - d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
 - e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

3.5.2. Community Risk and Hazards

Chapter 5, *Assessing and Mitigating Local Community Risk and Hazard Impacts*, contains information on screening criteria for local risk and hazards.

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PART II: ASSESSING & MITIGATING PROJECT LEVEL IMPACTS

4. OPERATIONAL-RELATED IMPACTS

Operational emissions typically represent the majority of a project's air quality impacts. After a project is built, operational emissions, including mobile and area sources, are anticipated to occur continuously throughout the project's lifetime. Operational-related activities, such as driving, use of landscape equipment, and wood burning, could generate emissions of criteria air pollutants and their precursors, GHG, TACs, and PM. Area sources generally include fuel combustion from space and water heating, landscape maintenance equipment, and fireplaces/stoves, evaporative emissions from architectural coatings and consumer products and unpermitted emissions from stationary sources. This chapter provides recommendations for assessing and mitigating operational-related impacts for individual projects. Recommendations for assessing and mitigating operational-related impacts at the plan-level are discussed in Chapter 9. Chapter 9 also contains guidance for assessing a project's consistency with applicable air quality plans.

When calculating project emissions to compare to the thresholds of significance, lead agencies should account for reductions that would result from state, regional, and local rules and regulations. The Air District also recommends for lead agencies to consider project design features, attributes, or local development requirements as part of the project as proposed and not as mitigation measures. For example, projects that are mixed-use, infill, and/or proximate to transit service and local services, or that provide neighborhood serving commercial and retail services would have substantially lower vehicle trip rates and associated criteria pollutant and GHG emissions than what would be reflected in standard, basin-wide average URBEMIS default trip rates and emission estimates. A project specific transportation study should identify the reductions that can be claimed by projects with the above described attributes. The Air District, in association with the California Air Pollution Control Officers Association (CAPCOA), is currently developing guidance for estimating reductions in standard vehicle trip rates and vehicle miles traveled (VMT) that can be claimed for these land use types that do not develop project specific transportation studies. This additional guidance will be posted to the District website in July 2010.

To estimate a project's carbon dioxide equivalent emissions from direct and indirect emission sources, BAAQMD recommends using the BAAQMD GHG Model (BGM). The Air District developed this model to calculate GHG emissions not included in URBEMIS such as indirect emissions from electricity use and waste and direct fugitive emissions of refrigerants. The BGM is discussed in more detail in Section 4.2 below.

4.1. CRITERIA AIR POLLUTANT AND PRECURSOR EMISSIONS

4.1.1. Significance Determination

Step 1: Comparison of Project Attributes with Screening Criteria

The first step in determining the significance of operational-related criteria air pollutants and precursors is to compare the attributes of the proposed project with the applicable *Screening Criteria* listed in Chapter 3. This preliminary screening provides a conservative indication of whether operation of the proposed project would result in the generation of criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* listed in Chapter 2. If all of the *Screening Criteria* are met, the operation of the proposed project would result in a less than significant impact to air quality. If the proposed project does not meet all the *Screening Criteria*, then project emissions need to be quantified.

Step 2: Emissions Quantification

If a proposed project involves the removal of existing emission sources, BAAQMD recommends subtracting the existing emissions levels from the emissions levels estimated for the new proposed land use. This net calculation is permissible only if the existing emission sources were operational at the time that the Notice of Preparation (NOP) for the CEQA project was circulated or in the absence of an NOP when environmental analysis begins, and would continue if the proposed redevelopment project is not approved. This net calculation is not permitted for emission sources that ceased to operate, or the land uses were vacated and/or demolished, prior to circulation of the NOP or the commencement of environmental analysis. This approach is consistent with the definition of baseline conditions pursuant to CEQA.



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Land Use Development Projects

For proposed land use development projects, BAAQMD recommends using the most current version of URBEMIS (which to date is version 9.2.4) to quantify operational-related criteria air pollutants and precursors. URBEMIS is a modeling tool initially developed by the California Air Resources Board for calculating air pollutant emissions from land use development projects. URBEMIS uses EMFAC emission factors and ITE trip generation rates to calculate ROG, NO_x, carbon monoxide, particulate matter, carbon dioxide, and total vehicle trips. URBEMIS is not equipped for calculating air quality impacts from stationary sources or plans. For land use projects, URBEMIS quantifies emissions from area sources (e.g., natural gas fuel combustion for space and water heating, wood stoves and fireplace combustion, landscape maintenance equipment, consumer products, and architectural coating) and operational-related emissions (mobile sources).

Appendix B contains more detailed instructions for using URBEMIS to model operational emissions.

Stationary-Source Facilities

A stationary source consists of a single emission source with an identified emission point, such as a stack at a facility. Facilities can have multiple emission point sources located on-site and sometimes the facility as a whole is referred to as a stationary source. Major stationary sources are typically associated with industrial processes, such as refineries or power plants. Minor stationary sources are typically land uses that may require air district permits, such as gasoline dispensing stations, and dry cleaning establishments. Examples of other District-permitted stationary sources include back-up diesel generators, boilers, heaters, flares, cement kilns, and other types of combustion equipment, as well as non-combustion sources such as coating or printing operations. BAAQMD is responsible for issuing permits for the construction and operation of stationary sources in order to reduce air pollution, and to attain and maintain the national and California ambient air quality standards in the SFBAAB. Newly modified or constructed stationary sources subject to Air District permitting may be required to implement Best Available Control Technology (BACT), which may include the installation of emissions control equipment or the implementation of administrative practices that would result in the lowest achievable emission rate. Stationary sources may also be required to offset their emissions of criteria air pollutants and precursors to be permitted. This may entail shutting down or augmenting another stationary source at the same facility. Facilities also may purchase an emissions reduction credit to offset their emissions. Any stationary source emissions remaining after the application of BACT and



offsets should be added to the indirect and area source emissions estimated above to arrive at total project emissions.

URBEMIS is not equipped to estimate emissions generated by stationary sources. Instead emissions from stationary sources should be estimated using manual calculation methods in consultation with BAAQMD. When stationary sources will be subject to BAAQMD regulations, the regulation emission limits should be used as emission factors. If BAAQMD emission limits are not applicable, alternative sources of emission factors include: [EPA AP-42 emission factors](#) for particular industrial processes, manufacturer specifications for specific equipment, throughput data (e.g., fuel consumption, rate of material feedstock input) and other specifications provided by the project engineer. To the extent possible, BAAQMD recommends that the methodology used to estimate stationary-source emissions be consistent with calculations that would need to be performed to fulfill requirements of the permitting process and provided in the CEQA document.

Step 3: Comparison of Unmitigated Emissions with Thresholds of Significance

Sum the estimated emissions for area, mobile, and stationary sources (if any) for each pollutant as explained above and compare the total average daily and annual emissions of each criteria pollutant and their precursors with the applicable *Thresholds of Significance* (refer to Table 2-2). If daily average or annual emissions of operational-related criteria air pollutants or precursors do not exceed any of the *Thresholds of Significance*, the project would result in a less than significant impact to air quality. If the quantified emissions of operational-related criteria air pollutants or precursors do exceed any applicable *Threshold of Significance*, the proposed project would result in a significant impact to air quality and CEQA requires implementation of all feasible mitigation measures.

Step 4: Mitigation Measures and Emission Reductions

Where operational-related emissions exceed applicable *Thresholds of Significance*, lead agencies are responsible for implementing all feasible mitigation measures to reduce the project's air quality impacts. Section 4.2 contains numerous examples of mitigation measures and associated emission reductions that may be applied to projects. The project's mitigated emission estimates from mitigation measures included in the proposed project or recommended by the lead agency should be quantified and disclosed in the CEQA document.

Step 5: Comparison of Mitigated Emissions with Thresholds of Significance

Compare the total average daily and annual amounts of mitigated criteria air pollutants and precursors with the applicable *Thresholds of Significance* (refer to Table 4-1). If the implementation of mitigation measures, including off-site mitigation, would reduce all operational-related criteria air pollutants and precursors to levels below the applicable *Thresholds of Significance*, the impact to air quality would be reduced to a less than significant level. Implementation of mitigation measures means that they are made conditions of project approval and included in a Mitigation Monitoring and Reporting Plan (MMRP). If mitigated levels of any criteria air pollutant or precursor would still exceed the applicable *Threshold of Significance*, the impact to air quality would remain significant and unavoidable.

Step	Emissions Source	Emissions (lb/day or tpy)*			
		ROG	NO _x	PM ₁₀	PM _{2.5}
2	Area Sources	A	A	A	A
	Mobile Sources	B	B	B	B
	Stationary Sources	C	C	C	C
	Total Unmitigated Emissions	A + B + C = D	A + B + C = D	A + B + C = D	A + B + C = D
	BAAQMD Threshold	54 lb/day or 10 tpy	54 lb/day or 10 tpy	82 lb/day or 15 tpy	54 lb/day or 10 tpy
3	Unmitigated Emissions Exceed BAAQMD Threshold?	Is D > Threshold? (If Yes, significant. Go to step 4. If No, less than significant)			
4	Mitigated Emissions	E	E	E	E
5	Mitigated Emissions Exceed BAAQMD Threshold?	Is E > Threshold? (If Yes, significant and unavoidable. If No, less than significant with mitigation incorporated)			

* Letters "A", "B", and "C" are used to represent numeric values that would be obtained through modeling for area and mobile sources, and by manual calculations for stationary source-emissions. "D" represents the sum of "A", "B", and "C" (i.e., unmitigated emissions). "E" represents mitigated emissions.
 Notes: lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; tpy = tons per year.
 Refer to Appendix D for support documentation.

4.2. GREENHOUSE GAS IMPACTS

4.2.1. Significance Determination

Step 1: Comparison of Project Attributes with Screening Criteria

The first step in determining the significance of operational-related GHG emissions is to compare the attributes of the proposed project with the applicable *Screening Criteria* (Refer to Chapter 3). If all of the *Screening Criteria* are met, the operation of the proposed project would result in a less than significant impact to global climate change. If the proposed project does not meet all the *Screening Criteria*, then project emissions need to be quantified.

If a project is located in a community with an adopted qualified GHG Reduction Strategy (described in section 4.3), the project may be considered less than significant if it is consistent with the GHG Reduction Strategy. A project must demonstrate its consistency by identifying and implementing all applicable feasible measures and policies from the GHG Reduction Strategy into the project.



Step 2: Emissions Quantification

For quantifying a project's GHG emissions, BAAQMD recommends that all GHG emissions from a project be estimated, including a project's direct and indirect GHG emissions from operations. Direct emissions refer to emissions produced from onsite combustion of energy, such as natural gas used in furnaces and boilers, emissions from industrial processes, and fuel combustion from mobile sources. Indirect emissions are emissions produced offsite from energy production and water conveyance due to a project's energy use and water consumption. See Table 4-2 for a list of GHG emission sources and types that should be estimated for projects.

Biogenic CO₂ emissions should not be included in the quantification of GHG emissions for a project. Biogenic CO₂ emissions result from materials that are derived from living cells, as opposed to CO₂ emissions derived from fossil fuels, limestone and other materials that have been transformed by geological processes. Biogenic CO₂ contains carbon that is present in organic materials that include, but are not limited to, wood, paper, vegetable oils, animal fat, and food, animal and yard waste.



The GHG emissions from permitted stationary sources should be calculated separately from a project's operational emissions. Permitted stationary sources are subject to a different threshold than land use developments. For example, if a proposed project anticipates having a permitted stationary source on site, such as a back-up generator, the GHG emissions from the generator should not be added to the project's total emissions. The generator's GHG emissions should be calculated separately and compared to the GHG threshold for stationary sources to determine its impact level.

If a proposed project involves the removal of existing emission sources, BAAQMD recommends subtracting the existing emissions levels from the emissions levels estimated for the new proposed land use. This net calculation is permissible only if the existing emission sources were operational at the time that the Notice of Preparation (NOP) for the CEQA project was circulated (or in the absence of an NOP when environmental analysis begins), and would continue if the proposed redevelopment project is not approved. This net calculation is not permitted for emission sources that ceased to operate, or the land uses were vacated and/or demolished, prior to circulation of the NOP or the commencement of environmental analysis. This approach is consistent with the definition of baseline conditions pursuant to CEQA.

BAAQMD Greenhouse Gas Model

BAAQMD recommends using URBEMIS to estimate direct CO₂ emissions from area and mobile sources. The same detailed guidance described for criteria air pollutants and precursors (Section 4.1 above) could be followed for quantifying GHG emissions as appropriate. URBEMIS estimates the modeled emissions output in units of short tons; the URBEMIS output may be converted to metric tons by multiplying the amount of short tons by 0.91.

To estimate a project's carbon dioxide equivalent emissions from direct and indirect emission sources, BAAQMD recommends using the BAAQMD GHG Model (BGM). The Air District developed this model to calculate GHG emissions not included in URBEMIS such as indirect emissions from electricity use and waste and direct fugitive emissions of refrigerants. The BGM

also adjusts for state regulations not included in URBEMIS, specifically California’s low carbon fuel rules and Pavley regulations.

The BGM imports project inputs and emission results from URBEMIS to quantify carbon dioxide equivalent emissions from additional direct and indirect sources not included in URBEMIS, such as water supply, waste disposal, electricity generation and refrigerants. The BGM also contains a range of GHG reduction strategies/mitigation measures that may be applied to projects. The BGM also adjusts emission totals to reflect reductions from adopted state regulations such as Pavley and the low carbon fuel standard. This model is available without cost and may be downloaded at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx>. The BGM is run using Microsoft Excel. Refer to the BGM user’s manual for detailed instructions on using the model.

Table 4-2 outlines the recommended methodologies for estimating a project’s GHG emissions.

Table 4-2 Guidance for Estimating a Project’s Operations GHG Emissions			
Emission Source	Emission Type	GHG	Methodology
Area Sources (natural gas, hearth, landscape fuel, etc.)	Direct - natural gas and fuel combustion	CO ₂ , CH ₄ , N ₂ O	URBEMIS and BGM
Transportation	Direct - fuel combustion	CO ₂ , CH ₄ , N ₂ O	URBEMIS and BGM
Electricity consumption	Indirect - electricity	CO ₂ , CH ₄ , N ₂ O	BGM
Solid waste landfill (non-biogenic emissions)*	Direct - landfill	CH ₄	BGM
Solid waste transport	Indirect - fuel combustion	CO ₂ , CH ₄ , N ₂ O	BGM
Water consumption	Indirect - electricity	CO ₂ , CH ₄ , N ₂ O	BGM
Wastewater (non-biogenic emissions)*	Indirect - electricity	CO ₂ , CH ₄ , N ₂ O	BGM
Industrial process emissions	Direct	CO ₂ , CH ₄ , N ₂ O, and refrigerants	BGM and BAAQMD permits**
Fugitive emissions	Direct	CO ₂ , CH ₄ , N ₂ O, and refrigerants	BGM

* Biogenic CO₂ emissions should not be included in the quantification of GHG emissions for a project.
 ** Industrial processes permitted by the Air District must use the methodology provided in BAAQMD rules and regulations. Other industrial process emissions, such as commercial refrigerants, should use the BGM.

CO₂ (carbon dioxide), CH₄ (methane), N₂O (nitrous oxides), and refrigerants (HFCs and PFCs).

In cases where users may need to estimate a project’s GHG emissions manually, BAAQMD recommends using ARB’s most current Local Government Operations Protocol (LGOP) as appropriate for guidance. The most current LGOP may be downloaded from ARB’s website.

Step 3: Comparison of Unmitigated Emissions with Thresholds of Significance

Sum the estimated GHG emissions from area and mobile sources and compare the total annual GHG emissions with the applicable *Threshold of Significance*. If annual emissions of operational-related GHGs do not exceed the *Threshold of Significance*, the project would result in a less than significant impact to global climate change. If annual emissions do exceed the *Threshold of Significance*, the proposed project would result in a significant impact to global climate change and will require mitigation measures for emission reductions.



Step 4: Mitigation Measures and Emission Reductions

Where operational-related emissions exceed applicable *Thresholds of Significance*, lead agencies are responsible for implementing all feasible mitigation measures to reduce the project’s GHG emissions. Section 4.2 contains recommended mitigation measures and associated emission reductions. The Air District recommends using the BGM if additional reductions are needed. The air quality analysis should quantify the reduction of emissions associated with any proposed mitigation measures and include this information in the CEQA document.

Step 5: Comparison of Mitigated Emissions with Thresholds of Significance

Compare the total annual amount of mitigated GHGs with the applicable *Threshold of Significance*, as demonstrated in Table 4-3. If the implementation of project proposed or required mitigation measures would reduce operational-related GHGs to a level below either the 1,100 MT CO₂e/yr or 4.6 MT CO₂e/SP/yr *Threshold of Significance*, the impact would be reduced to a less than significant level. If mitigated levels still exceed the applicable *Threshold of Significance*, the impact to global climate change would remain significant and unavoidable.

Step	Emissions Source	Emissions (MT CO ₂ e/yr)*
2	Area Sources	A
	Mobile Sources	B
	Indirect Sources	C
	Total Unmitigated Emissions	A + B + C = D
	BAAQMD Threshold	1,100 or 4.6 MT CO ₂ e/yr/SP
3	Unmitigated Emissions Exceed BAAQMD Threshold?	Is D > 1,100/4.6? (If Yes, significant. Go to step 4. If No, less than significant)
4	Mitigated Emissions	E
5	Mitigated Emissions Exceed BAAQMD Threshold?	Is E > 1,100/4.6? (If Yes, significant and unavoidable. If No, less than significant with mitigation incorporated)

* Letters “A”, “B”, and “C” are used to represent numeric values that would be obtained through modeling for area and mobile sources, and by manual calculations for indirect source-emissions. “D” represents the sum of “A”, “B”, and “C” (i.e., unmitigated emissions). “E” represents mitigated emissions.
Notes: CO₂e = carbon dioxide equivalent; MT = metric tons; yr = year.
Refer to Appendix D for support documentation.

4.3. GREENHOUSE GAS REDUCTION STRATEGIES

The Air District encourages local governments to adopt a qualified GHG Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG Reduction Strategy that meets the standards laid out below, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent with the State CEQA Guidelines, Section 15183.5 (see text in box below).

§15183.5. Tiering and Streamlining the Analysis of Greenhouse Gas Emissions.

(a) Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review.

Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in section 15152 (tiering), 15167 (staged EIRs) 15168 (program EIRs), 15175-15179.5 (Master EIRs), 15182 (EIRs Prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).

(b) Plans for the Reduction of Greenhouse Gas Emissions. Public agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar document. A plan to reduce greenhouse gas emissions may be used in a cumulative impacts analysis as set forth below. Pursuant to sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances.

(1) Plan Elements. A plan for the reduction of greenhouse gas emissions should:

(A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

(B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;

(C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;

(F) Be adopted in a public process following environmental review

(2) Use with Later Activities. A plan for the reduction of greenhouse gas emissions, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects. An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project. If there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project.

Standard Elements of a GHG Reduction Strategy

The Air District recommends the Plan Elements in the state CEQA Guidelines as the minimum standard to meet the GHG Reduction Strategy Thresholds of Significance option. A GHG Reduction Strategy may be one single plan, such as a general plan or climate action plan, or could be comprised of a collection of climate action policies, ordinances and programs that have been legislatively adopted by a local jurisdiction. The GHG Reduction Strategy should identify goals, policies and implementation measures that would achieve AB 32 goals for the entire community. Plans with horizon years beyond 2020 should consider continuing the downward



reduction path set by AB 32 and move toward climate stabilization goals established in Executive Order S-3-05.

To meet this threshold of significance, a GHG Reduction Strategy must include the following elements (corresponding to the State CEQA Guidelines Plan Elements):

(A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.

A GHG Reduction Strategy must include an emissions inventory that quantifies an existing baseline level of emissions and projected GHG emissions from a business-as-usual, no-plan, forecast scenario of the horizon year. The baseline year is based on the existing growth pattern defined by an existing general plan. The projected GHG emissions are based on the emissions from the existing growth pattern or general plan through to 2020, and if different, the year used for the forecast. If the forecast year is beyond 2020, BAAQMD recommends doing a forecast for 2020 to establish a trend. The forecast does not include new growth estimates based on a new or draft general plan.

When conducting the baseline emissions inventory and forecast, ARB's business-as-usual 2020 forecasting methodology should be followed to the extent possible, including the following recommended methodology and assumptions:

- The baseline inventory should include one complete calendar year of data for 2008 or earlier. CO₂ must be inventoried across all sectors (residential, commercial, industrial, transportation and waste); accounting of CH₄, N₂O, SF₆, HFC and PFC emission sources can also be included where reliable estimation methodologies and data are available.
- Business-as-usual emissions are projected in the absence of any policies or actions that would reduce emissions. The forecast should include only adopted and funded projects.
- The business-as-usual forecast should project emissions from the baseline year using growth factors specific to each of the different economic sectors: Recommendations for growth factors are included in the Air District's GHG Quantification Guidance document (explained below and available on the District's website).

The Air District's *GHG Plan Level Reduction Strategy Guidance* contains detailed recommendations for developing GHG emission inventories and projections and for quantifying emission reductions from policies and mitigation measures. This document is available at the Air District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx>.

(B) Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.

A GHG Reduction Strategy must establish a target that is adopted by legislation that meets or exceeds one of the following options, all based on AB 32 goals:

- Reduce emissions to 1990 level by 2020¹
- Reduce emissions 15 percent below baseline (2008 or earlier) emission level by 2020²
- Meet the plan efficiency threshold of 6.6 MT CO₂e/service population/year

If the target year for a GHG reduction goal exceeds 2020, then the GHG emission reduction target should be in line with the goals outlined in Executive Order S-3-05.

(C) Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.

A Strategy should identify and analyze GHG reductions from anticipated actions in order to understand the amount of reductions needed to meet its target. Anticipated actions refer to local and state policies and regulations that may be planned or adopted but not implemented. For example, ARB's Scoping Plan contains a number of measures that are planned but not yet implemented. BAAQMD recommends for the Strategy to include an additional forecast analyzing anticipated actions. Element (C), together with (A), is meant to identify the scope of GHG emissions to be reduced through Element (D).

(D) Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.

The GHG Reduction Strategy should include mandatory and enforceable measures that impact new development projects, such as mandatory energy efficiency standards, density requirements, etc. These measures may exist in codes or other policies and may be included in the Strategy by reference.

The GHG Reduction Strategy should include quantification of expected GHG reductions from each identified measure or categories of measures (such as residential energy efficiency measures, bike/pedestrian measures, recycling measures, etc.), including disclosure of calculation methods and assumptions. Quantification should reflect annual GHG reductions and demonstrate how the GHG reduction target will be met. The Strategy should specify which measures apply to new development projects.

(E) Monitor the plan's progress

To ensure that all new development projects are incorporating all applicable measures contained within the GHG Reduction Strategy, the Strategy should include an Implementation Plan containing the following:

- Identification of which measures apply to different types of new development projects, discerning between voluntary and mandatory measures.
- Mechanism for reviewing and determining if all applicable mandatory measures are being adequately applied to new development projects.
- Identification of implementation steps and parties responsible for ensuring implementation of each action.

¹ Specified target in AB 32 legislation

² From "Climate Change Scoping Plan", Executive Summary page 5



- Schedule of implementation identifying near-term and longer-term implementation steps.
- Procedures for monitoring and updating the GHG inventory and reduction measures every 3-5 years before 2020 and submitting annual implementation updates to the jurisdiction's governing body.
- Annual review and reporting on the progress of implementation of individual measures, including assessment of how new development projects have been incorporating Strategy measures. Review should also include an assessment of the implementation of Scoping Plan measures in order to determine if adjustments to local Strategy must be made to account for any shortfalls in Scoping Plan implementation.

(F) Adopt the GHG Reduction Strategy in a public process following environmental review

A GHG Reduction Strategy should undergo an environmental review which may include a negative declaration or EIR.

If the GHG Reduction Strategy consists of a number of different elements, such as a general plan, a climate action plan and/or separate codes, ordinances and policies, each element that is applicable to new development projects would have to complete an environmental review in order to allow tiering for new development projects.

Sustainable Communities Strategy (SCS) or Alternative Planning Strategy

If a project is located within an adopted Sustainable Communities Strategy or Alternative Planning Strategy, the GHG emissions from cars and light duty trucks do not need to be analyzed in the environmental analysis. This approach is consistent with the State CEQA Guidelines, Section 15183.5(c). This approach only applies to certain residential and mixed use projects and transit priority projects as defined in Section 21155 of the State CEQA Guidelines.

Section 15183.5(c): Special Situations. As provided in Public Resources Code sections 21155.2 and 21159.28, environmental documents for certain residential and mixed use projects, and transit priority projects, as defined in section 21155, that are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in an applicable sustainable communities strategy or alternative planning strategy need not analyze global

warming impacts resulting from cars and light duty trucks. A lead agency should consider whether such projects may result in GHG emissions resulting from other source, however, consistent with these Guidelines.

Section 21155: A transit priority project shall (1) contain at least 50 percent residential use, based on total building square footage and, if the project contains between 26 percent and 50 percent nonresidential uses, a floor area ratio of not less than 0.75; (2) provide a minimum net density of at least 20 dwelling units per acre; and (3) be within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan. A major transit stop is as defined in Section 21064.3, except that, for purposes of this section, it also includes major transit stops that are included in the applicable regional transportation plan. For purposes of this section, a high quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. A project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have not more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

4.4. MITIGATING OPERATIONAL-RELATED IMPACTS

The following mitigation measures would reduce operational-related emissions of criteria air pollutants, precursors, and GHGs from mobile, area, and stationary sources. Additional mitigation measures may be used, including off-site measures, provided their mitigation efficiency is justified. Where a range of emission reduction potential is given for a measure, the Lead Agency should provide justification for the mitigation reduction efficiency assumed for the project. If mitigation does not bring a project back within the threshold requirements, the project could be cumulatively significant and could be approved only with a Statement of Overriding Considerations and a showing that all feasible mitigation measures have been implemented.

Reductions from mitigation measures should be scaled proportionally to their sector of project-generated emissions. For example, if a measure would result in a 50 percent reduction in residential natural gas consumption, but only 20 percent of a project's emissions are associated with natural gas consumption, and only 10 percent of a project's emissions are from residential land uses, then the scaled reduction would equal one percent ($50\% * 20\% * 10\% = 1\%$).

Once all emission reductions are scaled by their applicable sector and land use, they should be added together for the total sum of emission reductions. Once all emission reductions are scaled by their applicable sector and land use, they should be added together for the total sum of emission reductions.

The Air District prefers for project emissions to be reduced to their extent possible onsite. For projects that are not able to mitigate onsite to a level below significance, offsite mitigation measures serve as a feasible alternative. Recent State's CEQA Guidelines amendments allow for offsite measures to mitigate a project's emissions, (Section 15126.4(c)(4)).

In implementing offsite mitigation measures, the lead agency must ensure that emission reductions from identified projects are real, permanent through the duration of the project, enforceable, and are equal to the pollutant type and amount of the project impact being offset. BAAQMD recommends that offsite mitigation projects occur within the nine-county Bay Area in order to reduce localized impacts and capture potential co-benefits. Offsite mitigation for PM and toxics emission reductions should occur within a five mile radius to the project site.

Another feasible mitigation measure the Air District is exploring establishing is an offsite mitigation program to assist lead agencies and project applicants in achieving emission reductions. A project applicant would enter into an agreement with the Air District and pay into an Air District fund. The Air District would commit to reducing the type and amount of emission indentified in the agreement. The Air District would identify, implement, and manage offsite mitigation projects.

The following tables list feasible mitigation measures for consideration in projects. The estimated emission reductions are a work in progress and the Air District will continue to improve guidance on quantifying the mitigation measures.

URBEMIS Mitigation Measures for Operational Mobile Source Emissions					
Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional comments
Mix of Uses	-3% to 9%	CAPs, GHGs	Mobile sources	-3 when no housing or employment centers within 1/2 mile	Residential: % reduction is taken from base trips (9.57) and subtracted from ITE trip generation; Nonresidential: % reduction from ITE trip generation
Local serving retail within 1/2 mile of project	2%	CAPs, GHGs	Mobile sources	Uses lower end of reported research to avoid double counting with mix of uses measure	
Transit Service	0% to 15%	CAPs, GHGs	Mobile sources		
Bike & Pedestrian	0%–9%	CAPs, GHGs	Mobile sources	Credit is given based on intersection density, sidewalk completeness, and bike network completeness; No reduction if entire area within 1/2 mile is single use	
Affordable Housing	0%–4%	CAPs, GHGs	Mobile sources		
Transportation Demand Management Parking, Transit Passes					
Daily Parking Charge	0%–25%	CAPs, GHGs	Only resident/employee trips, no visitor/shopper trips	Shoup, Donald. 2005. Parking Cash Out. American Planning Association. Chicago, IL.	
Parking Cash-Out	0%–12.5%	CAPs, GHGs			
Free Transit Passes	25% of Transit Service Reduction	CAPs, GHGs			
Telecommuting					
Employee Telecommuting Program	1%–100%	CAPs, GHGs	Mobile sources, Worker Trips only		
Compressed Work Schedule 3/36	1%–40%	CAPs, GHGs			
Compressed Work Schedule 4/40	1%–20%	CAPs, GHGs			
Compressed Work Schedule 9/80	1%–10%	CAPs, GHGs			

URBEMIS Mitigation Measures for Operational Mobile Source Emissions

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional comments
Other Transportation Demand Measures					
Secure Bike Parking (at least 1 space per 20 vehicle spaces)	At least 3 elements: 1% reduction, plus 5% of the reduction for transit and pedestrian/bike friendliness; At least 5 elements: 2% reduction, plus 10% of the reduction for transit and pedestrian/bike friendliness	CAPs, GHGs	Mobile sources, Worker Trips only		
Showers/Changing Facilities Provided					
Guaranteed Ride Home Program Provided					
Car-Sharing Services Provided					
Information Provided on Transportation Alternatives (Bike Schedules, Maps)					
Dedicated Employee Transportation Coordinator					
Carpool Matching Program					
Preferential Carpool/Vanpool Parking					
Parking Supply	0%–50%	CAPs, GHGs	Mobile sources		
On Road Trucks	As input by user in URBEMIS	CAPs, GHGs	Mobile sources		

URBEMIS Mitigation Measures for Operational Area-Source Emissions

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes
Increase Energy Efficiency Beyond Title 24	Same as % improvement over Title 24	CAPs, GHGs	Natural gas sector in URBEMIS for applicable land use only	User should specify baseline year for the Title 24 standards
Electrically powered landscape equipment and outdoor electrical outlets	Same as % of landscape equipment emissions	CAPs, GHGs	Landscape emissions: residential only	
Low VOC architectural coatings	Same as % VOC reduction in applicable coatings (Interior/Exterior)	ROG only	Architectural coating	



NON-URBEMIS Energy Efficiency Mitigation Measures

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional comments
Plant shade trees within 40 feet of the south side or within 60 feet of the west sides of properties.	30%	GHGs	R,C A/C Electricity	USDA Forest Service, Pacific Northwest Research Station. "California Study Shows Shade Trees Reduce Summertime Electricity Use." Science Daily 7 January 2009. 20 February 2009 < http://www.sciencedaily.com/releases/2009/01/090105150831.htm >.	Electricity-related measures reduce CAPs off-site, but they are not typically quantified as part of a CEQA analysis.
Require cool roof materials (albedo >= 30)	34%	GHGs	C A/C Electricity	U.S. EPA Cool Roof Product Information, Available: < http://www.epa.gov/heatisl and/resources/pdf/CoolRoofsCompendium.pdf >	
	69%	GHGs	R A/C Electricity		
Install green roofs	1%	GHGs	R,C A/C Electricity	Reductions are based on the Energy & Atmosphere credits (EA Credit 2) documented in the Leadership in Energy & Environmental Design (LEED), Green Building Rating System for New Constructions and Major Renovations, Version 2.2, October 2005. The reduction assumes that a vegetated roof is installed on a least 50% of the roof area or that a combination high albedo and vegetated roof surface is installed that meets the following standard: (Area of SRI Roof/0.75)+(Area of vegetated roof/0.5) >= Total Roof Area.	
Require smart meters and programmable thermostats	10%	CAPs, GHGs	R, C electricity and natural gas space heating	U. S. Environmental Protection Agency. 2009. Programmable Thermostat. http://www.energystar.gov/ia/new_homes/features/ProgThermostats1-17-01.pdf	

NON-URBEMIS Energy Efficiency Mitigation Measures

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional comments
Meet GBC standards in all New construction	17%	GHGs	R electricity	California Energy Commission [CEC] 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings	
	7%	GHGs	C electricity		
	9%	CAPs, GHGs	R natural gas		
	3%	CAPs, GHGs	C natural gas		
Retrofit existing buildings to meet CA GBC standards	38%	GHGs	R electricity	California Energy Commission [CEC] 2003. Impact Analysis 2005 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings; California Energy Commission [CEC] 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings	
	12%	GHGs	C electricity		
	18%	CAPs, GHGs	R natural gas		
	12%	CAPs, GHGs	C natural gas		
Install solar water heaters	70%	CAPs, GHGs	R natural gas water heating	Energy Star. 2009. Solar Water Heater. http://www.energystar.gov/ia/new_homes/features/WaterHtrs_062906.pdf ; Department of Energy. California Energy Commission [CEC] 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings	Cannot take credit for both solar and tank-less water heater measures
	70%	CAPs, GHGs	C natural gas water heating		
Install tank-less water heaters	35%	CAPs, GHGs	R natural gas water heating	Tankless Water Heater. 2008. Available: http://www.eere.energy.gov/consumer/your_home/water_heating/index.cfm/mytopic=12820	
	35%	CAPs, GHGs	C natural gas water heating		
Install solar panels on residential and commercial buildings	100%	GHGs	R, C electricity		



NON-URBEMIS Energy Efficiency Mitigation Measures

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional comments
100% increase in diversity of land use mix	5%	CAPs, GHGs	Mobile sources	Ewing, Reid, et al. 2001. <i>Travel and the Built Environment: A Synthesis</i> . Transportation Research Record 1780. Paper No. 01-3515 as cited in Urban Land Institute. 2008. <i>Growing Cooler</i> . ISBN: 978-0-87420-082-2. Washington, DC	
Jobs housing balance	$\text{Trip reduction} = (1 - (\text{ABS} (1.5 * \text{HH} - \text{E}) / (1.5 * \text{HH} + \text{E}) - 0.25) / 0.25 * 0.03;$ where ABS = absolute value; HH = study area households ; E = study area employment	CAPs, GHGs	Mobile sources	Nelson/Nygaard Consultants. 2005. <i>Crediting Low-Traffic Developments: Adjusting Site-Level Vehicle Trip Generation Using URBEMIS</i> . Pg 12, (adapted from Criterion and Fehr & Peers, 2001)	
100% increase in design (i.e., presence of design guidelines for transit oriented development, complete streets standards)	3%	CAPs, GHGs	Mobile sources	Ewing, Reid, et al. 2001. <i>Travel and the Built Environment: A Synthesis</i> . Transportation Research Record 1780. Paper No. 01-3515 as cited in Urban Land Institute. 2008. <i>Growing Cooler</i> . ISBN: 978-0-87420-082-2. Washington, DC	

NON-URBEMIS Energy Efficiency Mitigation Measures

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional comments
100% increase in density	5%	CAPs, GHGs	Mobile sources	Ewing, Reid, et al. 2001. <i>Travel and the Built Environment: A Synthesis</i> . Transportation Research Record 1780. Paper No. 01-3515 as cited in Urban Land Institute. 2008. <i>Growing Cooler</i> . ISBN: 978-0-87420-082-2. Washington, DC	
HVAC duct sealing	30%	GHGs	R,C A/C electricity	Sacramento Metropolitan Utilities District. 2008. Duct Sealing. Available: < http://www.pge.com/myhome/saveenergymoney/rebates/coolheat/duct/index.shtml >.	
Provide necessary infrastructure and treatment to allow use of 50% greywater/ recycled water in residential and commercial uses for outdoor irrigation	SFR: 74%*50% = 37.5%	GHGs	R electricity (water consumption)	Department of Water Resources. 2001. Statewide Indoor/Outdoor Split. Accessed December 2, 2008. Available at: < http://www.landwateruse.water.ca.gov/annualdata/urbanwateruse/2001/landuselvels.cfm?use=8 >.	
	MFR: 58% * 50% = 29%		C electricity (water consumption)		
	Commercial: 12% * 50% = 6%				
Complete streets (i.e., bike lanes and pedestrian sidewalks on both sides of streets, traffic calming features such as pedestrian bulb-outs, cross-walks, traffic circles, and elimination of physical and psychological barriers (e.g., sound walls and large arterial roadways, respectively).)	1-5%	CAPs, GHGs	Mobile sources	Dierkers, G., E. Silsbe, S. Stott, S. Winkelman, and M. Wubben. 2007. <i>CCAP Transportation Emissions Guidebook</i> . Center for Clean Air Policy. Washington, D.C. Available: < http://www.ccap.org/safe/guidebook.php >. as cited in California Air Pollution Control Officers Association (CAPCOA) 2008. <i>CEQA and Climate Change</i> .	



NON-URBEMIS Energy Efficiency Mitigation Measures

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional comments
Maximize interior day light		GHGs	R, C, M		
Increase roof/ceiling insulation		CAPs, GHGs	R, C, M		
Create program to encourage efficiency improvements in rental units		CAPs, GHGs	R		
Install rainwater collection systems in residential and Commercial Buildings		GHGs	R,C,M		
Install low-water use appliances and fixtures		GHGs	R,C,M	California Air Pollution Control Officers Association (CAPCOA) 2008. CEQA and Climate Change.	
Restrict the use of water for cleaning outdoor surfaces/Prohibit systems that apply water to non-vegetated surfaces		GHGs	R,C,M	California Attorney General's Office GHG Reduction Measures	
Implement water-sensitive urban design practices in new construction		GHGs	R,C,M		

NON-URBEMIS Waste Reduction Mitigation Measures

Provide composting facilities at residential uses		GHGs	R		
Create food waste and green waste curb-side pickup service		GHGs	R,C,M		
Require the provision of storage areas for recyclables and green waste in new construction		GHGs	R,C,M		

Notes: CAPs = Criteria Air Pollutants; GHGs = Greenhouse Gases; ROG = Reactive Organic Gases; R = Residential Development; C = Commercial Development; M = Mixed Use Development; A/C = Air Conditioning; and VOC = Volatile Organic Compounds.

Source: Information compiled by EDAW 2009.

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5. LOCAL COMMUNITY RISK AND HAZARD IMPACTS³

The purpose of this Chapter is (1) to recommend methods whereby local community risk and hazard impacts from projects for both new sources and new receptors can be determined based on comparison with applicable thresholds of significance and screening criteria and (2) to recommend mitigation measures for these impacts. This chapter contains the following sections:

Section 5.2 – Presents methods for assessing single-source impacts from either an individual new source or impacts on new receptors from existing individual sources.

Section 5.3 – Discusses methods for assessing cumulative impacts from multiple sources.

Section 5.4 – Discusses methods for mitigating local community risk and hazard impacts.

The recommendations provided in this chapter apply to assessing and mitigating impacts for project-level impacts and related cumulative impacts. Refer to Chapter 9 for recommendations for assessing and mitigating local community risk and hazard impacts at the plan-level.

To assist the Lead Agency in evaluating air quality impacts at the neighborhood scale, *Thresholds of Significance* have been established for local community risks and hazards associated with TACs and PM_{2.5} with respect to siting a new source and/or receptor; as well as for assessing both individual source and cumulative multiple source impacts. These *Thresholds of Significance* focus on PM_{2.5} and TACs because these more so than other emission types pose significant health impacts at the local level as discussed separately below.

5.1. TOXIC AIR CONTAMINANTS

TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A wide range of sources, from industrial plants to motor vehicles, emit TACs. Like PM_{2.5}, TAC can be emitted directly and can also be formed in the atmosphere through reactions among different pollutants. The methods presented in this Chapter for assessing local community risk and hazard impacts only include direct TAC emissions, not those formed in the atmosphere.

The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis or genetic damage; or short-term acute effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches. For evaluation purposes, TACs are separated into carcinogens and non-carcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure. Non-carcinogenic substances differ in that there is generally assumed to



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³ The use of the receptor thresholds is discussed in section 2.8 of these Guidelines

be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis. Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the ratio of expected exposure levels to an acceptable reference exposure levels.

TACs are primarily regulated through State and local risk management programs. These programs are designed to eliminate, avoid, or minimize the risk of adverse health effects from exposures to TACs. A chemical becomes a regulated TAC in California based on designation by the California Office of Environmental Health Hazard Assessment (OEHHA). As part of its jurisdiction under Air Toxics Hot Spots Program (Health and Safety Code Section 44360(b)(2)), OEHHA derives cancer potencies and reference exposure levels (RELs) for individual air contaminants based on the current scientific knowledge that includes consideration of possible differential effects on the health of infants, children and other sensitive subpopulations, in accordance with the mandate of the Children's Environmental Health Protection Act (Senate Bill 25, Escutia, Chapter 731, Statutes of 1999, Health and Safety Code Sections 39669.5 et seq.). The methodology in this Chapter reflects the approach adopted by OEHHA in May 2009, which considers age sensitivity factors to account for early life stage exposures. The specific toxicity values of each particular TAC as identified by OEHHA are listed in BAAQMD's [Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants](#).

5.1.1. Fine Particulate Matter

PM_{2.5} is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. PM_{2.5} can be emitted directly and can also be formed in the atmosphere through reactions among different pollutants. The methods presented in this Chapter for assessing local community risk and hazard impacts only include direct PM_{2.5} emissions, not those formed in the atmosphere.

Compelling evidence suggests that PM_{2.5} is by far the most harmful air pollutant in the SFBAAB in terms of the associated impact on public health. A large body of scientific evidence indicates that both long-term and short-term exposure to PM_{2.5} can cause a wide range of health effects (e.g., aggravating asthma and bronchitis, causing visits to the hospital for respiratory and cardiovascular symptoms, and contributing to heart attacks and deaths). BAAQMD recommends characterizing potential health effects from exposure to directly PM_{2.5} emissions through comparison to the applicable *Thresholds of Significance*.

5.1.2. Common Source Types

Common stationary source types of TAC and PM_{2.5} emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to BAAQMD permit requirements. The other, often more significant, common source type is on-road motor vehicles on freeways and roads such as trucks and cars, and off-road sources such as construction equipment, ships and trains. Because these common sources are prevalent in many communities, this Chapter focuses on screening tools for the evaluation of associated cumulative community risk and hazard impacts. However, it is important to note that other influential source types do exist (e.g., ports, railyards, and truck distribution centers), but these are often more complex and require more advanced modeling techniques beyond those discussed herein.

5.1.3. Area of Influence

For assessing community risks and hazards, a 1,000 foot radius is recommended around the project property boundary. BAAQMD recommends that any proposed project that includes the siting of a new source or receptor assess associated impacts within 1,000 feet, taking into account both individual and nearby cumulative sources (i.e., proposed project plus existing and foreseeable future projects). Cumulative sources represent the combined total risk values of each



individual source within the 1,000-foot evaluation zone. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

The recommended methodology for assessing community risks and hazards from PM_{2.5} and TACs follows a phased approach. Within this approach, more advanced techniques, for both new sources and receptors, which require additional site specific information are presented for each progressive phase to assess risks and hazards. Each phase provides concentrations and risks that are directly comparable to the applicable *Thresholds of Significance*, although it is important to note that the use of more site specific modeling input data produces more accurate results. Also, progression from one phase to the next in a sequential fashion is not necessary and a refined modeling analysis can be conducted at any time.

5.1.4. Impacted Communities

In the Bay Area, there are a number of urban or industrialized communities where the exposure to TACs is relatively high in comparison to others. These same communities are often faced with other environmental and socio-economic hardships that further stress their residents and result in poor health outcomes. To address community risk from air toxics, the Air District initiated the Community Air Risk Evaluation (CARE) program in 2004 to identify locations with high levels of risk from TACs co-located with sensitive populations and use the information to help focus mitigation measures. Through the CARE program, the Air District developed an inventory of TAC emissions for 2005 and compiled demographic and health indicator data. According to the findings of the CARE Program, diesel PM, mostly from on and off-road mobile sources, accounts for over 80 percent of the inhalation cancer risk from TACs in the Bay Area. Figure 5-1 shows the impacted communities as of November 2009, including: the urban core areas of Concord, eastern San Francisco, western Alameda County, Redwood City/East Palo Alto, Richmond/San Pablo, and San Jose. For more information on, and possible revisions to, impacted communities, go to the [CARE Program](#) website.

In many cases, air quality conditions in impacted communities result in part from land use and transportation decisions made over many years. BAAQMD believes comprehensive, community-wide strategies will achieve the greatest reductions in emissions of and exposure to TAC and PM_{2.5}. BAAQMD strongly recommends that within these impacted areas local jurisdictions develop and adopt Community Risk Reduction Plans, described in Section 5.4. The goal of the Community Risk Reduction Plan is to encourage local jurisdictions to take a proactive approach to reduce the overall exposure to TAC and PM_{2.5} emissions and concentrations from new and existing sources. Local plans may also be developed in other areas to address air quality impacts related to land use decisions and ensure sufficient health protection in the community.

5.2. SINGLE SOURCE IMPACTS

5.2.1. Significance Determination

The Lead Agency shall determine whether operational-related TAC and PM_{2.5} emissions generated as part of a proposed project siting a new source or receptor would expose existing or new receptors to levels that exceed BAAQMD's applicable *Thresholds of Significance* stated below:

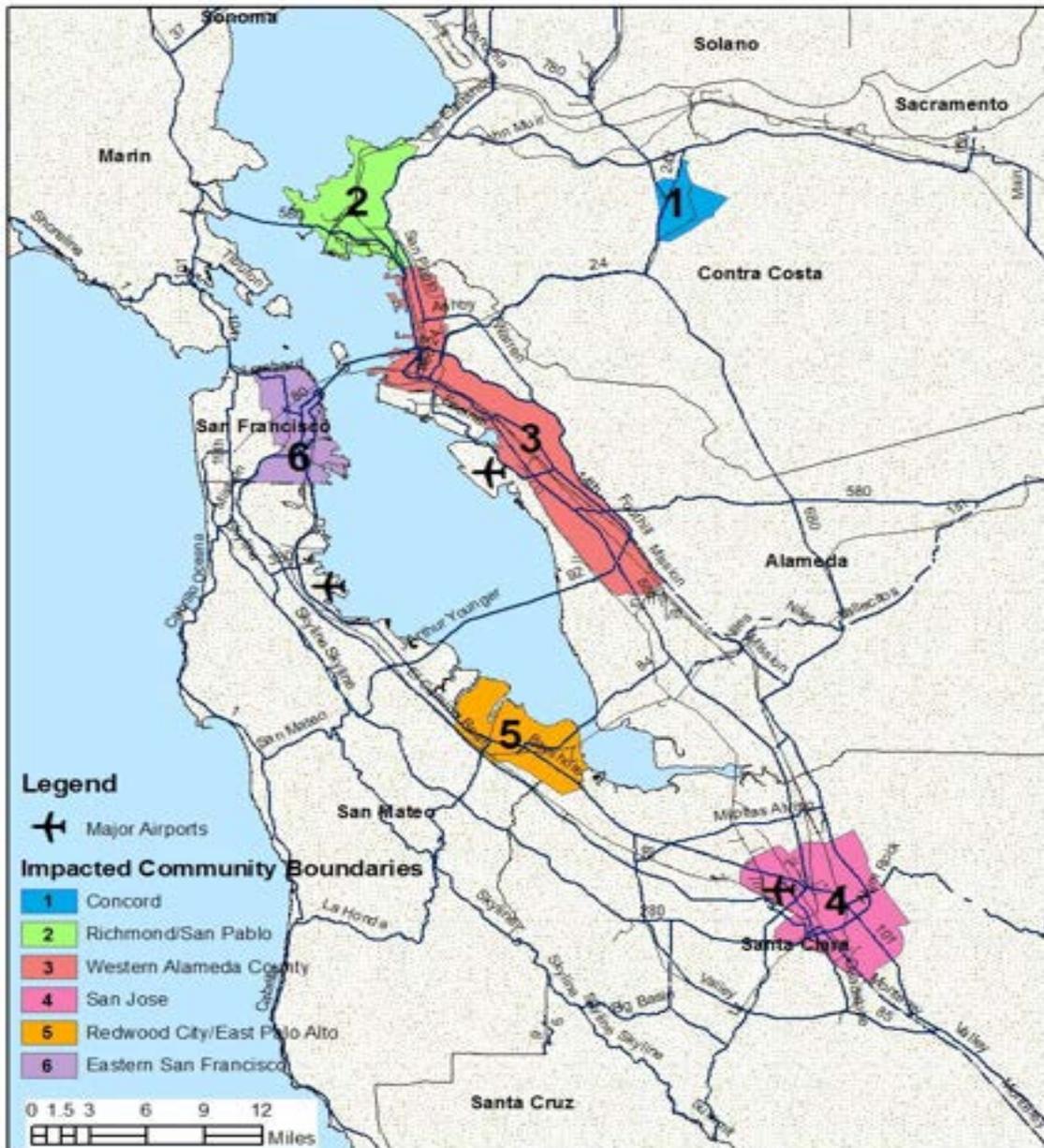
- Compliance with a qualified Community Risk Reduction Plan;
- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) risk greater than 1.0 HI from a single source would be a significant cumulatively considerable contribution;

- An incremental increase of greater than $0.3 \mu\text{g}/\text{m}^3$ annual average $\text{PM}_{2.5}$ from a single source would be a significant cumulatively considerable contribution.

In all areas, but especially within impacted communities identified under BAAQMD’s CARE program, the Lead Agency is encouraged to develop and adopt a Community Risk Reduction Plan. To determine whether an impacted community is located in a jurisdiction, the Lead Agency should refer to Figure 5-1 and the BAAQMD CARE web page at <http://www.baaqmd.gov/CARE/>. Please consult with BAAQMD if a more precise map is needed.

Impacted Communities

Figure 5-1



Source: BAAQMD 2009



Exposure of receptors to substantial concentrations of TACs and PM_{2.5} could occur from the following situations:

1. Siting a new TAC and/or PM_{2.5} source (e.g., diesel generator, truck distribution center, freeway) near existing or planned receptors; and
2. Siting a new receptor near an existing source of TAC and/or PM_{2.5} emissions.

BAAQMD recommendations for evaluating and making a significance determination for each of these situations are discussed separately below.

5.2.2. Siting a New Source

When evaluating whether a new source of TAC and/or PM_{2.5} emissions would adversely affect existing or future proposed receptors, a Lead Agency shall examine:

- the extent to which the new source would increase risk levels, hazard index, and/or PM_{2.5} concentrations at nearby receptors,
- whether the source would be permitted or non-permitted by the BAAQMD, and
- whether the project would implement Best Available Control Technology for Toxics (T-BACT), as determined by BAAQMD.

The incremental increase in cancer and non-cancer (chronic and acute) risk from TACs and PM_{2.5} concentrations at the affected receptors shall be assessed. As described above, the recommended methodology for assessing community risks and hazards from PM_{2.5} and TACs follows a phased approach, within which progressively more advanced techniques are presented for each phase (Figure 5-2). Each phase provides concentrations and risks that are directly comparable to the applicable *Thresholds of Significance*, although it is important to note that the use of more site specific modeling input data produces more accurate results. Also, progression from one phase to the next in a sequential fashion is not necessary and a refined modeling analysis can be conducted at any time.

For siting a new source, the first step is to determine the associated emission levels.

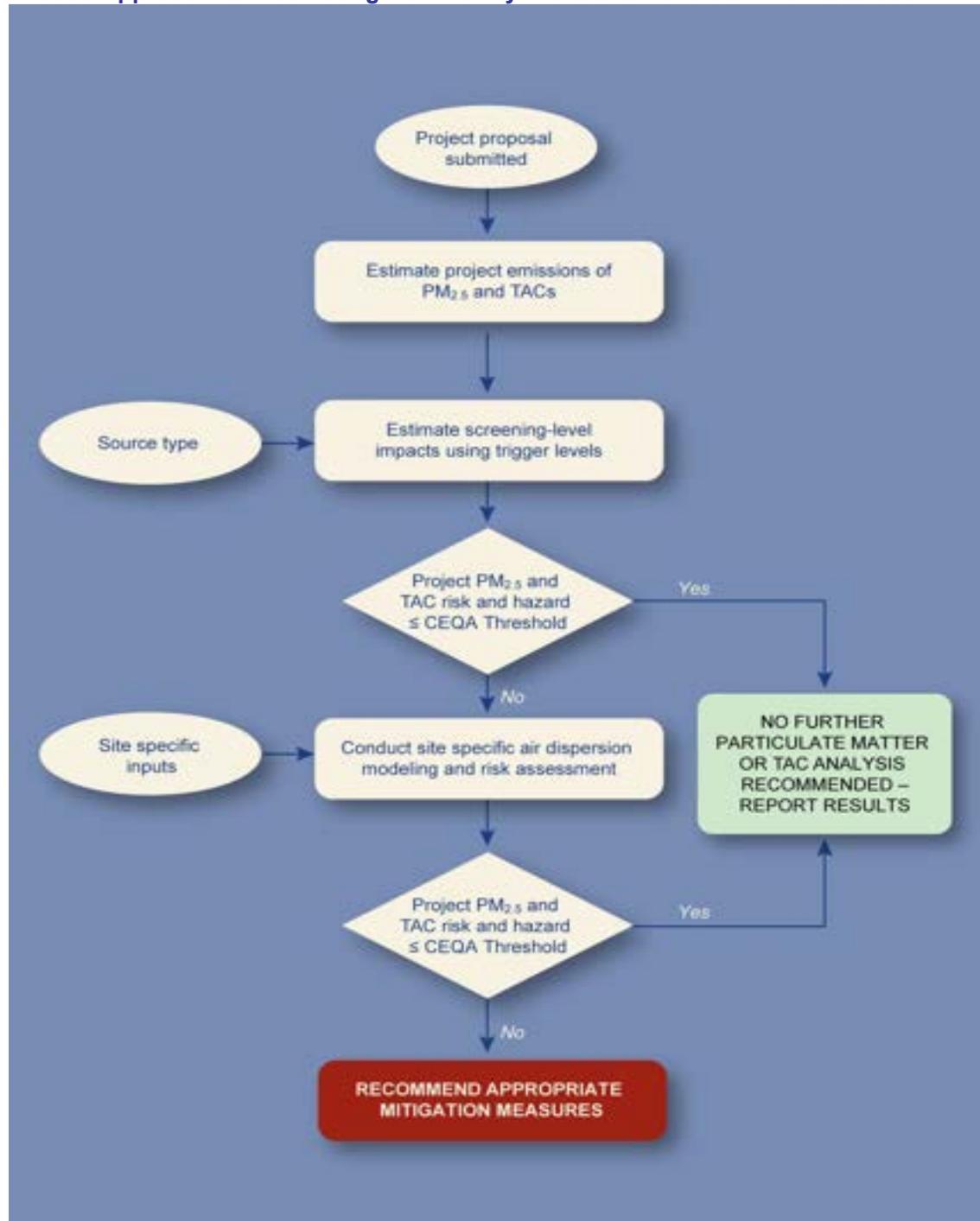
5.2.3. Sources Permitted by BAAQMD

For sources that would be permitted by BAAQMD (e.g., gas stations and back-up diesel generators) the project's type, size, or planned level of use can be used to help estimate PM_{2.5} and TAC emissions. Screening or modeling conducted as part of the permit application can be used to determine cancer and non-cancer risk and PM_{2.5} concentrations for comparing to the applicable *Thresholds of Significance*. BAAQMD can assist in determining the level of emissions associated with the new source. A Lead Agency should identify the maximally exposed existing or reasonably foreseeable future receptor.

Requirements of Toxics New Source Review (Regulation 2, Rule 5) will determine whether the project would implement T-BACT.

Figure 5-2

Phased Approach for Estimating Community Risks and Hazards – New Sources



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Concentration estimates of PM_{2.5} from screening or modeling should be compared with the *Threshold of Significance* for PM_{2.5}. If screening estimates determine PM_{2.5} concentrations from the project would not exceed the *Threshold of Significance*, no further analysis is recommended (See Figure 5-2). If emissions would exceed the *Threshold of Significance*, more refined modeling or mitigation measures to offset emission can be considered.

5.2.4. Sources Not Requiring a BAAQMD Permit

Some proposed projects would include the operation of non-permitted sources of TAC and/or PM_{2.5} emissions. For instance, projects that would attract high numbers of diesel-powered on-road trucks or use off-road diesel equipment on site, such as a distribution center, a quarry, or a manufacturing facility, would potentially expose existing or future planned receptors to substantial risk levels and/or health hazards.

For sources that would not require permits from BAAQMD (e.g., distribution centers and large retail centers) where emissions are primarily from mobile sources—the number and activity of vehicles and fleet information would be required. The latest version of the State of California’s EMFAC model is recommended for estimating emissions from on-road vehicles; the OFFROAD model is recommended for estimating emissions from off-road vehicles. For these types of new sources (not permitted by BAAQMD) screening methods are not currently available and a more refined analysis is necessary.



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If modeling estimates for community risks and hazards determine that local levels associated with the proposed project meet the applicable *Thresholds of Significance*, no further analysis is recommended. More details on project screening and recommended protocols for modeling stationary and mobile sources are presented in [Recommended Methods for Screening and Modeling Local Risks and Hazards](#). This online companion document provides screening tables for emissions from on-road cars and trucks on major roadways and many existing permitted sources in the SFBAAB. It describes how to use screening tables to determine whether a site specific modeling analysis and risk assessment is required. The document also addresses sources that BAAQMD has determined to have negligible impact on health outcomes. It describes the recommended methodology for performing dispersion modeling and estimating emission factors if the project exceeds the thresholds based on the screening analysis; it describes how to calculate the potential cancer risk using age-sensitivity toxicity factors from the concentrations produced from the air modeling analysis; and it provides a sample calculation and the methodology for estimating short term, acute exposures and long term, chronic health impacts. The recommended protocols are consistent with the most current risk assessment methodology used for the BAAQMD’s [New Source Review for Toxic Air Contaminants Regulation 2, Rule 5: Toxics New Source Review](#) and, with few exceptions, follows the California Air Pollution Control Officers Association’s (CAPCOA) [Health Risk Assessments for Proposed Land Use Projects](#) (July 2009).

BAAQMD recommends that all receptors located within a 1,000 foot radius of the project’s fence line be assessed for potentially significant impacts from the incremental increase in risks or hazards from the proposed new source. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

For new land uses that would host a high number of non-permitted TAC sources, such as a distribution center, the incremental increase in cancer risk shall be determined by an HRA using an acceptable air dispersion model in accordance with BAAQMD's *Recommended Methods for Screening and Modeling Local Risks and Hazards* and/or CAPCOA's guidance document titled *Health Risk Assessments for Proposed Land Use Projects*. A Lead Agency may consult HRAs that have previously been conducted for similar land uses to determine whether it assesses the incremental increase in cancer risk qualitatively or by performing an HRA. This analysis shall account for all TAC and PM emissions generated on the project site, as well as any TAC emissions that would occur near the site as a result of the implementation of the project (e.g., diesel trucks queuing outside an entrance, a high volume of trucks using a road to access a quarry or landfill).

Some proposed projects would include both permitted and non-permitted TAC sources. For instance, a manufacturing facility may include some permitted stationary sources and also attract a high volume of diesel trucks and/or include a rail yard. All sources should be accounted for in the analysis.

5.2.5. Siting a New Receptor⁴

If a project is likely to be a place where people live, play, or convalesce, it should be considered a receptor. It should also be considered a receptor if sensitive individuals are likely to spend a significant amount of time there. Sensitive individuals refer to those segments of the population most susceptible to poor air quality: children, the elderly, and those with pre-existing serious health problems affected by air quality (ARB 2005). Examples of receptors include residences, schools and school yards, parks and play grounds, daycare centers, nursing homes, and medical facilities. Residences can include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds could be play areas associated with parks or community centers.

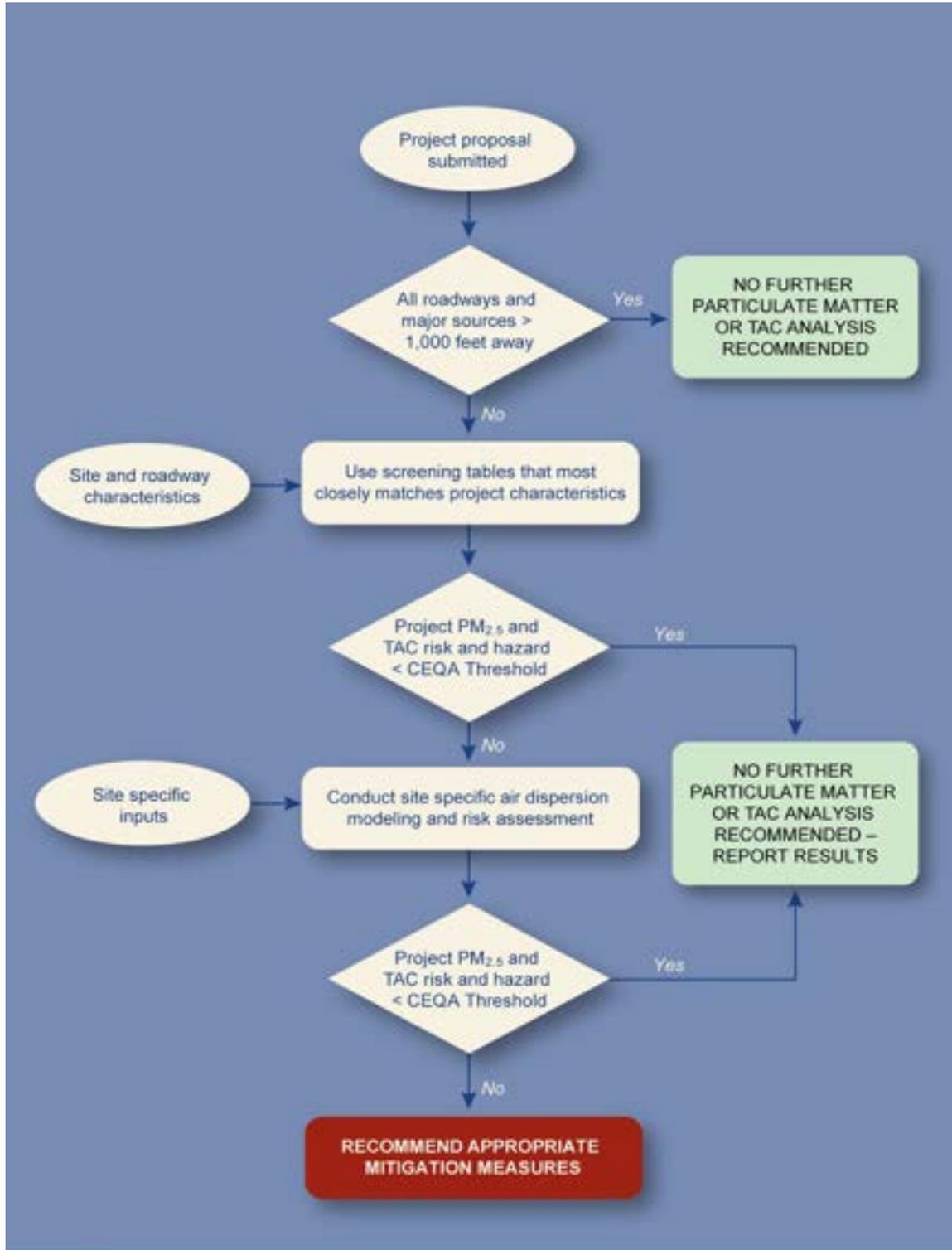
When siting a new receptor, a Lead Agency shall examine existing or future proposed sources of TAC and/or PM_{2.5} emissions that would adversely affect individuals within the planned project. A Lead Agency shall examine:

- the extent to which existing sources would increase risk levels, hazard index, and/or PM_{2.5} concentrations near the planned receptor,
- whether the existing sources are permitted or non-permitted by the BAAQMD, and
- whether there are freeways or major roadways near the planned receptor.

BAAQMD recommends that a Lead Agency identify all TAC and PM_{2.5} sources located within a 1,000 foot radius of the proposed project site. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius. Permitted sources of TAC and PM_{2.5} should be identified and located as should freeways and major roadways, and other potential sources. To conduct a thorough search, a Lead Agency shall gather all facility data within 1,000 feet of the project site (and beyond where appropriate).

The phased approach for evaluating impacts to new receptors is shown in Figure 5-3.

⁴ The use of the receptor thresholds is discussed in section 2.8 of these Guidelines



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**Phased Approach for Estimating Community Risks and Hazards – Receptors
Figure 5-3**

5.2.6. Screening Table for Stationary Sources

BAAQMD will make available data for certain existing permitted, stationary sources of TAC and PM_{2.5} with site locations, coordinates, source type, and screening-level estimates of excess cancer risk, chronic, and acute HI, and PM_{2.5} concentrations. An example of the entries to be provided in this table is shown in Table 5-1.

Table 5-1 Screening Table for Existing Permitted Stationary Sources* (within 1,000 feet of the Proposed Project)									
EXAMPLE Proposed Project Location Details: Address-19th Avenue and Judah Street, San Francisco, CA Centroid UTM's-E 546090, N 4179460									
Site #	Facility Name	Street Address	City	UTM E	UTM N	Cancer Risk in a million	Chronic Hazard Index	Acute Hazard Index	PM _{2.5} ug/m ³
462	20th Avenue Cleaner	1845 Irving Street	San Francisco	546113	4179490	7.5	0.02	0.00	
4672	Sundown Cleaners	1952 Irving Street	San Francisco	546016	4179510	7.5	0.02	0.00	
13519	Pacific Bell	1515 19th Avenue	San Francisco	546086	4179240	58.4	0.10	0.04	0.10
2155	Chevron Station #91000	1288 19th Avenue	San Francisco	546052	4179720	5.8	0.03	0.00	
8756	ConocoPhillips #251075	1400 19th Avenue	San Francisco	546064	4179490	2.7	0.01	0.00	
9266	ConocoPhillips #2611185	1401 19th Avenue	San Francisco	546058	4179500	2.2	0.01	0.00	
Cumulative:						84	0.19	0.04	0.10
Source: BAAQMD 2009									
*This example provides conservative screening level estimates and does not represent actual risk levels, HI or PM concentrations for the facilities listed.									

Table 5-1 selects a hypothetical location at 19th Avenue and Judah Street in San Francisco, as shown at the top of the table along with the Universal Transverse Mercator (UTM) coordinates of the location. Below this location are listed permitted facilities within 1,000 feet of the example location. Each row contains entries for a specific existing permitted source and conservative estimates of maximum risk, hazard index, and PM_{2.5} concentration within the 1,000 foot radius. Within a row, each risk, HI, or PM_{2.5} concentration for a source can be compared to the significance threshold: cancer risk is compared to 10 in a million; chronic and acute hazard index are compared to 1.0; and PM_{2.5} concentration is compared to 0.3 µg/m³. In Table 5-1 all entries are below the target threshold except for the source at 1515 19th Avenue, which has a cancer risk, conservatively estimated at about 58 in a million.

It is important to note that the listing of existing sources provided by the BAAQMD provides conservative screening-level estimates and does not represent the actual risk levels, HI, or PM



concentrations for that facility. These estimates are assumed to be uniform within the 1,000 foot radius and independent of the distance between source and receptor.

To use the screening tables, a Lead Agency would identify sources in the tables within 1,000 feet (or beyond where appropriate) of the project site. Risks, hazards, and PM_{2.5} concentrations for individual sources correspond to the table entries. These values are assumed to remain constant for all locations within the 1,000 foot radius. Table entries within a column can be summed to estimate the cumulative risks from all sources. The screening table for Air District permitted sources is also available as a compressed keyhole language (kmz) file for each of the nine Bay Area counties. The kmz file can be plotted using the Google Earth™ mapping tool, which is freely available as described in [Recommended Methodology for Screening and Modeling Local Risks and Hazards](#).

5.2.7. Screening Tables for On-road Mobile Sources

For all State highways within the SFBAAB, BAAQMD will make available a set of maps and tables that provide screening-level risks and PM_{2.5} concentrations. Screening tables are provided for each of the nine counties within BAAQMD's jurisdiction. To develop these tables, BAAQMD selected conservative assumptions and inputs following this general methodology:

- Hourly vehicle miles traveled (VMT) and emissions for 2012 were developed for each county using EMFAC based on default vehicle mix and full range of vehicle speeds.
- Highest vehicle traffic volumes for each roadway based on Caltrans's *2007 Traffic Volumes on California State Highways* were scaled based on VMT to develop hourly vehicle volumes.
- Hourly vehicle volume and emissions were input into a roadway model, CAL3QHCR, to estimate annual average concentrations using the most conservative meteorological data collected from monitoring locations within each county.

For the PM_{2.5} screening tables, the peak one hour of traffic was used to develop hourly vehicle volumes that totaled to the annual average daily traffic while risk and hazard tables are based on annual average daily vehicle volumes.

The purpose of the screening tables is to provide an easy-to-use initial analysis to determine if nearby roadway impacts to a new receptor are below the thresholds of significance. The outcome of the screening may be used to make a determination of no further action or it may indicate that a more refined analysis is warranted. The recommended project screening approach is as follows:

1. Determine if the new receptor is at least 1,000 feet from the nearest significant traffic volume roadway defined as a freeway or arterial roadway with greater than 10,000 vehicles per day. For new residential developments, the receptor should be placed at the edge of the property boundary. If the receptor does not have any significant roadway sources within 1,000 foot radius, then the proposed project meets the distance requirements and no further single-source roadway-related air quality evaluation is recommended.
2. If the receptor is within the 1,000 feet radius of a nearby roadway that has greater than 20,000 vehicles per day, then use the county- and road-specific screening tables to determine the PM_{2.5} concentrations, cancer risks, and hazards for the project. For non-California highways, default local roadway screening tables are provided in the online report [Recommended Methodology for Screening and Modeling Local Risks and Hazards](#). If any of the thresholds for PM_{2.5} concentration, risks, and hazards are

exceeded based on the comparisons, then more refined modeling analysis is recommended or the project sponsor may choose to implement mitigation measures.

3. For developments that exceed the screening analysis, site specific modeling analysis is recommended following BAAQMD's *Recommended Methodology for Screening and Modeling Local Risks and Hazards*.

For completion of Step 2 as described above, the methodology requires the use of appropriate screening tables to determine if the distance from the development to the nearby significant roadway will expose new receptors to concentrations exceeding the thresholds. The first step is to ensure that the latest screening tables have been downloaded from BAAQMD's website. An example (Table 5-2) is included in this section for San Francisco County for demonstration purposes only and should not be relied upon for use in a CEQA analysis. The Lead Agency or project sponsor must first gather project information including the county for which the development is proposed and the distance of the project to the nearest state highway or local roadway to determine which screening tables are appropriate. For each county, two tables are provided for PM_{2.5} concentrations, cancer risks, chronic non-cancer hazards, and acute non-cancer hazards based on whether the project is located north or south of the roadway or east or west of the roadway. The direction tables correspond to whether the projects are located generally upwind or downwind of the roadway with respect to the prevailing wind direction. Appropriate values are then posted in each table based on the project being located 100 feet, 200 feet, 500 feet, 700 feet, and 1,000 feet from the edge of the nearest travel lane to the project.

For proposed projects, the appropriate cell should be determined by referencing the corresponding county, roadway, and project distance in the tables that most closely matches the project conditions. If the project is predominantly north or south of the roadway, choose the north or south tables. Likewise, if the project is predominantly east or west, choose the east or west tables. If the project is evenly located for example, northeast or southwest of the roadway, select the higher value between either screening tables based on the project distance to the roadway. For distances not listed in the tables, BAAQMD recommends that the values between the two closest distances be linearly interpolated to estimate the value that best reflects the actual project distance.

The results of the screening analysis indicate whether new receptors will be exposed to roadway TAC emissions at concentrations exceeding the threshold of significance and therefore, a more refined modeling analysis and quantitative HRA may be required. If the concentration is less than the thresholds, then no further analysis is required for the single source comparison for roadways. The results of the analysis should be reported in the environmental documentation or staff report that includes a reference to the screening tables used. If the concentrations exceed the thresholds, then the project sponsor has the option to conduct a more refined modeling analysis or implement appropriate mitigation measures.

An example of how to use the screening tables is provided as follows. A new residential development is hypothetically proposed at the intersection of 23rd Street and Minnesota Street in San Francisco. It is located approximately 440 feet to the east of midpoint of northbound Highway 280. Based on Table 5-2, the PM_{2.5} concentrations from Highway 280 is 0.60 µg/m³ at 200 feet away and 0.28 µg/m³ 500 feet away from the project.



**Table 5-2
East or West of San Francisco County Highway**

Highway	Distance East or West of Freeway – PM _{2.5} Concentrations (ug/m ³)				
	100 Feet	200 Feet	500 Feet	700 Feet	1,000 Feet
1	0.50	0.28	0.12	0.096	0.060
35	0.14	0.11	0.032	0.020	0.016
80	1.0	0.64	0.30	0.20	0.15
101	1.1	0.72	0.34	0.26	0.17
280	0.80	0.60	0.28	0.19	0.13

Source: BAAQMD 2009; table above for demonstration purposes and should not be used in CEQA analysis.

To linearly interpolate the PM_{2.5} concentration for the project distance of 440 feet, the following equation was used:

$$(200 \text{ ft} - 500 \text{ ft}) \times (0.60 \text{ ug/m}^3 - \text{PM}_{2.5 \text{ 440 feet}}) = (200 \text{ ft} - 440 \text{ ft}) \times (0.6 \text{ ug/m}^3 - 0.28 \text{ ug/m}^3)$$

Solving for PM_{2.5} at 440 feet, the PM_{2.5} concentration is estimated as 0.34 ug/m³.

A similar example methodology was applied to the cancer risk, chronic non-cancer hazard and acute hazard. The resulting values based on a distance of 440 feet are shown in Table 5-3.

**Table 5-3
Cancer and Non-Cancer (Chronic and Acute) Hazard Indices at 440 feet**

Description	Screening Value	Thresholds	Exceeds Threshold?
PM _{2.5} Concentration	0.34 ug/m ³	0.3 ug/m ³	Yes
Cancer Risk	1.1 in a million	10 in a million	No
Chronic Non-cancer Hazard Index	0.028	1	No
Acute Non-cancer Hazard Index	0.028	1	No

Source: BAAQMD 2009; table above for demonstration purposes and should not be used in CEQA analysis.

In this example, the proposed project would exceed the PM_{2.5} threshold, but not the risk or hazard-based thresholds. At this point, the project sponsor can ratio the PM concentration further based on the actual AADT at the closest milepost to the project. If the concentrations continue to exceed the threshold, the project sponsor can determine whether additional modeling is warranted or implementation of mitigation measures is appropriate. Possible options include moving the residential portion of the development to a distance at which the roadway impacts would be negligible or installing high efficiency filtration in the development.

If the project sponsors choose to conduct a more refined modeling analysis, BAAQMD recommends the following general procedures. More detailed methodology is provided on the online resources located at BAAQMD’s CEQA webpage. To evaluate PM_{2.5} concentrations, BAAQMD recommends using CAL3QHC, which was designed to model roadside CO and PM concentrations. The CAL3QHCR model can estimate PM_{2.5} concentrations at defined receptor locations by processing hourly meteorological data over a year, hourly emissions, and traffic volume. The latest version of the model is available at: http://www.epa.gov/scram001/dispersion_prefrec.htm.

To run CAL3QHCR, meteorological, traffic, and vehicle emissions data at specified intervals over time are required. BAAQMD recommends the use of the meteorological data that most closely representatives conditions at the site. BAAQMD offers readily compatible meteorological data for each county within the SFBAAB that can be run by CAL3QHCR at <http://hank.baaqmd.gov/tec/data/>. For the screening analysis, BAAQMD relied on the most conservative meteorological data collected from any stations within the county; however, in this site-specific analysis, the user should select the data that is nearest the project and reflects actual meteorological conditions.

Emissions data must also be input into the CAL3QHCR model. Year 2012 average hourly emissions (e.g., grams/vehicle mile) were used in developing the screening tables. The emissions data can be produced using the EMFAC2007 model, but should be reflective of the base year in which residents will be residing in the new development. The model should also be run assuming the full range of vehicle fleet and if available, the average vehicle speeds along the specific stretch of road. However, if average speeds are not available, the user should select the full range of variable speeds to ensure that the analysis is health protective.

Highway Number	Average Daily 2-way Traffic Volumes (Vehicles/day)	Start Location	End Location
1	122,000	Alemany Boulevard	Presidio, South Highway 2, onto Golden Gate Bridge
35	31,000	John Muir Drive	Highway 1, Sloat Boulevard at 19 th Avenue
80	254,000	Highway 101 at Division Street	Bay Bridge at Treasure Island, Yerba Buena Island
101	245,000	Third Street	Van Ness Avenue to Highway 1 at Golden Gate Bridge
280	195,000	Alemany Boulevard, San Jose Avenue	Mariposa Street to 4 th Street and Brannan Street

Source: BAAQMD 2009

How to use the screening tables:

- Distance is from the center of the highway to the facility or development
- When two or more highways are within the influence area, sum the contribution from each freeway



The CAL3QHCR model also relies on hourly traffic volumes (e.g., vehicles per hour) as determined by the relative VMT. BAAQMD recommends developing a weighed VMT by using the ratio of VMT per hour to the peak VMT over the 24 hour day (as produced by the EMFAC model). This weighed VMT represents the percentage of traffic volume on an hourly basis over a 24 hour period. The hourly traffic volumes for the CAL3QHCR model are then the product of the weighed VMT by the peak traffic volumes for that roadway. The peak one-hour vehicle traffic for the applicable milepost of any California highway can be determined through the Caltrans web site at <http://traffic-counts.dot.ca.gov/>. Develop hourly emissions rates for input into the air model. The model provides annual average PM_{2.5} concentrations that can be compared directly against the thresholds.

A more detailed analysis is required for estimating the risk and hazard evaluation. TAC emissions were evaluated for only those toxic compounds found in diesel or gasoline fuel including diesel PM, benzene, ethylbenzene, acrolein, etc. The District recommends using the CAL3QHCR model. The model must be run separately to estimate emissions from diesel PM and emission of other TAC. In each analysis, the District recommends developing diesel specific emission factors from EMFAC. Because risk and hazard are expressed as lifetime exposure, the emissions were averaged from 2012 to 2040 that accounts for more efficient vehicle emissions and increased VMT. Beyond 2040, the EMFAC model does not have emissions and consequently, the 2040 emissions were applied from 2040 to 2082, to complete a 70-year lifetime exposure.

Annual average traffic volumes were used in the model. As specified in Regulation 2, Rule 5, BAAQMD recommends that age sensitivity factors be applied to the emissions per year to account for early life-stage exposures. The cancer risk and hazard levels are calculated using the predicted annual average concentrations multiplied by the cancer slope factor for cancer risk or divided by the relative exposure levels for hazard.

The risk and hazard levels are then compared against the applicable thresholds. Further assessment may be warranted if the thresholds are exceeded, but the project sponsor may consider design changes and other mitigation measures as a means of reducing potential risks (see Section 5.4). For detailed discussion on this methodology, the project sponsor should download the online report [*Recommended Methodology for Screening and Modeling Local Risks and Hazards*](#).

5.3. CUMULATIVE IMPACTS

5.3.1. Significance Determination

A Lead Agency shall examine TAC and/or PM_{2.5} sources that are located within 1,000 feet of a proposed project site. Sources of TACs include, but are not limited to, land uses such as freeways and high volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. Land uses that contain permitted sources, such as a landfill or manufacturing plant, may also contain non-permitted TAC and/or PM_{2.5} sources, particularly if they host a high volume of diesel truck activity. A Lead Agency should determine what the combined risk levels are from all nearby TAC sources in the vicinity of sensitive receptors. Lead agencies should use their judgment to decide if there are significant sources outside 1,000 feet that should be included.

A Lead Agency's analysis shall determine whether TAC and/or PM_{2.5} emissions generated as part of a proposed project would expose off-site receptors to risk levels that exceed BAAQMD's applicable *Thresholds of Significance* for determining cumulative impacts.

A project would have a cumulative significant impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000 foot radius (or beyond where appropriate) from the fence line of a source, or from the location of a receptor, plus the contribution from the project, exceeds the following:

- An excess cancer risk levels of more than 100 in one million or a chronic hazard index greater than 10 for TACs; or
- 0.8 $\mu\text{g}/\text{m}^3$ annual average $\text{PM}_{2.5}$.

Within impacted communities identified under BAAQMD's CARE program, the Lead Agency is encouraged to develop and adopt a Community Risk Reduction Plan. To determine whether a new source is located in an impacted community, the Lead Agency should refer to Figure 5-1 and the [CARE webpage](#). Please consult with BAAQMD if a more precise map is needed.

BAAQMD recommends that cumulative impacts of new sources and new receptors be evaluated as described in Section 5.2, and include the impacts of all individual sources (stationary and roadways) within the 1,000 foot radius.

Community risk and hazards analyses should follow guidance developed by BAAQMD for risk screening described in *Recommended Methodology for Screening and Modeling Local Risks and Hazards*, which generally follows CAPCOA's guidance document titled *Health Risk Assessments for Proposed Land Use Projects*. $\text{PM}_{2.5}$ concentrations and risk levels estimated for the locations where receptors may be located should be compared to BAAQMD's applicable *Threshold of Significance* for siting a new receptor near existing sources of TAC emissions.

A Lead Agency shall compare the analysis results from TAC and $\text{PM}_{2.5}$ emissions with the applicable *Threshold of Significance*. *Thresholds of Significance* apply for projects that would site new permitted or non-permitted sources in close proximity to receptors and for projects that would site new sensitive receptors in close proximity to permitted or non-permitted sources of TAC emissions. If a proposed project would not exceed BAAQMD's applicable *Threshold of Significance* for TACs or $\text{PM}_{2.5}$, then the project would result in a less-than-significant air quality impact. If a project would exceed the applicable *Threshold of Significance*, the proposed project would result in a significant air quality impact and the Lead Agency should implement all feasible mitigation to reduce the impact (refer to Section 5.4).

If implementation of BAAQMD-recommended mitigation measures for reducing TAC and $\text{PM}_{2.5}$ emissions and resultant exposure to health risks would reduce all TAC impacts to levels below the applicable *Threshold of Significance*, TAC impacts would be reduced to a less-than-significant level. If resultant health risk exposure would still exceed the applicable *Threshold of Significance*, the impacts would remain significant and unavoidable.

5.4. COMMUNITY RISK REDUCTION PLANS

The goal of a Community Risk Reduction Plan would be to bring TAC and $\text{PM}_{2.5}$ concentrations for the entire community covered by the Plan down to acceptable levels as identified by the local jurisdiction and approved by the Air District. This approach provides local agencies a proactive alternative to addressing communities with high levels of risk on a project-by-project approach. The Air District has developed detailed guidelines for preparing Community Risk Reduction Plans which can be found on the Air District web site at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx>.



Qualified Community Risk Reduction Plans

A qualified Community Risk Reduction Plan adopted by a local jurisdiction should include, at a minimum, the following elements:

- (A) Define a planning area;
- (B) Include base year and future year emissions inventories of TACs and PM_{2.5};
- (C) Include Air District–approved risk modeling of current and future risks;
- (D) Establish risk and exposure reduction goals and targets for the community in consultation with Air District staff;
- (E) Identify feasible, quantifiable, and verifiable measures to reduce emissions and exposures;
- (F) Include procedures for monitoring and updating the inventory, modeling and reduction measures in coordination with Air District staff;
- (G) Be adopted in a public process following environmental review.

5.5. MITIGATING LOCAL COMMUNITY RISK AND HAZARD IMPACTS

For stationary sources, please refer to [BAAQMD's permit handbook and BACT/T-BACT workbook](#). BAAQMD-recommended mitigation measures for reducing the exposure of sensitive receptors to TACs and hazards include the following:

1. Increase project distance from freeways and/or major roadways.
2. Redesign the site layout to locate sensitive receptors as far as possible from any freeways, major roadways, or other non-permitted TAC sources (e.g., loading docks, parking lots).
3. In some cases, BAAQMD may recommend site redesign. BAAQMD will work closely with the local jurisdiction and project consultant in developing a design that is more appropriate for the site.
4. Large projects may consider phased development where commercial/retail portions of the project are developed first. This would allow time for CARB's diesel regulations to effectively reduce diesel emissions along major highways and arterial roadways. Ultimately lower concentrations would be predicted along the roads in the near future such that residential development would be impacted by less risk in later phases of development.
5. Projects that propose sensitive receptors adjacent to sources of diesel PM (e.g., freeways, major roadways, rail lines, and rail yards) shall consider tiered plantings of trees such as redwood, deodar cedar, live oak and oleander to reduce TAC and PM exposure. This recommendation is based on a laboratory study that measured the removal rates of PM passing through leaves and needles of vegetation. Particles were generated in a wind tunnel and a static chamber and passed through vegetative layers at low wind velocities. Redwood, deodar cedar, live oak, and oleander were tested. The results indicate that all forms of vegetation were able to remove 65–85 percent of very fine particles at wind velocities below 1.5 meters per second (approximately 3 miles per hour [mph]) with redwood and deodar cedar being the most effective. Even greater

removal rates were predicted for ultra-fine PM (i.e., aerodynamic resistance diameter of 0.1 micrometer or less).

6. Install and maintain air filtration systems of fresh air supply either on an individual unit-by-unit basis, with individual air intake and exhaust ducts ventilating each unit separately, or through a centralized building ventilation system. The ventilation system should be certified to achieve a certain effectiveness, for example, to remove at least 80% of ambient PM_{2.5} concentrations from indoor areas. The air intake for these units should be located away from areas producing the air pollution (i.e., away from major roadways and highways).
7. Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).
8. Locate air intakes and design windows to reduce PM exposure (e.g., windows nearest to the freeway do not open).
9. Install indoor air quality monitoring units in buildings.
10. Require rerouting of nearby heavy-duty truck routes.
11. Enforce illegal parking and/or idling of heavy-duty trucks in vicinity.



6. LOCAL CARBON MONOXIDE IMPACTS



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Emissions and ambient concentrations of CO have decreased dramatically in the SFBAAB with the introduction of the catalytic converter in 1975. No exceedances of the CAAQS or NAAQS for CO have been recorded at nearby monitoring stations since 1991. SFBAAB is currently designated as an attainment area for the CAAQS and NAAQS for CO; however, elevated localized concentrations of CO still warrant consideration in the environmental review process. Occurrences of localized CO concentrations, known

as hotspots, are often associated with heavy traffic congestion, which most frequently occur at signalized intersections of high-volume roadways.

6.1. SIGNIFICANCE DETERMINATION

Step 1: Comparison of Project Attributes with Screening Criteria

The first step in determining the significance of CO emissions is to compare the attributes of the proposed project to the applicable *Screening Criteria* (refer to Chapter 3).

This preliminary screening procedure provides a conservative indication of whether the proposed project would result in the generation of CO concentrations that would substantially contribute to an exceedance of the *Thresholds of Significance*. If all of the *Screening Criteria* are met, the proposed project would result in a less-than-significant impact to air quality with respect to concentrations of local CO. If the proposed project does not meet all the screening criteria, then CO emissions should be quantified.

Step 2: Emissions Quantification

This section describes recommended methodologies for quantifying concentrations of local CO for proposed projects that do not meet all of the *Screening Criteria*. The recommended methodology is to use both the On-Road Mobile-Source Emission Factors (EMFAC) and the California Line Source Dispersion Model (CALINE4) models in accordance with recommendations in the University of California, Davis, Transportation Project-Level Carbon Monoxide Protocol (*CO Protocol*) (Garza, et al. 1997).

Air Quality Models

BAAQMD recommends using the most current version of the EMFAC model to obtain mobile-source emission factors for CO associated with operating conditions that would be representative of the roadway or facility subject to analysis.

Users should input the emission factors and other input parameters into the CALINE4 model to quantify CO concentrations near roadways or facilities.

The CO Protocol contains detailed methodology for modeling CO impacts.

Input Parameters

The CALINE4 model contains five screens for input data. CALINE4 input parameters are summarized below. For more detailed descriptions see the [CALINE4 Users Guide](#).

Job Parameters

File Name – Name the file (e.g., data file extension) to create the CALINE4 Input file.

Job Title – Provide a name for the modeling scenario (e.g., existing no project, existing plus project).

Run Type – Select the worst-case wind angle.

Aerodynamic Roughness Coefficient – Choose the characteristic (i.e., rural, suburban, central business district, other) that is most representative of the project site.

Model Information – Indicate the unit of measurement (i.e., meters or feet) and inputs the vertical dimension of the project (i.e., altitude above sea level).

Run – Once data input is completed, return to this screen to run the model. Upon running the model, the output will appear as a text file called C4\$.out. Save the output file under an appropriate filename for future reference.

Link Geometry

On this screen, input the dimensions (i.e., coordinates) for the roadway intersection that is the subject of the analysis.

Link Name – Input names for each roadway segment.

Link Type – Indicate the character of the roadway segment (i.e., at-grade, depressed, fill, bridge, parking lot).

Endpoint Coordinates (X₁, X₂, Y₁, Y₂) – Input the dimensions (i.e., coordinates) of the roadway segments as though the intersection were oriented at point of origin X = 0, Y = 0 on a Cartesian coordinate system. Roadway segments approaching the intersection from the west side of the screen (if north is treated as “up”, or the top of the screen) would have negative X coordinate endpoints. Similarly, roadway segments approaching the intersection from the south would have negative Y coordinate endpoints.

Link Height – Indicate the vertical dimension of the roadway segment. If the roadway segment is at-grade, should set this parameter to zero. If the roadway segment is depressed, enter a negative value for this parameter.

Mixing Zone Width – The Mixing Zone is defined as the width of the roadway, plus three meters on either side. The minimum allowable value is 10 meters, or 32.81 feet.

Canyon/Bluff (Mix Left/Right) – Set these features to zero.

Link Activity

Traffic Volume – Input hourly traffic volumes applicable to each roadway segment.

Emission Factor – Input the CO emission factor (in units of grams/mile) obtained from EMFAC for the applicable vehicle speed class reflecting operating conditions for the affected intersection.

Run Conditions

Wind Speed – Input 0.5 meters per second to represent worst-case conditions.



Wind Direction – Set parameter to zero. Select “Worst-Case Wind Angle” as the “Run Type” on the “Job Parameters” screen, so this field will be overridden by the model.

Wind Direction Standard Deviation – Use a wind direction standard deviation of 5 degrees to represent worst-case conditions.

Atmospheric Stability Class – Use Stability Class 4 (i.e., class D) to represent average conditions in the SFBAAB.

Mixing Height – Indicate the vertical dimension over which vertical mixing may occur. In most situations, input 300 meters, approximately the height of the atmospheric boundary layer. If the roadway subject to analysis is a bridge underpass, tunnel, or other situation where vertical mixing would be limited, indicates the height of the structure that would hamper vertical mixing (in units of meters).

Ambient Temperature – Indicate the average temperature of the project site during the time of day at which maximum daily traffic volume would occur (in degrees Celsius). A temperature of 7.2 degrees Celsius is recommended.

Ambient Pollutant Concentration – Enter 0 in this field to determine the contribution of CO from the roadway subject to analysis. Add the roadway-related CO concentration to ambient CO levels outside of the CALINE4 model, as discussed later in this section.

Receptor Positions

Receptor Name – Input names for each receptor.

Receptor Coordinates (X, Y, Z) – Input receptor coordinates in a manner similar to the “Link Coordinates” on the “Link Geometry” screen. Locate receptors at three and seven meters from the intersection in all directions from the intersection, in accordance with the recommendations of the *CO Protocol*. The Receptor Coordinates are oriented in the same Cartesian coordinate system as the roadway segment “Link Coordinates.” Receptors located to the southwest of the intersection would have negative X and Y coordinates. The Z dimension should be assigned the coordinate of 1.8 meters (5.9 feet); the approximate breathing height of a receptor located adjacent to the roadway.

This screen also contains a window that shows a map of the link and receptor coordinates in the X, Y plane.

Model Output

CALINE4 output includes estimated 1-hour CO concentrations in units of ppm at the receptor locations input into the model. Note the highest concentrations at each of the three meter and seven meter receptor distances from the roadway.

Background Concentrations

Ambient 1-hour CO concentrations can be obtained from [ARB air quality monitoring station data](#) and 8-hour concentrations from [EPA](#). Users should obtain the CO monitoring data recorded at the monitoring station nearest the project site. According to the *CO Protocol*, select the second highest concentration recorded during the last two years to represent the ambient CO concentration in the project area.

Estimated Localized CO Concentrations

Users should sum the highest modeled 1-hour CO concentration in units of ppm obtained from CALINE4 to ambient (background) 1-hour CO concentrations in ppm obtained from ARB. This represents the modeled worst-case 1-hour CO concentration near the affected roadway.

Persistence Factor – multiply the highest 1-hour CO concentration estimated by CALINE4 by a persistence factor of 0.7, as recommended in the CO Protocol, to obtain the estimated 8-hour CO concentration.

Add the estimated 8-hour CO concentration (ppm) obtained in the previous step to the ambient 8-hour CO concentration obtained from EPA (ppm). This represents the modeled worst-case 8-hour CO concentration near the affected roadway.

Step 3: Comparison of Unmitigated Emissions with Thresholds of Significance

Following quantification of local CO emissions in accordance with the recommended methods, compare the total modeled worst-case 1-hour and 8-hour CO concentrations with the applicable *Threshold of Significance*. If the modeled concentrations do not exceed any of the *Thresholds of Significance*, the project would result in a less-than-significant impact to air quality. If modeled concentrations do exceed any applicable *Threshold of Significance*, the proposed project would result in a significant impact to air quality with respect to local CO impacts.

Step 4: Mitigation Measures and Emission Reductions

Where local CO emissions exceed applicable *Thresholds of Significance*, refer to Section 6.2 for recommended mitigation measures and associated emission reductions. Only reduction measures included in the proposed project or recommended as mitigation in a CEQA-compliant document can be included when quantifying mitigated emission levels.

Step 5: Comparison of Mitigated Emissions with Thresholds of Significance

Following quantification of local CO emissions in accordance with the recommended methods, compare the total modeled worst-case 1-hour and 8-hour CO concentrations with the applicable *Thresholds of Significance*. If the implementation of recommended mitigation measures reduces all local CO emissions to levels below the applicable *Thresholds of Significance*, the impact to air quality would be reduced to a less-than-significant level. If mitigated levels of local CO emissions still exceed the applicable *Threshold of Significance*, the impact to air quality would remain significant and unavoidable.

6.2. MITIGATING LOCAL CARBON MONOXIDE IMPACTS

The following section describes recommended mitigation measures for reducing local CO impacts to air quality. Consider implementation of the following measures, as feasible, for reducing project-generated traffic volumes and associated CO emissions at affected intersections. Actual emission reductions should be quantified through project-specific transportation modeling.

1. Synchronize traffic signals to improve traffic flow and minimize traffic congestion.
2. Consider additional traffic signals, such as light metering, to relocate congested areas further away from receptors.
3. Improve public transit service to reduce vehicle traffic and increase public transit mode share during peak traffic congestion periods.
4. Improve bicycle and pedestrian infrastructure to reduce vehicle traffic and increase bicycle and pedestrian mode share during peak traffic congestion periods. Improvements may include installing class I or II bike lanes, sidewalks, and traffic calming features.
5. Adjust pedestrian crosswalk signal timing to minimize waiting time for vehicles turning right or otherwise sharing green time with pedestrians. Give pedestrians a head start before traffic signal changes to green.



6. Where pedestrian traffic is high, implement pedestrian crosswalks with multi-directional crossings allowing pedestrians to cross intersections diagonally.
7. Limit heavy-duty truck traffic during peak hours. Designate truck routes that divert truck traffic away from congested intersections.
8. Limit left turns or other maneuvers during peak hours that add to congestion.
9. Limit on-street parking during peak hours to allow for added vehicle capacity.
10. Implement traffic congestion-alleviating mitigation measures as identified by a traffic engineer.

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7. ODOR IMPACTS⁵

Odor impacts could result from siting a new odor source near existing sensitive receptors or siting a new sensitive receptor near an existing odor source. Examples of land uses that have the potential to generate considerable odors include, but are not limited to:

1. Wastewater treatment plants;
2. Landfills;
3. Confined animal facilities;
4. Composting stations;
5. Food manufacturing plants;
6. Refineries; and
7. Chemical plants.

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word strong to describe the intensity of an odor. Odor intensity depends on the concentration in the air. When an odor sample is progressively diluted, the odor concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odor reaches a level that is no longer detectable.

The presence of an odor impact is dependent on a number of variables including:

1. Nature of the odor source (e.g., wastewater treatment plant, food processing plant);
2. Frequency of odor generation (e.g., daily, seasonal, activity-specific);
3. Intensity of odor (e.g., concentration);
4. Distance of odor source to sensitive receptors (e.g., miles);
5. Wind direction (e.g., upwind or downwind); and
6. Sensitivity of the receptor.

The recommendations provided in this chapter only apply to assessing and mitigating odor impacts for individual projects. Please refer to Chapter 9 for recommendations for assessing and mitigating odor impacts at the plan-level.

⁵ The use of the receptor thresholds is discussed in section 2.8 of these Guidelines

7.1. SIGNIFICANCE DETERMINATION

Odor impacts could occur from two different situations:

1. Siting a new odor source (e.g., the project includes a proposed odor source near existing sensitive receptors), or
2. Siting a new receptor (e.g., the project includes proposed sensitive receptors near an existing odor source).

Regardless of the situation, BAAQMD recommends completing the following steps to comprehensively analyze the potential for an odor impact.

Step 1: Disclosure of Odor Parameters

The first step in assessing potential odor impacts is to gather and disclose applicable information regarding the characteristics of the buffer zone between the sensitive receptor(s) and the odor source(s), local meteorological conditions, and the nature of the odor source. Consideration of such parameters assists in evaluating the potential for odor impacts as a result of the proposed project. Projects should clearly state the following information in odor analyses, which provide the minimum amount of information required to address potential odor impacts:

1. Type of odor source(s) the project is exposed to or the type of odor source(s) produced by the project (e.g., wastewater treatment plant, landfill, food manufacturing plant);
2. Frequency of odor events generated by odor source(s) (e.g., operating hours, seasonal);
3. Distance and landscape between the odor source(s) and the sensitive receptor(s) (e.g., topography, land features); and
4. Predominant wind direction and speed and whether the sensitive receptor(s) in question are upwind or downwind from the odor source(s).

Step 2: Odor Screening Distances

BAAQMD has developed a list of recommended odor screening distances for specific odor-generating facilities shown in Table 3-3. Projects that would locate sensitive receptor(s) to odor source(s) closer than the screening distances would be considered to result in a potential significant impact. If the proposed project would include the operation of an odor source, the screening distances should also be used to evaluate the potential impact to existing sensitive receptors. Projects that would locate sensitive receptor(s) near odor source(s) farther than the screening distances, or vice versa, would be considered to have a sufficient buffer to avoid significant impacts. The odor screening distances in Table 3-3 should not be used as absolute thresholds, rather an indicator to how much further analysis is required. The Lead Agency should also consider the other parameters listed above in Step 1 and information from Step 3 below to comprehensively evaluate potential odor impacts.

Step 3: Odor Complaint History

The impact of an existing odor source on surrounding sensitive receptors should also be evaluated by identifying the number of confirmed complaints received for that specific odor source.

Facilities that are regulated by CalRecycle (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency's discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CalRecycle regulated facilities with an adopted OIMP.



If the proposed project would be located near an existing odor source, lead agencies should contact BAAQMD to obtain the odor complaints over the past 3 years for the source in question. Then calculate the annual average confirmed odor complaints filed for the source. BAAQMD considers a source to have a substantial number of odor complaints if the complaint history includes five or more confirmed complaints per year averaged over a 3-year period. Also, disclose the distance at which receptors were affected by the existing odor source. As discussed in Step 1, describe the topography and landscape between the receptors and the odor source. These distances and landscaping should then be compared with the distance and landscape that would separate the proposed project and the odor source.

If the proposed project would locate an odor source, first identify the location of potential sensitive receptors (i.e., distance, upwind/downwind) with respect to the project site. If the proposed odor source does not have any existing or planned sensitive receptors within the screening distances shown in Table 3-3, it may be considered less than significant for odor impacts. To evaluate how implementation of the proposed source project would affect identified sensitive receptors contact BAAQMD to obtain odor complaints in the region for facilities similar in size and type of odor produced in the past 3 years. These surrogate odor complaints should be evaluated for their distance from source to receptor, and then compared with the distance from the proposed project to receptors. Odor complaints from the surrogate odor source are considered substantial if the complaint history includes more than five confirmed complaints per year averaged over a 3-year period.

BAAQMD considers a substantial number of odor complaints, specifically, more than five confirmed complaints per year averaged over the past three years as the indication of an odor impact. As discussed above, the Lead Agency should compare the odor parameters (i.e., distance and wind direction) associated with the odor complaints that have been filed with those of the proposed project. Similar to the odor screening distances, odor complaints should not be used as an absolute threshold, but evidence to support a significance determination.

Step 4: Significance Determination

An odor source with five or more confirmed complaints per year averaged over three years is considered to have a significant impact. BAAQMD recognizes that there is not one piece of information that can solely be used to determine the significance of an odor impact. The factors (i.e., Step 1 through 3) discussed above could enhance the potential for a significant odor impact or help prevent the potential for a significant odor impact. For example, a project that would be located near an existing odor source may not discover any odor complaints for the existing odor source. It is possible that factors such as a small number of existing nearby receptors, predominate wind direction blowing away from the existing receptors, and/or seasonality of the odor source has prevented any odor complaints from being filed about the existing odor source. The results of each of the steps above should be clearly disclosed in the CEQA document. Projects should use the collective information from Steps 1 through 3 to qualitatively evaluate the potential for a significant odor impact. The Lead Agency should clearly state the reasoning for the significance determination using information from Steps 1 through 3 to support the determination.

7.2. MITIGATING ODOR IMPACTS

BAAQMD considers appropriate land use planning the primary method to mitigate odor impacts. Providing a sufficient buffer zone between sensitive receptors and odor sources should be considered prior to analyzing implementation of odor mitigation technology. Projects that would include potential sensitive receptors should consider the odor parameters, discussed in Step 1 above, during the planning process to avoid siting receptors near odor sources. Similarly, projects

that would include an odor source should consider the location of nearby existing sensitive receptors that could be affected by the project.

The source types for which mitigation has been provided below have been selected based on the nature of the odors produced as a result of their operational activities. These land use types are those most likely to result in odor impacts if sensitive receptors are located in close proximity. This should not be considered an exhaustive list and due to the subjective nature of odor impacts, there is no formulaic method to assess if odor mitigation is sufficient. In determining whether the implementation of mitigation would reduce the potential odor impact to a less-than-significant level, rely on the information obtained through the steps above.

7.2.1. Wastewater Treatment Plant

Main odor sources for wastewater treatment plants typically are the headworks area where the wastewater enters the facility and large solids and grit are removed, the primary clarifiers where suspended solids are removed, and the aeration basins when poor mixing characteristics lead to inadequate dissolved oxygen levels. Lead agencies should consider applying the following odor mitigation measures to wastewater treatment plants.

1. Activated Carbon Filter/Carbon adsorption
2. Biofiltration/Bio Trickling Filters
3. Fine Bubble Aerator
4. Hooded Enclosures
5. Wet and Dry Scrubbers
6. Caustic and Hypochlorite Chemical Scrubbers
7. Ammonia Scrubber
8. Energy Efficient Blower System
9. Thermal Oxidizer
10. Capping/Covering Storage Basins and Anaerobic Ponds
11. Mixed Flow Exhaust
12. Wastewater circulation technology
13. Exhaust stack and vent location with respect to receptors

7.2.2. Landfill/Recycling/Composting Facilities

Odors generated from landfills and composting facilities are typically associated with methane production from the anaerobic decomposition of waste. Lead agencies should consider applying the mitigation measures below to reduce and treat methane in facilities. Landfill projects should also implement best management practices to avoid and minimize the creation of anaerobic conditions.

1. Passive Gas Collection
2. Active Gas Collection
3. Flaring or energy production/utilization
4. Vegetation Growth on Landfill Cover
5. Cover/Cap Landfill
6. Odor Neutralizing Spray
7. Negative aeration for compost facilities
8. Turning and mixing of compost piles



Facilities that are regulated by CalRecycle (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency's discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CalRecycle regulated facilities with an adopted OIMP.

7.2.3. Petroleum Refinery

Odors generated from materials and processes associated with petroleum refineries include, but are not limited to, H₂S, SO₂, mercaptan, ammonia (NH₃), and petroleum coke. Installing the following current and feasible odor mitigation measures for petroleum refineries should be considered.

1. Water Injections to Hydrocracking Process
2. Vapor recovery system
3. Injection of masking odorants into process streams
4. Flare meters and controls
5. Wastewater circulation technology for Aerated Ponds
6. Exhaust stack and vent location with respect to receptors
7. Thermal oxidizers
8. Carbon absorption
9. Biofiltration/Bio Trickling Filters

7.2.4. Chemical Plant

Chemical plants can generate a variety of different odors (e.g., acrylates, phenols, and styrene) as a result of process emissions. The range of odor mitigation measures required for chemical plants may vary substantially depending on the type of odors produced. The odor mitigation measures could be applied to chemical plants.

1. Wet scrubbers (50–90 percent efficiency)
2. Catalytic oxidation (99 percent efficiency)
3. Thermal oxidation (90–99 percent efficiency)
4. Carbon adsorption (95 percent efficiency)
5. Exhaust stack and vent location with respect to receptors



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7.2.5. Food Services

Restaurants, especially fast food restaurants, can generate substantial sources of odors as a result of cooking processes and waste disposal. Char broilers, deep-fryers, and ovens tend to produce food odors that can be considered offensive to some people. The food waste produced by restaurants can putrefy if not properly managed, which can also produce objectionable odors. The follow mitigation measures are management practices and odor technology that can be used to reduce the amount odors generated by food services.

1. Integral grease filtration system or grease removal system
2. Baffle filters
3. Electrostatic precipitator
4. Water cooling/cleaning unit
5. Disposable pleated or bag filters

6. Activated carbon filters
7. Oxidizing pellet beds
8. Incineration
9. Catalytic conversion
10. Proper packaging and frequency of food waste disposal
11. Exhaust stack and vent location with respect to receptors

In conclusion, odor impacts can also be minimized, contained, or prevented by implementing technologies and design measures at the source, or through planning-based measures. Where odor sources and receptors cannot be physically separated to a degree where impacts would be minimized to less-than-significant level, disclosures of odor sources to prospective tenants of sensitive land uses should be used. Mitigation for odors that is both effective and feasible shall be selected on a case-by-case basis.



8. CONSTRUCTION-RELATED IMPACTS

Construction-related activities are those associated with the building of a project or plan components. Construction activities are typically short-term or temporary in duration; however, project-generated emissions could represent a significant impact with respect to air quality and/or global climate change. Construction-related activities will result in the generation of criteria air pollutants including carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM₁₀, and PM_{2.5}); precursor emissions such as, reactive organic gases (ROG) and oxides of nitrogen (NO_x), and GHGs from exhaust, fugitive dust, and off-gas emissions. Sources of exhaust emissions could include on-road haul trucks, delivery trucks, worker commute motor vehicles, and off-road heavy-duty equipment. Sources of fugitive emissions (e.g., PM dust) could include construction-related activities such as soil disturbance, grading, and material hauling. Sources of off-gas emissions could include asphalt paving and the application of architectural coatings.

The recommendations provided in this chapter only apply to assessing and mitigating construction-related impacts for individual projects. Construction-related assumptions and project-specific information assumed in CEQA analyses should accompany the quantitative analysis described below. Refer to Chapter 9 for recommendations for assessing and mitigating construction-related impacts at the plan level.

8.1. CRITERIA AIR POLLUTANTS AND PRECURSORS

8.1.1. Significance Determination

Step 1: Comparison of Project Attributes with Screening Criteria

The first step in determining the significance of construction-related criteria air pollutants and precursors is to compare the attributes of the proposed project with the applicable *Screening Criteria* listed in Chapter 3. If all of the *Screening Criteria* are met, construction of the proposed project would result in a less-than-significant impact to air quality. If not, then construction emissions need to be quantified.

Step 2: Emissions Quantification

BAAQMD recommends using URBEMIS to quantify construction emissions for proposed land use development projects and the Roadway Construction Emissions Model (RoadMod) for proposed linear projects such as, new roadway, roadway widening, or pipeline installation). The most current URBEMIS (currently version 9.2.4) should be used for emission quantification. Table 8-5 outlines summary guidelines for using URBEMIS. Refer to Appendix B for detailed instructions for modeling construction-generated emissions using URBEMIS and RoadMod.



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Step 3: Comparison of Unmitigated Emissions with Thresholds of Significance

Following quantification of project-generated construction-related emissions, the total average daily emissions of each criteria pollutant and precursor should be compared with the applicable *Threshold of Significance*. For instance, with respect PM₁₀ and PM_{2.5}, compare the total amount of emissions from both exhaust and fugitive sources with the applicable *Threshold of Significance*. If construction-related emissions have been quantified using multiple models or

model runs, sum the criteria air pollutants and precursor levels from each where said activities would overlap. In cases where the exact timing of construction activities is not known, sum any phases that could overlap to be conservative.

If daily average emissions of construction-related criteria air pollutants or precursors would not exceed any of the *Thresholds of Significance*, the project would result in a less-than-significant impact to air quality. If daily average emissions of construction-related criteria air pollutants or precursors would exceed any applicable *Threshold of Significance*, the proposed project would result in a significant impact to air quality and would require mitigation measures for emission reductions.

Step 4: Mitigation and Emission Reductions

For all proposed projects, BAAQMD recommends the implementation of all *Basic Construction Mitigation Measures* (Table 8.2) whether or not construction-related emissions exceed applicable *Thresholds of Significance*. In addition, all projects must implement any applicable air toxics control measures (ATCM). For example, projects that have the potential to disturb asbestos (from soil or building material) must comply with all the requirements of ARB's ATCM for Construction, Grading, Quarrying, and Surface Mining Operations. Only reduction measures included in the proposed project's description or recommended as mitigation in a CEQA-compliant environmental document can be included when quantifying mitigated emission levels. Refer to Appendix B for detailed instructions on how to use URBEMIS to quantify the effects of construction emissions mitigation measures.

Step 5: Comparison of Mitigated (Basic Mitigation) Emissions with Thresholds of Significance

Following quantification of project-generated construction-related emissions, compare the total average daily amount of mitigated (with implementation of *Basic Construction Mitigation Measures*) criteria air pollutants and precursors with the applicable *Thresholds of Significance*. If the implementation of BAAQMD-recommended *Basic Construction Mitigation Measures* would reduce all construction-related criteria air pollutants and precursors to levels below the applicable *Thresholds of Significance*, the impact to air quality would be less than significant. If emissions of any criteria air pollutant or precursor would exceed the applicable *Threshold of Significance*, the impact to air quality would be significant. Table 8-1 provides an example of significance determination methodology.

Step 6: Implement Additional Construction Mitigation Measures

BAAQMD recommends that all proposed projects, where construction-related emissions would exceed the applicable *Thresholds of Significance*, implement the *Additional Construction Mitigation Measures* (Table 8-3). The methodology for quantifying reductions of fugitive PM dust, exhaust, and off gas emissions associated with the implementation of these mitigation measures are discussed separately below (Table 8-3). Keep all of the changes recommended above with regards to the *Basic Construction Mitigation Measures*, as the emission reductions associated with these *Additional Construction Mitigation Measures* are considered additive. Please note that in RoadMod all of these associated reductions should be taken outside of the model, described in further detail in Appendix B.

Step 7: Comparison of Mitigated Emissions with Thresholds of Significance

Following quantification of project-generated construction-related emissions in accordance with the above BAAQMD-recommended methods, compare the total average daily amount of mitigated (with *Additional Construction Mitigation Measures* implemented) criteria air pollutants and precursors with the applicable *Thresholds of Significance*. If the implementation of additional mitigation measures would reduce all construction-related criteria air pollutants and precursors to levels below the applicable *Thresholds of Significance*, the impact to air quality would be reduced



to a less-than-significant level. If mitigated levels of any criteria air pollutant or precursor still exceed the applicable *Threshold of Significance*, the impact to air quality would remain significant and unavoidable.

Table 8-1 Example Construction Criteria Air Pollutant and Precursor Significance Determination					
Step	Emissions Source	Emissions (lb/day or tpy)			
		ROG	NO _x	PM ₁₀	PM _{2.5}
2	Fugitive Dust Emissions	-	-	A	A
	Mobile Sources	B	B	B	B
	Off-gassing	C	-	-	-
3	Total Unmitigated Emissions	B + C = D	B = D	A + B = D	A + B = D
4	Total Basic Mitigated Emissions	E	E	E	E
	BAAQMD Threshold	54 lb/day	54 lb/day	82 lb/day*	54 lb/day*
5	Basic Mitigated Emissions Exceed BAAQMD Threshold?	Is E > 54 lb/day? (If Yes, significant. Go to step 6. If No, less than significant)	Is E > 54 lb/day? (If Yes, significant. Go to step 6. If No, less than significant)	Is B* > 82 lb/day? (If Yes, significant. Go to step 6. If No, less than significant)	Is B* > 54 lb/day? (If Yes, significant. Go to step 6. If No, less than significant)
6	Total Additional Mitigated Emissions	F	F	F	F
7	Additional Mitigated Emissions Exceed BAAQMD Threshold?	Is F > 54 lb/day? (If Yes, significant and unavoidable. If No, less than significant with mitigation incorporated)	Is F > 54 lb/day? (If Yes, significant and unavoidable. If No, less than significant with mitigation incorporated)	Is F* > 82 lb/day? (If Yes, significant and unavoidable. If No, less than significant with mitigation incorporated)	Is F* > 54 lb/day? (If Yes, significant and unavoidable. If No, less than significant with mitigation incorporated)

* Applies to construction equipment exhaust only.

Notes: tpy = tons per year.; lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; Refer to Appendix D for support documentation.

8.1.2. Mitigating Criteria Air Pollutants and Precursors

Basic Construction Mitigation Measures

For all proposed projects, BAAQMD recommends the implementation of all *Basic Construction Mitigation Measures*, listed in Table 8-2, whether or not construction-related emissions exceed applicable *Thresholds of Significance*. Appendix B provides guidance on quantifying mitigated emission reductions using URBEMIS and RoadMod.

Table 8-2 Basic Construction Mitigation Measures Recommended for ALL Proposed Projects	
1.	All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2.	All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3.	All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4.	All vehicle speeds on unpaved roads shall be limited to 15 mph.
5.	All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6.	Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7.	All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8.	Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Additional Construction Mitigation Measures

BAAQMD recommends that all proposed projects, where construction-related emissions would exceed the applicable *Thresholds of Significance*, implement the *Additional Construction Mitigation Measures*. Table 8-3 lists the *Additional Construction Mitigation Measures*. Appendix B contains more detailed guidance on emission reductions by source type (i.e., fugitive dust and exhaust) for quantification in URBEMIS and RoadMod.



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Table 8-3
Additional Construction Mitigation Measures Recommended for Projects with Construction Emissions Above the Threshold

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
9. Minimizing the idling time of diesel powered construction equipment to two minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_x and PM.
13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Assessing Mitigation Measures

Table 8-4 provides a summary of BAAQMD recommendations for assessing construction-related impacts and mitigation measures using URBEMIS. Detailed guidance is provided in Appendix B.

Table 8-4 URBEMIS Guidance for Assessing Construction-Related Impacts	
URBEMIS Construction Input Parameter	Guidance Principle
Land Use Type and Size	<ul style="list-style-type: none"> • Select most applicable land use type. • Use the appropriate land use units.
Construction Schedule	<ul style="list-style-type: none"> • Use the earliest possible commencement date(s) if project-specific information is unknown. • Overlap phases that will or have the potential to occur simultaneously. • Check the selected number of work days per week to ensure an accurate number of construction work days for each phase.
Demolition Phase	<ul style="list-style-type: none"> • Use a separate demolition URBEMIS run if the land use size to be developed differs from the land use size to be demolished. • Demolition fugitive dust is based on maximum daily volume of building to be demolished. • Demolition construction equipment is based on acres of land use to be demolished (in <i>Enter Land Use Data</i> module).
Site Grading Phase	<ul style="list-style-type: none"> • Site grading construction equipment is based on maximum daily acres disturbed. • Enter project-specific maximum daily acres disturbed if known, otherwise URBEMIS assumes the maximum daily amount of acres disturbed is 25 percent of total acres disturbed.
Site Grading Fugitive Dust	<ul style="list-style-type: none"> • Select the appropriate fugitive dust quantification methodology based on the amount and type of project-specific information available. • The more specific grading information available will result in more accurate quantification of PM emissions.
Asphalt Paving Phase	<ul style="list-style-type: none"> • Acres to be asphalt paved are based on land use type and size (in <i>Enter Land Use Data</i> module). • Asphalt paving construction equipment is based on total acres to be paved. • Assumes asphalt paving occurs at equal rate throughout phase. • Account for excess asphalt paving requirements of project beyond default assumptions by adjusting the acres to be paved.
Architectural Coatings	<ul style="list-style-type: none"> • Assumes architectural coating operations occur at equal rate throughout phase.
Basic Construction Mitigation Measures	<ul style="list-style-type: none"> • All projects must implement Basic Construction Mitigation Measures, including those below the construction screening levels. • Use surrogate URBEMIS mitigation to account for Basic Construction Mitigation Measures' emission reductions.
Additional Construction Mitigation Measures	<ul style="list-style-type: none"> • Projects with construction emissions that exceed the thresholds are required to implement Additional Construction Mitigation Measures. • Use surrogate URBEMIS mitigation to account for Additional Construction Mitigation Measures' emission reductions.
Other	<ul style="list-style-type: none"> • For all construction phases, the more specific information available will result in more accurate emissions quantification. • When a specific construction schedule is unknown, all phases that could potentially overlap should be added to calculate maximum daily emissions.



8.2. GREENHOUSE GASES

The District does not have an adopted *Threshold of Significance* for construction-related GHG emissions. However, the Lead Agency should quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals. BAAQMD recommends using URBEMIS for proposed land use development projects and RoadMod for proposed projects that are linear in nature. Sources of construction-related GHGs only include exhaust, for which the same detailed guidance as described for criteria air pollutants and precursors should be followed.

The Lead Agency is encouraged to incorporate best management practices to reduce GHG emissions during construction, as applicable. Best management practices may include, but are not limited to: using alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet; using local building materials of at least 10 percent; and recycling or reusing at least 50 percent of construction waste or demolition materials.

8.3. TOXIC AIR CONTAMINANTS

BAAQMD recommends that the same community risk and hazard *Threshold of Significance* for project operations be applied to construction. However, BAAQMD suggests associated impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site receptors, as applicable. The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

BAAQMD has developed guidance for estimating risk and hazards impacts entitled *Recommended Methods for Screening and Modeling Local Risks and Hazards* (May 2010) which also includes recommendations for mitigation of significant risk and hazards impacts. The Air District has also developed a Construction Risk Calculator model that provides distances from a construction site, based on user-provided project date, where the risk impacts are estimated to be less than significant; sensitive receptors located within these distances would be considered to have potentially significant risk and hazards impacts from construction. The Construction Risk Calculator can be downloaded from the Air District web site at:

<http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx>.

8.3.1. Diesel Particulate Matter

Construction-related activities could result in the generation of TACs, specifically diesel PM, from on-road haul trucks and off-road equipment exhaust emissions. Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (ARB 2005). In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. This results in difficulties with producing accurate estimates of health risk. Additionally, the implementation of the *Basic Construction Mitigation Measures* (table 8-2), which is recommended for all proposed projects, would also reduce diesel PM exhaust emissions.

However, these variability issues associated with construction do not necessarily minimize the significance of possible impacts.

The analysis shall disclose the following about construction-related activities:

1. Types of off-site receptors and their proximity to construction activity within approximately 1,000 feet;
2. Duration of construction period;
3. Quantity and types of diesel-powered equipment;
4. Number of hours equipment would be operated each day;
5. Location(s) of equipment use, distance to nearest off-site sensitive receptors, and orientation with respect to the predominant wind direction;
6. Location of equipment staging area; and
7. Amount of on-site diesel-generated PM_{2.5} exhaust (assuming that all on-site diesel PM_{2.5} exhaust is diesel PM) if mass emission levels from construction activity are estimated.

In cases where construction-generated emissions of diesel PM are anticipated to occur in close proximity to sensitive receptors for extended periods of time, lead agencies are encouraged to consult with BAAQMD.

8.3.2. Demolition and Renovation of Asbestos-Containing Materials

Demolition of existing buildings and structures would be subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing). BAAQMD Regulation 11, Rule 2 is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the national emissions standards for asbestos along with some additional requirements. The rule requires the Lead Agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity. This notification includes a description of structures and methods utilized to determine whether asbestos-containing materials are potentially present. All asbestos-containing material found on the site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of material containing asbestos. Therefore, projects that comply with Regulation 11, Rule 2 would ensure that asbestos-containing materials would be disposed of appropriately and safely. By complying with BAAQMD Regulation 11, Rule 2, thereby minimizing the release of airborne asbestos emissions, demolition activity would not result in a significant impact to air quality.

Because BAAQMD Regulation 11, Rule 2 is in place, no further analysis about the demolition of asbestos-containing materials is needed in a CEQA document. BAAQMD does recommend that CEQA documents acknowledge and discuss BAAQMD Regulation 11, Rule 2 to support the public's understanding of this issue.

8.3.3. Naturally Occurring Asbestos

Naturally occurring asbestos (NOA) was identified as a TAC in 1986 by ARB. NOA is located in many parts of California and is commonly associated with ultramafic rocks, according to the California Department of Geology's special publication titled [Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California](#). Asbestos is the common name for a group of naturally occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Ultramafic rocks form in high-temperature environments well below the surface of the earth. By the time they are exposed at the surface by geologic uplift and erosion, ultramafic rocks may be partially to completely altered into a type of metamorphic rock called serpentinite.



Sometimes the metamorphic conditions are right for the formation of chrysotile asbestos or tremolite-actinolite asbestos in the bodies of these rocks, along their boundaries, or in the soil.

For individuals living in areas of NOA, there are many potential pathways for airborne exposure. Exposures to soil dust containing asbestos can occur under a variety of scenarios, including children playing in the dirt; dust raised from unpaved roads and driveways covered with crushed serpentine; grading and earth disturbance associated with construction activity; quarrying; gardening; and other human activities. For homes built on asbestos outcroppings, asbestos can be tracked into the home and can also enter as fibers suspended in the air. Once such fibers are indoors, they can be entrained into the air by normal household activities, such as vacuuming (as many respirable fibers will simply pass through vacuum cleaner bags).

People exposed to low levels of asbestos may be at elevated risk (e.g., above background rates) of lung cancer and mesothelioma. The risk is proportional to the cumulative inhaled dose (quantity of fibers), and also increases with the time since first exposure. Although there are a number of factors that influence the disease-causing potency of any given asbestos (such as fiber length and width, fiber type, and fiber chemistry), all forms are carcinogens.

8.3.4. Mitigating Naturally Occurring Asbestos

BAAQMD enforces CARB's ATCM which regulates NOA emissions from grading, quarrying, and surface mining operations at sites which contain ultramafic rock. The provisions that cover these operations are found specifically in the California Code of Regulations, Section 93105. The ATCM for Construction, Grading, Quarrying and Surface Mining Operations was signed into State law on July 22, 2002, and became effective in the SFBAAB on November 19, 2002. The purpose of this regulation is to reduce public exposure to NOA from construction and mining activities that emit or re-suspend dust which may contain NOA.

The ATCM requires regulated operations engaged in road construction and maintenance activities, construction and grading operations, and quarrying and surface mining operations in areas where NOA is likely to be found, to employ the best available dust mitigation measures to reduce and control dust emissions. Tables 8-2 and 8-3 list a number of dust mitigation measures for construction.

BAAQMD's NOA program requires that the applicable notification forms from the Air District's website be submitted by qualifying operations in accordance with the procedures detailed in the ATCM Inspection Guidelines Policies and Procedures. The Lead Agency shall reference BAAQMD's ATCM Policies and Procedures to determine which NOA Notification Form is applicable to the proposed project ([NOA Notification Forms](#)).

Using the geologic map of the SFBAAB ([Geologic Map](#)), the Lead Agency shall discuss whether a proposed project would be located in "areas moderately likely to contain NOA." If a project would not involve earth-disturbing construction activity in one of these areas or would not locate receptors in one of these areas then it can be assumed that the project would not have the potential to expose people to airborne asbestos particles.

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PART III: ASSESSING & MITIGATING PLAN LEVEL IMPACTS

9. PLAN-LEVEL IMPACTS

Long range plans (e.g., general plan, redevelopment plans, specific plans, area plans, community plans, regional plans, congestion management plans, etc.) present unique challenges for assessing impacts. These plans often contain development strategies for 20-year, or longer, time horizons. They can also provide for a wide range of potential land uses and densities that accommodate all types of development. General plan updates and large specific plans nearly always require the Lead Agency to prepare an Environmental Impact Report (EIR).

Due to the SFBAAB's nonattainment status for ozone and PM, and the

cumulative impacts of growth on air quality, these plans almost always have significant, unavoidable adverse air quality impacts. CEQA requires the Lead Agency to evaluate individual as well as cumulative impacts of general plans, and all feasible mitigation measures must be incorporated within the proposed plan to reduce significant air quality impacts.



This chapter provides guidance on methods to evaluate air quality and climate change impacts of long-range plans prepared within the SFBAAB pursuant to CEQA. The term *general and area plan* refers broadly to discretionary planning activities which may include, but are not limited to the following: general plans, redevelopment plans, specific plans, area plans, community plans, congestion management plans, and annexations of lands and service areas. General and area plans are often subject to program-level analysis under CEQA, as opposed to project-level analysis. As a general principle, the guidance offered within this chapter should be applied to discretionary, program-level planning activities; whereas the project-level guidance offered in other chapters should be applied to individual project-specific approvals, such as a proposed development project.

Air quality impacts from future development pursuant to general or area plans can be divided into construction-related impacts and operational-related impacts. Construction-related impacts are associated with construction activities likely to occur in conjunction with future development allocated by the plan. Operational-related impacts are associated with continued and future operation of developed land uses, including increased vehicle trips and energy use.

Please note that the plan-level approach described here differs for greenhouse gas (GHG) impact assessments. The Air District recommends that when assessing GHG impacts for plans other than regional plans (transportation and air quality plans) and general plans, such as specific plans and area plans, the appropriate thresholds and methodology is the same as project-level GHG impact assessments described in Chapter 4.

Regional plan (transportation and air quality plans) impacts also are assessed differently because of their unique characteristics (regional plans do not establish land use designations) and are subject to a threshold of “no net increase in emissions.”

9.1. CRITERIA AIR POLLUTANTS AND PRECURSOR EMISSIONS

To meet the *Threshold of Significance* for operational-related criteria air pollutant and precursor impacts for plans (other than regional plans), a proposed plan must satisfy the following criteria:

- Consistency with current air quality plan (AQP) control measures (this requirement applies to project-level as well as plan-level analyses).
- A proposed plan's projected VMT or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase.

Air Quality Plan Control Measures

For this threshold, an air quality plan refers to clean air plans, state implementation plans (SIPS), ozone plans, and other potential air quality plans developed by BAAQMD. To date, the Air District's most current plan is the 2010 Clean Air Plan.

The following approach for incorporating current AQP control measures into a plan is also applicable for determining a project's consistency with an air quality plan. CEQA requires lead agencies to determine whether a project is consistent with all applicable air quality plans. In addition, the State CEQA Guidelines sample Environmental Checklist Form (Appendix G), poses the question: "Would the project conflict with or obstruct implementation of the applicable air quality plan?"

BAAQMD recommends that the agency approving a project where an air quality plan consistency determination is required analyze the project with respect to the following questions. If all the questions are concluded in the affirmative, and those conclusions are supported by substantial evidence, the Air District considers the project consistent with air quality plans prepared for the Bay Area.

1. Does the project support the primary goals of the AQP?

The primary goals of the 2010 Bay Area Clean Air Plan (CAP), the current AQP to date, are to:

- Attain air quality standards;
- Reduce population exposure and protecting public health in the Bay Area; and
- Reduce greenhouse gas emissions and protect the climate.

Any project (i.e. project or plan) that would not support these goals would not be considered consistent with the 2010 CAP. The recommended measure for determining project support of these goals is consistency with District-approved CEQA thresholds of significance. Therefore, if approval of a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project would be considered consistent with the 2010 CAP.

2. Does the project include applicable control measures from the AQP?

Agencies approving projects should require that they include all air quality plan control measures that can feasibly be incorporated into the project design or applied as mitigation, or justify the reasons, supported by substantial evidence, why a measure or measures are not incorporated into the project. Projects that incorporate all feasible air quality plan control measures are considered consistent with the 2010 CAP.

The 2010 CAP contains 55 control measures aimed at reducing air pollution in the Bay Area. Along with the traditional stationary, area, mobile source and transportation control measures, the 2010 CAP contains a number of new control measures designed to protect the climate and promote mixed use, compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources. BAAQMD encourages project developers and lead agencies to incorporate these Land Use and Local Impact (LUM) measures and Energy and Climate measures (ECM) into proposed project designs and plan elements.

Refer to Volume II of the 2010 CAP Control Measure for a list of all the control measures and implementation guidance.

3. Does the project disrupt or hinder implementation of any AQP control measures?

If approval of a project would not cause the disruption, delay or otherwise hinder the implementation of any air quality plan control measure, it would be considered consistent with the 2010 CAP. Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path, or proposes excessive parking beyond parking requirements.

Projected VMT and Population Growth

A proposed plan must demonstrate that its projected VMT or vehicle trips (VT) (either measure may be used) is less than or equal to its projected population increase to be considered to have a less than significant impact on criteria air pollutants and precursor emissions.

9.2. GREENHOUSE GASES

California's legislative mandate (AB 32) is to reduce total projected 2020 GHG emissions to 1990 levels, a reduction of approximately 30 percent. To achieve this target, future development must be planned and implemented in the most GHG-efficient manner possible. GHG-efficient development reduces vehicle miles traveled by supporting compact, dense, mixed-use, pedestrian- and bicycle-friendly, transit oriented development. State, regional and local agencies are strongly encouraged to address GHG emissions when updating and/or adopting long-range plans. For local jurisdictions, the general plan is perhaps the best venue for addressing GHG emissions in making meaningful progress toward attaining AB 32 goals while addressing CEQA requirements.



If a long-range plan includes goals, policies, performance standards, and implementation measures achieving GHG emission reductions that can be shown to meet and/or exceed AB 32 mandates, as outlined in Section 4.3, subsequent projects consistent with the plan could be relieved of performing GHG analysis as part of their CEQA compliance.

The *Threshold of Significance* for operational-related GHG impacts of plans employs either a GHG efficiency-based metric of 6.6 MT per SP per year of carbon dioxide equivalent (CO₂e), or a GHG Reduction Strategy option. Unlike the other plan-level thresholds that apply to the different

plans mentioned in Section 9 above, the GHG efficiency threshold may only be applied to general plans. A Lead Agency may also determine that this threshold is appropriate for a GHG Reduction Strategy's 2020 milestone target. GHG Reduction Strategies using this threshold with horizon years beyond 2020 should consider horizon-year goals consistent with climate stabilization predictions identified in the Governor's Executive Order S-03-05.

Step 1. GHG Reduction Strategy Approach

A long-range plan would be assumed to have a less than significant impact related to GHG emissions if the Lead Agency has a qualified GHG Reduction Strategy that is referenced and or integrated within the long-range plan. See Chapter 4 for qualifying criteria for a qualified GHG Reduction Strategy.

If the Lead Agency does not have a qualified GHG Reduction Strategy meeting established criteria, refer to Step 2.

Step 2. GHG Efficiency Approach – Emissions Quantification



BAAQMD recommends quantifying community-wide GHG emissions from a general or area plan through development of a GHG emissions inventory and projections report. The emissions inventory should be conducted for a base year at or before the current year of the plan; and should follow published ARB protocols for municipal and community-wide inventories (when available). The base year inventory should be expressed in terms of metric tons CO_{2e} emissions and account for municipal and community-wide emission sectors applicable in the jurisdiction such as, transportation, commercial, residential, water use and treatment, solid waste, and agriculture.

Section 4.3 contains additional guidance on preparing a GHG emissions inventory and projections report for a qualified GHG Reduction Strategy that should be applied to general plans as well. A range of tools and resources are available to assist lead agencies in completing inventories, including the Air District's *GHG Plan Level Reduction Strategy Guidance*, *Intergovernmental Panel on Climate Change (IPCC) Emissions Inventory Guidelines*, *CCAR GRP*, and *ICLEI's Clean Air and Climate Protection (CACP) model*. In all instances where regional, statewide or national data sources are available, the Air District recommends that local data be used if available and more accurate.

Step 3. Prepare Greenhouse Gas Emissions Projections

BAAQMD recommends preparing a community-wide GHG emission projection to identify the expected levels of GHG emissions for: 1) 2020 (i.e., the AB 32 benchmark year), and 2) the projected year of the plan build out. Two projections should be prepared for each year:

- A projection reflecting existing conditions (e.g., business-as-usual), and
- A projection that accounts for proposed policies, programs, and plans included within the general or area plan that would reduce GHG emissions from build-out of the plan.

The first projection should be used as the basis for evaluation of the no project alternative in the plan's EIR. The second projection should be used as the basis for evaluation of the proposed project. Additional projections corresponding to plan alternatives considered within the EIR should



also be prepared and included within the EIR's alternatives analysis. Examples of policies, performance standards and implementation measures are included in Section 9.5.

Where possible, emission projections should account for inherent improvements in energy and fuel efficiency, population and employment growth rates published by ABAG, VMT growth rates available from MTC, energy consumption growth rates available from California Energy Commission (CEC) planned expansions of municipal infrastructure or services, and anticipated statewide legislative requirements or mandates (e.g., Renewable Energy Portfolio, Green Building Code Standards, on-road vehicle emission regulations).

A range of GIS-based planning models are available that can assist lead agencies in completing projections, including [Index](#), [PLACE3S](#), [UPlan](#), and the Sustainable Systems Integration Model (SSIM). The projection should be expressed in metric tons CO₂e emissions, and include the expected municipal and community-wide emissions across all sectors evaluated in the base year inventory.

BAAQMD encourages lead agencies to prepare similar projections for 2050 (the Executive Order S-03-05 benchmark year). As we approach the 2020 timeframe, BAAQMD will reevaluate this significance threshold to better represent progress toward 2050 goals. The Lead Agency should use the projected build-out emissions profile of the general or area plan as a benchmark to ensure that adoption of the plan would not preclude attainment of 2050 goals.

Step 4. Determine Planned Population and Employment Levels and Service Population

State law requires that general and area plans identify the planned density and intensity of land uses for all lands within the planning area established by the Lead Agency. These measures of density (typically dwelling units/acre) and intensity (typically floor-area ratios) are often translated into expected population and employment levels for estimating traffic impacts associated with the proposed plan. Most demand-based transportation models use population and employment to determine trip generation. Measures of population and employment are typically available for general and area plans. In evaluating GHG impacts, estimates of the number of residents and jobs anticipated in the general or area plan are required for 2020, the build-out year of the proposed plan, the no project alternative, and additional alternatives the Lead Agency is evaluating in the environmental review.

Service population (SP) is an efficiency-based measure used by BAAQMD to estimate the development potential of a general or area plan. SP is determined by adding the number of residents to the number of jobs estimated for a given point in time. For purposes of evaluating GHG impacts, SP estimates are required for 2020 and for the build-out year of the proposed plan.

Step 5. Compare Service Population to 2020 GHG Projections and Thresholds of Significance

The Lead Agency should divide the 2020 GHG emissions inventory by 2020 SP estimates to determine the per-SP emissions associated with the proposed general or area plan, the no project alternative, and additional alternatives the Lead Agency is evaluating. The Lead Agency should then compare these per-SP emissions to the significance thresholds identified in Chapter 2 (refer to Table 9-1).

**Table 9-1
Example Plan-level Greenhouse Gas Emissions Analysis**

Step	Emissions Source	Year	Emissions (MT CO ₂ e/yr)*
2	GHG Emissions Inventory (Community-wide and municipal)	Base year (e.g., 2007)	A
3	GHG Emissions Projections	2020	B
		GP Buildout (e.g., 2030)	C
4	Projected Service Population (population + employment)	SP	
	GHG/SP (2020)	B/SP (MT CO ₂ e/SP/yr)	
5	BAAQMD GHG/SP Threshold	6.6 (MT CO ₂ e/SP/yr)	
	Is B/SP > 6.6? (If Yes, Significant. Proceed to Step 6. If No, less than significant).		

*Letters "A", "B", and "C" are used to represent numeric values that would be obtained through conducting a community-wide emissions inventory and projections.
Notes: CO₂e = carbon dioxide equivalent; MT = metric tons; yr = year, P = population, SP = service population.
Refer to Appendix D for support documentation.

If the estimated per-SP emissions exceed identified thresholds, the general or area plan would be considered to have a significant impact with respect to GHG emissions, and mitigation would be required.

Step 6. Mitigation Measures

General or area plans found to have a significant impact should implement all feasible mitigation measures to reduce impacts. Refer to Section 9.5 for examples of appropriate mitigation measures for operational impacts relative to GHG emissions. Mitigation measures identified through the environmental review process must be made into binding and enforceable policies and implementation programs within the long range plan.

9.3. LOCAL COMMUNITY RISK AND HAZARD IMPACTS⁶

For general and area plans to have a less-than-significant impact with respect to potential toxic air contaminants (TACs), special overlay zones need to be established around existing and proposed land uses that emit TACs. Special overlay zones should be included in proposed plan policies, land use maps, and implementing ordinances.

The *Thresholds of Significance* for plans with regard to community risk and hazard impacts are:

1. The land use diagram must identify:
 - a. Special overlay zones around existing and planned sources of TACs;



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⁶ The use of the receptor thresholds is discussed in section 2.8 of these Guidelines



- b. Special overlay zones of at least 500 feet (or Air District-approved modeled distance) on each side of all freeways and high-volume roadways.
2. The plan must also identify goals, policies, and objectives to minimize potential impacts and create overlay zones for sources of TACs and receptors.

ARB's Land Use Handbook offers advisory recommendations for locating sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, gasoline stations, and other industrial facilities, to reduce exposure of sensitive populations. The Lead Agency should refer to this handbook when evaluating whether the proposed general or area plan includes adequate buffer distances between TAC sources and sensitive receptors.

9.3.1. Community Risk Reduction Plans

The goal of a Community Risk Reduction Plan (CRRP) would be to bring TAC and PM_{2.5} concentrations for the entire community covered by the Plan down to acceptable levels as identified by the local jurisdiction and approved by the Air District. This approach provides local agencies a proactive alternative to addressing communities with high levels of risk on a project-by-project approach.

A qualified Community Risk Reduction Plan adopted by a local jurisdiction should include, at a minimum, the following elements:

- (A) Define a planning area;
- (B) Include base year and future year emissions inventories of TACs and PM_{2.5};
- (C) Include Air District–approved risk modeling of current and future risks;
- (D) Establish risk and exposure reduction goals and targets for the community in consultation with Air District staff;
- (E) Identify feasible, quantifiable, and verifiable measures to reduce emissions and exposures;
- (F) Include procedures for monitoring and updating the inventory, modeling and reduction measures in coordination with Air District staff; and
- (G) Be adopted in a public process following environmental review.

Refer to Chapter 5 for additional guidance on preparing a CRRP. The Air District has also developed the *Community Risk Reduction Plan Methodology* guidance document, which can be found at <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx>.

9.4. ODOR IMPACTS

- For plans to have a less-than-significant impact, a plan must identify the location of existing and planned odor sources in the plan area. The plan must also include policies to reduce potential odor impacts in the plan area.

9.5. REGIONAL PLANS

Regional plans must demonstrate a no net increase in emissions to satisfy the *Threshold of Significance* for operational-related criteria air pollutant and precursor impacts, GHGs, and toxic air contaminants.

Regional plans include the Regional Transportation Plan prepared by the Metropolitan Transportation Commission (MTC) and air quality plans prepared by the Air District. In order to meet this threshold, these agencies must compare the regional plan's baseline emissions with its projected future emissions. This approach requires two comparative analyses:

- a. Compare existing (base year) emissions with projected future year plus project emissions (base year/project comparison);
- b. Compare projected future year emissions without the project with projected future year emissions plus the project (no project/project comparison).

A regional plan is considered less than significant if each scenario demonstrates that no net increase in emissions of criteria air pollutants and precursors, GHGs, and toxic air contaminants will occur.

9.6. MITIGATING PLAN-LEVEL IMPACTS

Plans often have significant, unavoidable adverse air quality impacts due to the SFBAAB's nonattainment status and the cumulative impacts of growth on air quality. In addition, plans generally have long-term planning horizons of twenty years or more. For these reasons, it is essential for plans to incorporate all feasible strategies and measures to reduce air quality impacts. Mitigation measures for plans are often broad in scope due to the long timeframe and comprehensive nature of general and area plan policies and programs.

This section contains mitigation measures recommended for plans prepared within the SFBAAB. Measures are identified by state-required general plan element, planning issue, development phase, and type of air quality impact. Proposed plans should incorporate mitigation measures applicable to their elements and planning issues.

Plans are the appropriate place to establish community-wide air quality policies that reinforce regional air quality plans. Plans present opportunities to establish requirements for new construction, future development, and redevelopment projects within a community that will ensure new or revised plans do not inhibit attainment of state and national air quality standards and actually assist in improving local and regional air quality. Binding, enforceable mitigation measures identified through the environmental review process should be incorporated as policies and implementation programs within the plan to the



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greatest extent feasible. Ideally, air quality related goals, policies, performance measures and standards should be incorporated within the context of the proposed project itself, rather than introduced as corrective actions within the proposed project's EIR. The list below is not intended to serve as an exhaustive list. The Air District also recommends that Lead Agencies refer to CAPCOA's *Model Policies for Greenhouse Gases in General Plans* (June 2009) for additional guidance (<http://www.capcoa.org/modelpolicies/CAPCOA-ModelPolicies-6-12-09-915am.pdf>).

9.6.1. Qualified Greenhouse Gas Reduction Strategy

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Develop and adopt a comprehensive Qualified GHG Reduction Strategy that includes: baseline inventory of greenhouse gas emissions from all sources, greenhouse gas emissions reduction targets that are consistent with the goals of AB 32, and enforceable GHG emission reduction strategies and performance measures.		X				X		
Qualified GHG Reduction Strategy to include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, report progress to the public and responsible agencies, and revise the plan as appropriate.		X				X		

9.6.2. Land Use Element

Urban Form

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Create and enhance landscaped greenway, trail, and sidewalk connections between neighborhoods, commercial areas, activity centers, and parks.					X	X		
Adopt policies supporting infill development					X	X		
Ensure that proposed land uses are supported by a multi-modal transportation system and that the land uses themselves support the development of the transportation system.					X	X		
Designate a central city core for high-density and mixed-use development.					X	X		
Discourage high intensity office and commercial uses from locating outside of designated centers or downtowns, or far from residential areas and transit stations.					X	X		
Provide financial incentives and density bonuses to entice development within the designated central city.					X	X		
Provide public education about benefits of well-designed, higher-density housing and relationships between land use and transportation.					X	X		

Compact Development

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Achieve a jobs/housing balance or improve the jobs/housing ratio within the plan area.					X	X		
Create incentives to attract mixed-use projects to older commercial and industrial areas.					X	X		
Adopt incentives for the concurrent development of retail, office, and residential land uses within mixed-use projects or areas. Require mixed-use development to include ground-floor retail.					X	X		
Provide adaptive re-use alternatives to demolition of historic buildings. Provide incentives to prevent demolition of historic buildings.	X	X			X	X		
Facilitate lot consolidation that promotes integrated development with improved pedestrian and vehicular access.					X	X		
Reinvest in existing neighborhoods and promote infill development as a preference over new, greenfield development.					X	X		
Ensure that new development finances the full cost of expanding public infrastructure and services to provide an economic incentive for incremental expansion.					X	X		
Require new developments to extend sewer and water lines from existing systems or to be in conformance with a master sewer and water plan.	X	X			X	X		

Transit-oriented Design

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Require all development projects proposed within 2,000 feet of an existing or planned light rail transit, commuter rail, express bus, or transit corridor stop, to incorporate site design measures that enhance the efficiency of the transit system.					X	X		
Develop transit/pedestrian-oriented design guidelines. Identify and designate appropriate sites during general plan updates and amendments.					X	X		
Plan areas within ¼-mile of locations identified as transit hubs and commercial centers for higher density development.					X	X		



Sustainable Development

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Ensure new construction complies with California Green Building Code Standards and local green building ordinances.					X	X		
Promote re-use of previously developed property, construction materials, and/or vacant sites within a built-up area.					X	X		
Avoid development of isolated residential areas near hillsides or other areas where such development would require significant infrastructure investment or adversely impact biological resources.						X		
Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, and promote effective use of daylight. Orientation should optimize opportunities for on-site solar generation.					X	X		
Provide land area zoned for commercial and industrial uses to support a mix of retail, office, professional, service, and manufacturing businesses.					X	X		
Provide permitting incentives for energy efficient and solar building projects.					X	X		
Develop a joint powers agreement or other legal instrument that provides incentive for counties to discourage urban commercial development in unincorporated areas and promote urban infill and redevelopment projects.					X	X		

Activity Centers

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Provide pedestrian amenities, traffic-calming features, plazas and public areas, attractive streetscapes, shade trees, lighting, and retail stores at activity centers.					X	X		
Provide for a mix of complementary retail uses to be located together to create activity centers and commercial districts serving adjacent neighborhoods.					X	X		
Permit upper-story residential and office uses in neighborhood shopping areas.					X	X		
Provide pedestrian links between commercial districts and neighborhoods.					X	X		
Provide benches, streetlights, public art, and other amenities in activity centers to attract pedestrians.					X	X		

Green Economy and Businesses

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Work with businesses to encourage employee transit subsidies and shuttles from transit stations.					X	X		
Encourage businesses to participate in local green business programs.					X	X		
Offer incentives to attract businesses to city core and infill areas.					X	X		
Work to attract green businesses and promote local green job training programs.					X	X		
Support regional collaboration to strengthen the green economy.					X	X		
Provide outreach and education to local businesses on energy, waste, and water conservation benefits and cost savings.					X	X		
Support innovative energy technology companies.					X	X		

9.6.3. Circulation Element

Local Circulation

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Create or reinforce a grid street pattern with small block sizes and maintain high connectivity within the roadway network.					X	X		
Implement circulation improvements that reduce vehicle idling, such as signal timing systems and controlled intersections.					X	X	X	
Consider alternatives such as increasing public transit or improving bicycle or pedestrian travel routes before funding transportation improvements that increase VMT.					X	X		
Require payment of transportation impact fees and/or roadway and transit improvements as a condition upon new development.					X	X		
Minimize use of cul-de-sacs and incomplete roadway segments.					X	X		
Actively promote walking as a safe mode of local travel, particularly for children attending local schools.					X	X		
Consult with school districts, private schools, and other operators to coordinate local busing, to expand ride-sharing programs, and to replace older diesel buses with low or zero emission vehicles.					X	X	X	
Evaluate all busing options as a preferential strategy to roadway improvements in the vicinity of schools to ease congestion.					X	X		
Establish public/private partnerships to develop satellite and neighborhood work centers for telecommuting.					X	X		
Employ traffic calming methods such as median landscaping and provision of bike or transit lanes to slow traffic, improve roadway capacity, and address safety issues.					X	X		
Support the use of electric vehicles where appropriate. Provide electric recharge facilities.					X	X		



Regional Transportation

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Ensure that submittals of transportation improvement projects to be included in regional transportation plans (RTP, RTIP, CMP, etc.) are consistent with the air quality goals and policies of the general plan.					X	X		
Consult with adjacent jurisdictions to address the impacts of regional development patterns on the circulation system.					X	X		
Adopt a (or implement the existing) Transportation Demand Management Ordinance.					X	X		
Create financing programs for the purchase or lease of vehicles used in employer ride sharing programs.					X	X		
Consult with adjacent jurisdictions to maintain adequate service levels at shared intersections and to provide adequate capacity on regional routes for through traffic.					X	X		
Work to provide a strong paratransit system that promotes the mobility of all residents and educate residents about local mobility choices.					X	X		
Designate sites for park-and-ride lots. Consider funding of the park and ride lots as mitigation during CEQA review of residential development projects.					X	X		
Consult with appropriate transportation agencies and major employers to establish express buses and vanpools to increase the patronage of park and ride lots.					X	X		
Allow developers to reach agreements with auto-oriented shopping center owners to use commercial parking lots as park-and-ride lots and multimodal transfer sites.					X	X		

Parking

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Reduce parking for private vehicles while increasing options for alternative transportation.					X	X		
Eliminate minimum parking requirements for new development.					X	X		
Establish commercial district parking fees.					X	X		
Require that parking is paid for separately and is not included in rent for residential or commercial space.					X	X		
Encourage parking sharing between different land uses.					X	X		
Encourage businesses to offer parking cash-outs to employees.					X	X		
Encourage parking assessment districts.					X	X		
Encourage car-share and bike-share programs and dedicated parking spaces in new development.					X	X		
Support preferential parking for low emission and carpool vehicles					X	X		

Bicycles and Pedestrians

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Provide safe and convenient pedestrian and bicycle connections to and from activity centers, commercial districts, offices, neighborhoods, schools, other major activity centers.					X	X		
Ensure that non-motorized transportation systems are connected and not interrupted by impassable barriers, such as freeways.					X	X		
Provide pedestrian pathways that are well-shaded and pleasantly landscaped to encourage use.					X	X		
Consult with transit providers to increase the number of bicycles that can be accommodated on buses.					X	X		
Provide crosswalks and sidewalks along streets that are accessible for people with disabilities and people who are physically challenged.					X	X		
Prohibit on-street parking to reduce bicycle/automobile conflicts in appropriate target areas.					X	X		
Prohibit projects that impede bicycle and walking access.					X	X		
Retrofit abandoned rail corridors as segments of a bikeway and pedestrian trail system.					X	X		
Require commercial developments and business centers to include bicycle amenities in building such as bicycle racks, showers, and lockers.					X	X		

Regional Rail Transit

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Support regional rail service and consult with rail operators to expand services.					X	X		
Create activity centers and transit-oriented development projects near transit stations.					X	X		

Local and Regional Bus Transit

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Give funding preference to investment in public transit over investment in infrastructure for private automobile traffic.					X	X		
Establish a local shuttle service to connect neighborhoods, commercial centers, and public facilities to rail transit.					X	X		
Empower seniors and those with physical disabilities who desire maximum personal freedom and independence of lifestyle with unimpeded access to public transportation.					X	X		
Provide transit shelters that are comfortable, attractive, and accommodate transit riders. Ensure that shelters provide shade, route information, benches and lighting.					X	X		
Design all arterial and collector streets planned as transit routes to allow for the efficient operation of public transit.					X	X		
Require transit providers to coordinate intermodal time schedules					X	X		



9.6.4. Conservation Element

Municipal Operations

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Replace existing City vehicles with ultra-low or zero emission vehicles and purchase new low emission vehicles.					X	X		
Require that all new government buildings, and all major renovations and additions, meet identified green building standards.					X	X		
Install cost-effective renewable energy systems on all city buildings and purchase remaining electricity from renewable sources.					X	X		
Support the use of teleconferencing in lieu of city/county employee travel to conferences and meetings when feasible.					X	X		
Require city/county departments to set up telecommuting programs as part of their trip reduction strategies.					X	X		
Require environmentally responsible government purchasing. Require or give preference to products that reduce or eliminate indirect GHG emissions.						X		
Investigate the feasibility of using solar (photovoltaic) street lights instead of conventional street lights to conserve energy.					X	X		
Support investment in cost-effective land use and transportation modeling and geographic information system technology.					X	X	X	X
Install LED lighting for all traffic light systems.						X		
Implement a timed traffic light system to reduce idling.					X	X		

Air Quality – Sensitive Receptors

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of TAC and PM _{2.5} emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. Community Risk Reduction Plan to include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, report progress to the public and responsible agencies, and revise the plan as appropriate.			X				X	
Require residential development projects and projects categorized as sensitive receptors to be located an adequate distance from existing and potential sources of TACs and odors.				X			X	X
Require new air pollution point sources such as, but not limited to, industrial, manufacturing, and processing facilities to be located an adequate distance from residential areas and other sensitive receptors.	X		X	X	X		X	X
Consult with BAAQMD to identify TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.			X	X			X	X
Consult with project proponents during the pre-application review process to avoid inappropriate uses at affected sites and during the environmental review process for general plan amendments and general plan updates.					X		X	X
Require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review when the proposed project has associated air-toxic emissions.			X				X	
Designate adequate industrial land in areas downwind and well-separated from sensitive uses.							X	X
Designate non-sensitive land uses for areas surrounding industrial sites.					X		X	X
Protect vacant industrial sites from encroachment by residential or other sensitive uses through appropriate zoning.					X		X	X
Require indoor air quality equipment, such as enhanced air filters, to be installed at schools, residences, and other sensitive receptor uses located near pollution sources.							X	X
Quantify the existing and added health risks to new sensitive receptors or for new sources.							X	
Utilize pollution absorbing trees and vegetation in buffer areas.					X	X	X	



Air Quality – PM₁₀ and Dust Control

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Include PM ₁₀ control measures as conditions of approval for subdivision maps, site plans, and grading permits.	X				X			
Minimize vegetation removal required for fire prevention.	X				X			
Require alternatives to discing, such as mowing, to the extent feasible. Where vegetation removal is required for aesthetic or property maintenance purposes, encourage or require alternatives to discing.	X	X			X	X		
Require subdivision designs and site planning to minimize grading and use landform grading in hillside areas.	X							
Condition grading permits to require that graded areas be stabilized from the completion of grading to commencement of construction.	X							
Require all access roads, driveways, and parking areas serving new commercial and industrial development to be constructed with materials that minimize particulate emissions and are appropriate to the scale and intensity of use.	X							
Develop a street cleaning program aimed at removing heavy silt loadings from roadways that result from sources such as storm water runoff and construction sites.	X				X			
Pave shoulders and pave or landscape medians. Curb and gutter installation may provide additional benefits where paving is contiguous to the curb.	X	X			X	X		

Water Conservation

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Require residential remodels and renovations to improve plumbing fixture and fixture-fitting water efficiency by an established amount above the California Building Standards Code water efficiency standards.		X						
Provide water use audits to identify conservation opportunities and financial incentives for adopting identified efficiency measures.		X						
Require use of native and drought-tolerant plants, proper soil preparation, and efficient irrigation systems for landscaping.		X				X		
Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.		X				X		
Increase use of recycled and reclaimed water for landscaping projects.		X				X		
Adopt a water-efficient landscaping ordinance and implement the Bay-Friendly Landscaping Guidelines established by StopWaste.org.						X		
Provide public water conservation education.						X		
Reduce pollutant runoff from new development through use of Best Management Practices.	X	X	X		X	X	X	
Minimize impervious surfaces and associated urban runoff pollutants in new development and reuse projects.	X	X	X		X	X	X	
Utilize permeable surfaces and green roof technologies where appropriate.					X	X	X	

Energy Conservation

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Conduct energy efficiency audits of existing buildings by checking, repairing, and readjusting heating, ventilation, air conditioning, and lighting, water heating equipment, insulation and weatherization. Offer financial incentives for adoption of identified efficiency measures.		X				X		
Require implementation of energy-efficient design features in new development, including appropriate site orientation, exceedance of Title 24, use of light color roofing and building materials, and use of evergreen and wind-break trees to reduce heating and cooling fuel consumption.		X				X		
Adopt residential and commercial energy efficiency retrofit ordinances that require upgrades as a condition of issuing permits for renovations or additions, and on the sale of residences and buildings.		X				X		
Facilitate cooperation between neighboring development projects to use on-site renewable energy supplies or combined heat and power co-generation facilities.		X				X		
Develop a comprehensive renewable energy financing and informational program for residential and commercial uses.		X				X		
Partner with community services agencies to fund energy efficiency projects for low income residents.		X				X		
Encourage the installation of energy efficient fireplaces in lieu of normal open-hearth fireplaces. Prohibit installation of wood burning devices.	X	X			X	X		
Provide natural gas lines or electrical outlets to backyards to encourage the use of natural gas or electric barbecues, and electric gardening equipment.	X				X			
Implement Community Choice Aggregation (CCA) for renewable electricity generation.		X				X		

Solid Waste

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Achieve established local and regional waste-reduction and diversion goals. Adopt more stringent waste reduction goals.		X				X		
Establish programs that enable residents to donate or recycle surplus furniture, old electronics, clothing, and other household items.		X				X		
Establish methane recovery in local landfills and wastewater treatment plants to generate electricity.		X				X		
Participate or initiate a composting program for restaurants and residences.						X		
Implement recycling programs for businesses and construction waste.	X	X			X	X		
Prohibit styrofoam containers and plastic bag use by businesses.					X	X		



9.6.5. Open Space Element

Community Forestry

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Require inclusion of low VOC-emitting street trees and landscaping for all development projects.		X				X		
Require that trees larger than a specified diameter that are removed to accommodate development must be replaced at a set ratio.		X				X		
Provide adequate funding to manage and maintain the existing community forest, including sufficient funds for tree planting, pest control, scheduled pruning, and removal and replacement of dead trees.		X				X		
Provide public education regarding the benefits of street trees and the community forest.		X				X		

Sustainable Agriculture

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Require agricultural practices be conducted in a manner that minimizes harmful effects on soils, air and water quality, and marsh and wildlife habitat. Sustainable agricultural practices should be addressed in the Qualified GHG Reduction Strategy to address climate change effects if relevant.	X	X			X	X		
Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open spaces that provide carbon sequestration benefits.	X	X			X	X		
Establish a mitigation program for establishing conservation areas. Impose mitigation fees on development of such lands and use funds generated to protect existing, or create replacement, conservation areas.	X	X			X	X		
Require no-till farming, crop rotation, cover cropping, and residue farming.	X	X			X	X		
Require the use of appropriate vegetation within urban-agricultural buffer areas.		X				X		
Protect grasslands from conversion to non-agricultural uses.	X	X			X	X		
Support energy production activities that are compatible with agriculture, including biogas, wind and solar.		X				X		
Allow alternative energy projects in areas zoned for agriculture or open space where consistent with primary uses.		X				X		
Provide spaces within the community suitable for farmers markets.						X		
Promote local produce and garden programs at schools.						X		

Parks and Recreation

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Expand and improve community recreation amenities including parks, pedestrian trails and connections to regional trail facilities.						X		
Require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails as a condition upon new development.		X				X		
Encourage development of pocket parks in neighborhoods. Improve equal accessibility to park space across communities.		X				X		
Encourage joint use of parks with schools and community centers and facilities.		X				X		

9.6.6. Housing Element

Affordable Housing

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Ensure a portion of future residential development is affordable to low and very low income households.		X				X		
Target local funds, including redevelopment and Community Development or Energy Efficiency Block Grant resources, to assist affordable housing developers in incorporating energy efficient designs and features.						X		
Adopt minimum residential densities in areas designated for transit-oriented, mixed use development to ensure higher density in these areas.					X	X		
Consult with the Housing Authority, transit providers, and developers to facilitate construction of low-income housing developments that employ transit-oriented and pedestrian-oriented design principles.					X	X		
Offer density-bonus incentives for projects that provide for infill, mixed use, and higher density residential development.					X	X		

9.6.7. Safety Element

Traffic Safety

Mitigation Measure or General/Area Plan Policy	Construction				Operational			
	CAPs	GHGs	TACs	Odors	CAPs	GHGs	TACs	Odors
Facilitate traffic safety for motorists and pedestrians through proper street design and traffic monitoring.					X	X		
Require traffic control devices, crosswalks, and pedestrian-oriented lighting within design of streets, sidewalks, trails, and school routes.					X	X		

A. CONSTRUCTION ASSESSMENT TOOLS

High Level Haulage Input Worksheet High Level of Detail Fugitive Dust Quantification Method

Instructions: When using the *High Level of Detail* quantification method to calculate fugitive dust emissions from cut/fill activities, BAAQMD recommends using this worksheet to calculate the on- and off-site haulage inputs for URBEMIS. If a project would involve both on-site and off-site cut/fill operations, the user should create two separate High Level Haulage Input Worksheets (i.e., one worksheet calculation for on-site and one for off-site).

Project Name:

Grading Activity/Phase:

User inputs
Input to use in URBEMIS
Calculation (do not change)

Cut/Fill Operations

Description	Amount	Units	Notes
Total Cut/Fill Volume	1,800	cubic yards	Enter information
Months of Activity	2	months	Enter information
Days of Activity	44	days	
Daily Cut/Fill Volume	40.91	cubic yards/day	

Soil Density by Soil Type and Condition

Soil Type	Bulk Density (grams/cubic centimeter)	Density (pounds/cubic yard)	Density (tons/cubic yard)
Sandy	1.69	2,849	1.42
Loamy Coarse-Loamy	1.63	2,747	1.37
Loamy Fine-Loamy	1.60	2,697	1.35
Loamy Coarse-Silty	1.60	2,697	1.35
Loamy Fine-Silty	1.54	2,596	1.30
Clayey 25-25% clay	1.49	2,511	1.26
Clayey >45% clay	1.39	2,343	1.17

Source: U.S. Department of Agriculture, Natural Resources Conservation Service, 2007. National Soil Survey Handbook, title 430-VI. [Online] Available at <<http://soils.usda.gov/technical/handbook/>>.

URBEMIS 2007 Ton-Mile Calculation

Description	Amount	Units	Notes
Soil Type	Loamy Coarse-Loamy		Use drop-down menu to select soil type. Assume Sandy unless project-specific soil type is known.
Soil Density	1.37	tons/cubic yard	Enter project specific soil density if known
Haul Distance (Round Trip On-Site)	0.04	miles	Enter distance
Ton-Mile per Day	2.25	ton-miles/day	

Notes:

On-site ton-mile assumes cut/fill volume is moved by scrapers.
Off-site ton-mile assumes cut/fill volume is moved by haul trucks.

URBEMIS Construction Modeling Data Needs/Requests

1) Construction Schedule

Land use type and size to be developed

Commencement and buildout date

Duration and start date for each construction phase (e.g., demolition, grading, building construction)

Identify any potential or planned overlap in phases

Note: If project will be built out in multiple phases, provide information above for each phase.

2) Demolition

Commencement date and duration of activities

Total volume to be demolished

Maximum daily volume to be demolished

Haul truck capacity and distance to disposal site (URBEMIS defaults provided)

Demolition equipment required (URBEMIS defaults provided)

Note: URBEMIS estimates demolition construction equipment based on the land use being developed.

3) Grading (Mass and Fine)

Commencement date and duration of activities

Maximum daily acres disturbed (URBEMIS defaults provided)

Volume of material to be cut and/or filled (cubic yards)

Volume of material to be exported and/or exported (cubic yards)

Construction equipment required

Note: URBEMIS estimates grading construction equipment based on maximum daily acres disturbed.

4) Fugitive Dust

A) Method 1 (Default)

Maximum daily acres disturbed (URBEMIS defaults provided)

B) Method 2 (Low Level of Detail)

Duration of cut/fill operations

Volume of material to be cut and/or filled (cubic yards)

Origin of soil material (i.e., on-site or off-site)

C) Method 3 (Medium Level of Detail)

Duration of cut/fill operations

Number of scrapers or haul trucks operating per day

Hours of operation for each scraper or haul truck (scraper hours and haul truck hours)

D) Method 4 (High Level of Detail)

Duration of cut/fill operations

Volume of material to be cut and/or filled (cubic yards)

Bulk density of material (i.e., tons per cubic yard)

Round trip distance required to move materials on-site (on-site miles only)



5) Asphalt Paving

Commencement date and duration of activities

Total acres to be paved

Construction equipment required

Note: URBEMIS estimates asphalt paving construction equipment based on total acres to be paved.

6) Architectural Coatings

Commencement date and duration of activities

B. AIR QUALITY MODELING INSTRUCTIONS (URBEMIS)

This section provides detailed instructions for and examples of air quality modeling of operational and construction-related emissions pursuant to the methodological recommendations in this guide.

OPERATIONAL-RELATED EMISSIONS

URBEMIS Input Parameters

URBEMIS provides default values for Bay Area specific modeling parameters. Users may use the default values or provide project specific information when possible for more accurate emission quantification. BAAQMD-recommended input parameters and data requirements along with general URBEMIS user information for each operational-related activity are described below. Refer to the [URBEMIS User's Guide](#) and the BAAQMD Greenhouse Gas Model User's Manual (referred to collectively as the "User's Guide" below) for more detailed information.

Table B-1 URBEMIS Input Parameters for Operation Emissions	
Operational Input Parameters	Guidance Principle
Air District	Bay Area Air District
Analysis Year	Earliest possible year when project would be operational
Land Use Type and Units	Based on project description
Trip Rate	From project traffic study, local trip rates, or ITE Trip Generation Manual
Project Location	Urban
Road Dust	Category should not be turned off but can be modified if project information is known
Pass-by Trips	See User's Guide for further instructions
Double Counting Correction	See User's Guide for further instructions
Percentage of Land Uses using Natural Gas	100 percent for both residential and nonresidential development
Persons per Residential Unit (Consumer Products)	Based on estimated number of residents
All Other URBEMIS Inputs	Use default values, unless project-specific data is available. See User's Guide for further instructions ¹
¹ The rationale for changing default values should be disclosed in the CEQA document	

Land Use Type and Size

Choose each individual land use type (e.g., single family housing, apartment high rise, regional shopping center, or office park) that is most applicable to the proposed development project in the *Enter Land Use Data* module and enter the size of the project (e.g., acres, thousand square feet [ksf], students, dwelling units [du], rooms, pumps, rooms, or employees). Ensure that the unit type for the project-specific data is consistent with the unit type selected in URBEMIS. By default, URBEMIS estimates the trip generation rates for each land use type based on equations included in the [ITE Trip Generation Manual](#). The trip rate represents the number of daily trips generated by a particular land use type by size. Override the default trip rate if project-specific data is available from the transportation analysis.

URBEMIS estimates the trip rate differently for residential land use types than for non-residential land use types. For residential land use types, URBEMIS adjusts the default trip rate based on residential density (i.e., dwelling units/residential acre). Overriding the default value for the number of acres for a residential land use type would automatically result in a change in the trip rate value. If both the number of acres and the trip rates for a residential development are known, enter the unit amount for the land use first, then adjust the acreage second, and then adjust the trip rate last. Select the *Submit* button after completing the *Enter Land Use Data* module.

For nonresidential land use types, URBEMIS uses a default trip rate value that is directly based on the unit amount entered into the *Enter Land Use Data* module. URBEMIS also assumes a Floor Area Ratio (FAR) of 0.5 for all nonresidential uses. The FAR is the ratio of the total floor area of a building to the size of the parcel on which it is located. Override the value in the acres data field based on the FAR for the proposed nonresidential land uses. URBEMIS does not adjust the default trip rate if the acre value is adjusted.

The *Enter Land Use Data* module includes a default worker commute trip percentage for all nonresidential land use types, which is used to estimate percentages of other commercial trip types in the *Enter Operational Data* module. The *Enter Land Use Data* module also contains default percentages of primary, diverted, and pass-by trips for all land use types, residential and non-residential. Primary trips are trips made for the specific purpose of visiting the generator and URBEMIS assumes that primary trips travel a full trip length; pass-by trips are trips made as intermediate stops on the way from an origin to another trip destination; and diverted-linked trips are trips attracted from the traffic volume on roadways in the vicinity of the generator but which require a diversion from that roadway to another roadway to gain access to the site. Pass-by and diverted-linked trips are assigned a shorter trip distance than primary trips. URBEMIS assumes that pass-by trips result in virtually no extra travel, with an assumed trip length of 0.1 mile. Diverted-linked trip lengths are assumed to equal 25 percent of the primary trip length. URBEMIS allows users to edit these data fields. URBEMIS incorporates this information for estimation of mobile-source emissions only if the check box for the Pass-by Trips category in the *Enter Operational Data* module is selected. When not selected, URBEMIS assumes all trips are primary trips. BAAQMD recommends reviewing the User's Guide for more information about when to use this feature. Additional discussion about pass-by trips is provided under the *Enter Operational Data* module guidance below.

When estimating emissions for a type of land use that is not listed in URBEMIS, select a similar land use type or add a new land use type on the Blank tab of the *Enter Land Use Data* module. When selecting a similar nonresidential land use type as a proxy, consider the worker commute trip percentage and the primary, diverted, and pass-by trip values. The name of the land use type is unimportant and can be overridden with new text if desired. BAAQMD recommends using one of the types of residential land uses listed in URBEMIS as a proxy when analyzing any type of unique residential project.

For unique nonresidential types of land uses, BAAQMD recommends either using another nonresidential land use type as a proxy or using a Blank land use type. If a new land use type is analyzed using a row on the Blank tab of the *Enter Land Use Data* module, enter a trip rate as URBEMIS does not provide default trip rate on the Blank tab. BAAQMD recommends using a trip rate from the [ITE Trip Generation Manual](#), if an appropriate trip rate is available. If an applicable trip generation rate is not available, the Lead Agency should make a good faith effort to derive a trip generation rate for the proposed project.

Operational Data

The *Enter Operational Data* module allows users to estimate vehicle exhaust emissions from trips (and associated VMT) generated by a project. The module consists of seven operational



parameter categories including *Year & Vehicle Fleet*, *Trip Characteristics*, *Temperature Data*, *Variable Starts*, *Road Dust*, *Pass-by Trips*, and *Double-Counting Correction*. The first five operational categories are all needed to calculate vehicle exhaust emissions and; therefore, cannot be turned off. Three of the seven operational categories can be turned off: *Road Dust*, *Pass-by Trips*, and *Double-Counting Correction*.

Guidance regarding each of the operational categories is provided below. In general, most of the default values for these seven source categories do not need to be changed, except where otherwise noted.

Year & Vehicle Fleet

The *Year & Vehicle Fleet* category allows users to specify the operational year for the project. Use the earliest possible year when the project would be operational to estimate worst-case operational emissions. Be aware that changing the project start year also changes the vehicle fleet mix. The default fleet mix values (i.e., *Fleet %*, *Vehicle Type*, *Non-Catalyst*, *Catalyst*, *Diesel*) are based on values from EMFAC using the year and the location of the project that is specified when users creates a new project in URBEMIS. The fleet mix should be modified only if it is known that the fleet mix for a project would be different from the average vehicle fleet mix in the project area. In that situation, select *Keep Current Fleet Mix When Changing Years*. Changes to the fleet mix data should be based on information provided by the transportation analysis and/or assumptions that are disclosed in the CEQA document. For instance, the fleet mix of motor vehicle trips generated by a school project would likely consist of a higher percentage of school buses and a lower percentage of motor homes and motorcycles than the URBEMIS average.

Trip Characteristics

The *Trip Characteristics* category includes trip data such as average speed, trip percentages, urban and rural trip lengths for different trip types. The trip percentages for home-based trips can be modified; however, it is not possible to modify the same for commercial-based trips, which URBEMIS calculates using the worker commute trip percentage entered in the *Enter Land Use Data* module. URBEMIS uses either the urban or rural trip length values depending on whether *Urban Project* or *Rural Project* is selected on the same screen. In general, the *Urban Project* option should be selected for most land use development projects under BAAQMD's jurisdiction. The trip length values can be changed if supported by information produced in a transportation analysis and/or reasonable assumptions about the project. For instance, the trip length for a proposed school might be adjusted according to the spatial distribution of the households that would be served by that school, particularly if the majority of trip generation would consist of parents driving their children to the school.

In addition to trip rate adjustments based on residential density, URBEMIS allows for modifications to vehicle trips based on other project characteristics. If specific project information is available for any land use type it should be reflected in the URBEMIS inputs. The table "URBEMIS Measures – Operational (Mobile-source) Measures" in Section 4.2 lists available measures to alter the trip rate to better reflect specific conditions. For example, if a project includes access to transit, URBEMIS trip rates can be adjusted between 0% and 15%. A 15% reduction in vehicle trips due to transit access would only be appropriate for a project that offers access to exceptional transit service. See the User's Guide for further instructions on all adjustments. Lead agencies must discuss and justify their reductions with substantial evidence.

Temperature Data

The *Temperature Data* category contains default ambient winter and summer temperature values which are used to estimate winter and summer emissions, respectively. The default temperature values in these data fields are specific to SFBAAB and should only be modified in consultation with BAAQMD.

Variable Starts

The *Variable Starts* parameter category shows the percentage of vehicles in several time classes (minutes since the vehicle engine was turned off) for the six trip types defined in the *Trip Characteristics* parameter category. This information is derived from the applicable EMFAC file and should only be modified in consultation BAAQMD.

Road Dust

The *Road Dust* parameter category allows users to specify the distribution of vehicle travel between paved and unpaved roads. This category is used to calculate entrained road dust emissions due to vehicle travel on paved and unpaved surfaces. Do not turn this category off, and users can adjust the percentage of travel on paved and unpaved roads if detailed project information is known.

Pass-by Trips

The *Pass-by Trips* parameter category can only be turned on or off. When selected, this category divides all the project-generated trips into primary, pass-by, and diverted-linked trips (entered as percentages in *Enter Land Use Data* module). When this category is not selected, URBEMIS assumes 100 percent of the project-generated trips are primary trips. Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination. URBEMIS accounts for these trips by setting the trip length to 0.1 miles for each pass-by trip. These trips are most important for retail and commercial land uses, such as gas stations and fast food restaurants. This option is not applicable to all land use types. For example, most of the trips to and from a *Warehouse* are typically expected to be primary trips and the *Pass-by Trips* option should not be used. This category check box should not be selected unless the percentage of pass-by trips is supported by a transportation analysis or a set of reasonable assumptions discussed in the CEQA document. If the trip length values in the *Trip Characteristics* category or the trip rate values in the *Enter Land Use Data* module are overwritten using information provided by a transportation analysis, be aware of whether the traffic data incorporated the occurrence of pass-by trips. If the *Pass-By Trips* checkbox is selected then the Lead Agency should discuss its reasoning for assuming that some of the project-generated vehicle trips would be considered pass-by trips.

Double-Counting Correction

The *Double-Counting Correction* parameter category is designed to account for internal trips between residential and nonresidential land uses. The *Double-Counting Correction* is applicable to mixed-use projects that include both residential and nonresidential land use types in the *Enter Land Use Data* module. For example, a residential trip and a retail trip generated by a mixed-use project may be the same trip. Users have the option of entering the number of internal trips between residential and nonresidential land uses in the *Enter the gross internal trip* as desired. The value entered represents the number of internal trips that would not be included in the emissions estimate. This category should not be used unless the transportation analysis or local transportation studies contain data to support the correction factor. In some cases, the transportation analysis may report project-specific trip generation that is already corrected for internal trips. Consult with a traffic engineer to determine the appropriate method to account for internal trips. The *Double-Counting Correction* checkbox should not be selected if detailed project information is unknown.

Area Source

The *Enter Area Source Data* module allows users to adjust the five area-source emission categories including, natural gas fuel combustion, hearth fuel combustion, landscape fuel combustion, consumer products, and architectural coatings. The natural gas, hearth, and landscape maintenance categories relate to on-site fuel combustion and the consumer products and architectural coatings categories address on-site evaporative emissions.

Guidance regarding each of the area-source categories is provided below. In general, most of the default values for these five source categories do not need to be changed except where otherwise noted in this guide.

Natural Gas Fuel Combustion

Parameters in the *Natural Gas Fuel Combustion* category are used to estimate the natural gas combustion emissions from space and water heating. On the *Natural Gas* tab the default percentage for land uses using natural gas should be changed to 100 percent for both residential and nonresidential land use types, as is representative of most development projects in the SFBAAB, unless project-specific data is available. Similarly, do not override the default natural gas usage values unless project-specific data is available.

Hearth Fuel Combustion

The *Hearth Fuel Combustion* category consists of separate tabs for *Hearth Percentages*, *Wood Stoves*, *Wood Fireplaces*, *Natural Gas Fireplaces*, and *Natural Gas Emission Factors*. Each of the tabs is discussed separately below.

- *Hearth Percentages*

The parameters on the *Hearth Percentages* tab are applicable only to projects that include residential units. The default percentages should be used for the wood stoves, wood fireplaces, and wood stoves unless project-specific information is available. URBEMIS does not estimate emissions from any hearth types for nonresidential land use types.

- *Wood Stoves*

On the *Wood Stoves* tab, the default percent values for the types of wood stoves (i.e., *Noncatalytic*, *Catalytic*, *Conventional*, and *Pellet*) should be changed in accordance with [District Regulation 6, Rule 3](#), which allows only EPA-certified wood burning fireplaces and pellet stoves in new construction projects. The values for *Wood Burned*, *Wood Stove Usage*, and *Pounds in a Cord of Wood* should not be changed unless project-specific information is available.

- *Wood Fireplaces*

The *Wood Fireplaces* tab is similar to the *Wood Stoves* tab. The emission factors on this tab cannot be modified. The values for *Wood Burned*, *Wood Stove Usage*, and *Pounds in a Cord of Wood* should not be changed unless project-specific information is available. [District Regulation 6, Rule 3](#) allows only EPA-certified wood burning fireplaces in new construction projects.

- *Natural Gas Fireplaces*

The values in the data fields on the *Natural Gas Fireplaces* tab should only be modified in the case that project-specific information is available that supports overriding default values.

- *Natural Gas Emission Factors*

The emission factors contained in the *Natural Gas Emission Factors* tab cannot be modified. These values are used to estimate emissions from natural gas combustion in fireplaces/stoves and, according to the [URBEMIS User's Guide](#), are based on [U.S. Environmental Protection Agency Air Pollutant \(AP-42\) emission factors](#).

Landscape Fuel Combustion

The *Landscape Fuel Combustion* source category calculates on-site emissions from landscaping equipment such as lawn mowers, leaf blowers, chain saws, and hedge trimmers that are powered by internal combustion engines. On this tab, only adjust the value for the year being analyzed. The year entered into this field should be the earliest year when the project could become fully

operational. Landscaping emissions are estimated for the summer period only. URBEMIS uses emission rates from ARB's OFFROAD model to estimate of landscape maintenance equipment emissions.

Consumer Products

The *Consumer Products* source category is only relevant to projects that include residential land use types. The *Pounds of ROG (per person)* value should not be adjusted in this category. The persons per residential unit data field should be adjusted based on the estimated number of residents that would be supported by the proposed project, if available. The value should be consistent with the number of residents divided by the number of residential units.

Architectural Coating

Do not make changes to the values in the *Architectural Coating* source category without consulting BAAQMD.

EXAMPLE PROJECT OPERATIONAL-RELATED EMISSIONS CALCULATION

Description

The Example Project would develop a multi-story, mixed-use building that includes 40 units of residential condominium apartments, 50,000 square feet (or "50 thousand square feet" [ksf]) of offices and 35 ksf of retail land uses on an undeveloped 4.0-acre site. All of the residential condominium apartments would have natural gas lines for space heating but half of the units would be referred to as "suites" and include natural gas fireplaces. The regular apartments would not have natural gas fireplaces. Project construction would last two years beginning in 2010 and the project would be fully operational by 2013.

Screening Analysis

In the Land Use Module of URBEMIS (*Enter Land Use Data*) the corresponding Land Use Types of the proposed development would be Apartment High Rise units, General Office Building, and Strip Mall.

When each of the Land Use Types (i.e. Apartment High Rise units, General Office Building, and Strip Mall) is considered individually, their respective sizes would not exceed any of the District's Operational Screening Criteria (Table 3-1). However, because the project would contain more than one land use type, the operational screening levels cannot be used to assess the project's operational emissions, as explained in the discussion about the screening levels earlier in this guidance. The lead agency would be required to perform a detailed estimation of operational emissions using URBEMIS.

Emissions Quantification

When entering the proposed land uses into the Land Use Module, URBEMIS estimates the number of Acres for each Land Use Type assuming that each land use type would be constructed on separate lots. Using default values URBEMIS would assume this Example Project is 4.56 total acres (i.e. 0.65 acres for Apartment High Rise, 2.30 acres for General Office Building, and 1.61 acres for Strip Mall). For mixed-use and/or multi-level developments, the user should adjust the Acres for each of the proposed land uses such that the combined total acreage of all land use types is equal to the actual combined total size of the proposed project site (i.e., 4.0 acres, in this example) prior to running the model.

URBEMIS estimates the Trip Rate differently for residential land use types than for non-residential land use types. For residential land use types, URBEMIS adjusts the default Trip Rate based on residential density (i.e., dwelling units/residential acre). Therefore, overriding the default



value for the number of Acres assumed by URBEMIS for a residential land use type would automatically result in a change to the value assumed in the Trip Rate data field. If both the number of Acres and the Trip Rate for a residential development are known, the user should adjust the Acres field first, then adjust the Trip Rate field, and then click the Submit button. For nonresidential Land Use Types, URBEMIS uses a default value for in the Trip Rate data field that is directly based on the Unit Amt entered into the Land Use Module. The trip rates used by URBEMIS are based on standard rates from the ITE Trip Generation Manual. URBEMIS also assumes a Floor Area Ratio (FAR) of 0.5 for all nonresidential land use types. The FAR is the ratio of the total floor area of a building to the size of the parcel on which it is located. The user should override the value in the Acres data field based on the actual FAR for the development, as appropriate.

In the Area Source Module, Hearth Fuel Combustion category, the user should change the data fields for Wood Stoves, Wood Fireplaces, Natural Gas Fireplaces, and None (% w/o any hearth option) on the Hearth Percentages tab to 0, 0, 50, and 50, respectively to match the project description. In the Landscape Fuel Combustion source category the Year being Analyzed data field should be changed to 2013.

In the Operational Module the year data field in the Year & Vehicle Fleet category page should also be changed to 2013.

Lastly, the estimated daily and annual emissions of criteria air pollutants and precursors should be compared to the District's thresholds of significance (Table 2-2). If the daily or annual emissions would exceed the thresholds of significance, operational emissions would be considered significant and all feasible mitigation measures should be implemented to reduce these emissions.

CONSTRUCTION-RELATED EMISSIONS

Land Use Development Projects

URBEMIS includes a module (*Enter Construction Data*) that quantifies emissions from the following construction-related activity phases: demolition, mass and fine grading ("grading"), trenching, asphalt paving, building construction, and the application of architectural coatings.

URBEMIS Input Parameters

BAAQMD recommends input parameters and data requirements along with general URBEMIS user information for each construction-related activity phase below. Refer to the [URBEMIS User's Manual](#) for more detailed information. Appendix A contains a *Construction Data Needs Form* template that can be used to assist with requesting and gathering project-specific information.

Land Use Type and Size

Choose each individual land use type (e.g., single family housing, apartment high rise, regional shopping center, or office park) that is most applicable to the proposed development project in the *Enter Land Use Data* module and enter the size of the project (e.g., acres, thousand square feet [ksf], students, dwelling units [du], rooms, pumps, rooms, or employees). For several of the land use types, various size units are available (e.g., ksf and acres); ensure that the unit type for the project-specific data is consistent with the unit type selected in URBEMIS.

Schedule

The project schedule typically provides the number of months or days required for the completion of each construction-related activity phase (e.g., grading, building construction, asphalt paving), as well as the total duration of project construction. Where project-specific information is

available, modify URBEMIS default assumptions in *Click to Add, Delete, or Modify Phases* under the *Enter Construction Data* module. In this module, add or delete construction activities, add multiple similar construction activities (e.g., three grading phases), as well as overlap any construction activities as necessary. The URBEMIS default assumption for the number of work days per week is five, which inherently assumes that construction-related activities would only occur during weekdays, not on weekends. This can be altered if project-specific data is available in *Click to Add, Delete, or Modify Phases* under the construction phase setting *Work Days/Week*. For projects with specific phasing information (i.e., duration of each construction phase), but no definite construction commencement date, the earliest feasible start date should be used to be conservative. In addition, when project-specific information is not known, assume some overlap of construction phases (e.g., overlap of grading and asphalt paving activities or asphalt paving and building construction activities) to also be conservative. Please note that URBEMIS quantifies annual emissions on a calendar year basis (i.e., January to December) rather than the year-long period (running yearly average from the start date of construction) with the maximum amount of emissions.

Demolition

URBEMIS quantifies exhaust and fugitive PM dust emissions from demolition activities in the *Demolition Phase* within the *Enter Construction Data* module. Information to quantify emissions from this activity phase includes:

1. Duration of demolition (work days/week, phase start and end dates);
2. Total volume of building to be demolished (width, length, and height);
3. Maximum daily volume of building to be demolished (width, length, and height);
4. Haul truck capacity (cubic yards [yd³]);
5. Haul truck trip length to disposal site (round trip miles); and
6. Off-road equipment requirements (number and type of equipment).

URBEMIS contains default assumptions for haul truck capacity (yd³ per truck) and round trip distance (miles), if project-specific information is not available. URBEMIS also contains default assumptions for off-road equipment requirements. URBEMIS bases these on the size(s) of the proposed land use type(s) in the *Enter Land Use Data* module to estimate the off-road equipment requirements. In other words, URBEMIS assumes the size of the land use to be demolished is equal to the land use that would be developed. If the size(s) and/or type(s) of the land use(s) to be demolished are different from the land use(s) to be developed, create a separate URBEMIS run to quantify demolition emissions. Input the size and type of land use(s) for the different demolition building space versus the proposed building space in the *Enter Land Use Data* module for the separate URBEMIS run and only include the *Demolition* phase within the *Enter Construction Data* module.

Site Grading (Mass and Fine)

URBEMIS quantifies exhaust and fugitive PM dust emissions from grading activities in the *Site Grading* phase within the *Enter Construction Data* module. Information to quantify emissions from this activity phase includes, where applicable:

1. Duration of grading (work days/week, phase start and end dates);
2. Total acreage to be graded (acres);
3. Maximum daily acreage disturbed (acres per day);
4. Type and amount of cut/fill activities (yd³ per day on- or off-site);
5. Description of soil hauling (amount of soil import/export [yd³], haul truck capacity [yd³ per truck], round trips per day, round trip distance [miles]); and



6. Off-road grading equipment requirements (number and type of equipment).

URBEMIS default assumptions for the total acreage to be graded and the maximum daily acreage disturbed are shown in the *Daily Acreage* tab within the *Site Grading* phase. Under the default settings, URBEMIS assumes that the maximum daily acreage disturbed is equivalent to 25 percent of the total acreage to be graded. Override this default assumption if more specific project information is available. The *Site Grading* phase consists of separate tabs for *Daily Acreage*, as mentioned above, *Fugitive Dust*, *Soil Hauling*, and *Site Grading Equipment*. Due to the differences in methodology and level of information required, each is discussed separately below.

Fugitive Dust

URBEMIS quantifies fugitive PM dust emissions in the *Site Grading* phase under the *Fugitive Dust* tab. URBEMIS provides four different levels of detail from which to select (i.e., default, low, medium, and high), described below.

Default: This method involves the use of the *Default Emission Rate* quantification methodology in the *Fugitive Dust* tab for which fugitive PM dust emissions are based on an emission rate (pound per disturbed acre per day [lb/acre-day]). This method should only be used when no project-specific information is known, or when no cut/fill activities would occur. BAAQMD recommends the selection of the worst-case emission rate (i.e., 38.2 lb/acre-day) for extensive site preparation activities (e.g., cut/fill) where the exact type and amount (e.g., yd³ per day on- or off-site) are not known, and selection of the average emission rate (i.e., 10 lb/acre-day) otherwise. The average emission rate would be used for projects that involve typical site grading activities, but no cut/fill or earthmoving activities.

Low: The *Low Level of Detail* quantification method should be used when cut/fill activities would occur and the amount of on-site and off-site cut/fill is known. Input the type and amount of cut/fill activities (yd³ per day on- or off-site). On-site cut/fill activities involve soil movement within the boundaries of the project site via scrapers or graders, while off-site cut/fill activities involve soil movement outside of the boundaries of the project site via haul trucks. Projects that require off-site cut/fill should also enter the appropriate amount of soil import/export in the *Soil Hauling* tab, as discussed in more detail below.

Medium: The *Medium Level of Detail* quantification method should be used when cut/fill activities would occur and the required number of activity hours per day for on-site scrapers and off-site haul trucks is known. Input the number of hours per day for on-site scraper and off-site haul trucks conducting cut/fill activities. Input the total number of scraper-hours and/or haul truck-hours that are anticipated to occur per day. For example, if two scrapers would operate for eight hours per day each and three haul trucks would operate for four hours per day each, enter 16 for the *Onsite Scraper* parameter (i.e., 2 scrapers × 8 hours) and 12 for the *Offsite Haul* parameter (i.e., 3 haul trucks × 4 hours). Similar to the *Low Level of Detail* quantification method, on-site cut/fill activities involve soil movement within the boundaries of the project site via scrapers or graders, while off-site cut/fill activities involve soil movement outside of the boundaries of the project site via haul trucks. Projects that require off-site cut/fill should also enter the appropriate amount of soil import/export in the *Soil Hauling* tab, as discussed in more detail below.

High: The *High Level of Detail* quantification method should be used when cut/fill activities would occur and details about soil haulage is known. Input data on the amount of on- and off-site haulage (ton-miles per day) based on the total volume of cut/fill (yd³), duration of the cut/fill activities (work days), density of soil being moved (tons per yd³), and the scraper or haul truck round-trip distance (miles). A *High Level Haulage Input* worksheet that can be used to assist with

determining the amount of on- and off-site haulage (ton-miles per day) required for this method is contained in Appendix A.

Soil Hauling

URBEMIS quantifies entrained PM road dust and exhaust emissions from soil hauling in the *Soil Hauling* tab within the *Site Grading* phase. Information requirements include the amount of soil import/export (yd³), round trips per day, round trip distance (miles), and haul truck capacity (yd³ per truck). For round trip distance and haul truck capacity, URBEMIS provides default assumptions of 20 yd³ per truck and 20 miles, respectively. Override the default assumptions if the project specific values are known.

Grading Equipment

URBEMIS quantifies exhaust emissions from on-site heavy-duty equipment in the *Site Grading Equipment* tab within the *Site Grading* phase. Information requirements include the type of equipment and quantity or amount, along with horsepower, load factor, and hours of operation per work day. URBEMIS provides default assumptions for all of these, primarily based on the amount of maximum daily acreage disturbed shown in the *Daily Acreage* tab. If project-specific grading equipment is known, click on the *All Checks Off* button and input the number for each type of equipment to be used for the project. Note that although the *All Checks Off* button will allow users to override the URBEMIS default equipment assumptions in the *Amount Model Uses* column, make sure to delete the previous URBEMIS default equipment selections prior to entering the project-specific equipment information.

Asphalt Paving

URBEMIS quantifies off-gas and exhaust emissions from asphalt paving activities in the *Paving* tab within the *Enter Construction Data* module. Information to quantify emissions from this activity phase includes the duration of asphalt paving (work days/week, phase start and end dates), total acreage to be paved, and off-road equipment requirements. URBEMIS includes default assumptions for the amount of asphalt to be paved based on the size of the proposed land use type(s) in the *Enter Land Use Data* module. Account for the size of project features (e.g., parking structure, roadways, and large hardtop fields) that would require asphalt paving in excess of default assumptions (i.e., standard site access and parking spaces) within the *Total Acreage to be Paved with Asphalt* parameter.

Architectural Coating

URBEMIS quantifies off-gas emissions from the application of architectural coatings in the *Arch Coating* tab within the *Enter Construction Data* module. Information to quantify emissions from this phase include the duration of activities (i.e., work days/week, phase start and end dates). URBEMIS includes default parameters for the volatile organic compound content per liter of coating based on BAAQMD's Regulation 8, Rule 3: Architectural Coating.

Basic Construction Mitigation Measures

BAAQMD recommends that all proposed projects implement the *Basic Construction Mitigation Measures* regardless of the significance determination. The methodology for quantifying criteria air pollutant and precursor emission reductions from both fugitive PM dust and exhaust emissions by implementing the *Basic Construction Mitigation Measures* discussed below.

Fugitive Particulate Matter Dust Emissions

For quantification of fugitive PM dust-related *Basic Construction Mitigation Measures* in URBEMIS, BAAQMD first recommends selecting the *Mitigation* option in the *Enter Construction Data* module for the *Site Grading* phase. For *Site Grading Soil Disturbance Mitigation*, select (turn on) the soil stabilizing measure titled *Water exposed surfaces* along with the two times daily option without altering the default percent reduction. For *Unpaved Roads Mitigation*, select the



measure titled *Reduce speed on unpaved roads to less than 15 mph* without altering the default percent reduction. URBEMIS assumes that fugitive PM dust emissions from soil disturbance activities and travel on unpaved roads account for approximately 79 percent and 21 percent of total the fugitive PM dust emissions, respectively. URBEMIS will apply an approximate 53 percent reduction to total fugitive PM dust emissions as a result of implementation of the *Basic Construction Mitigation Measures* 1 through 5 in Table 8-2.

BAAQMD considers this as a surrogate for the implementation of the *Basic Construction Mitigation Measures* listed in Section 8.2. RoadMod assumes an inherent 50 percent reduction in fugitive PM dust emissions when water trucks are selected. BAAQMD recommends selecting water trucks to account for the implementation of the *Basic Construction Mitigation Measures*.

Exhaust Emissions

For quantification of the exhaust-related *Basic Construction Mitigation Measures* in URBEMIS, select the *Mitigation* option in the *Enter Construction Data* module for the *Site Grading*, *Building Construction*, and *Asphalt Paving* phases, as applicable to the proposed project. BAAQMD then recommends that for the *Off-Road Equipment Mitigation*, select (turn on) the measure titled *Use aqueous diesel fuel* and alter the default percent reduction for each to match those recommended by BAAQMD in Section 8.2. BAAQMD considers this as a surrogate for the implementation of the *Basic Construction Mitigation Measures* listed in Section 8.2.

RoadMod

RoadMod does not calculate emission reductions associated with the implementation of the exhaust-related *Basic Construction Mitigation Measures*. To quantify the exhaust-related emission reductions associated with the implementation of the *Basic Construction Mitigation Measures*, rely on the information and data contained in the *Data Entry* and *Emission Estimates* tabs in RoadMod. Reductions in exhaust emissions should be quantified separately for each phase (i.e., Grubbing/Land Clearing, Grading/Excavation, Drainage/Utilities/ Sub-Grade, and Paving). First isolate the exhaust emissions from off-road (e.g., heavy-duty) equipment for each phase. Table 8-4 below provides a cell reference for the *Data Entry* tab of RoadMod to assist with the identification and isolation of such emissions.

Once isolated, apply the specified percent reductions listed in Section 8.2 to each compound emission to determine the resultant amount of mitigated emissions from construction of the proposed project for each phase. A 5 percent reduction could be applied for NO_x, PM₁₀, and PM_{2.5} to account for implementation of the appropriate *Basic Construction Mitigation Measures*.

Emission reductions should be estimated by multiplying the total emissions for each compound by the anticipated emission reduction applicable for that compound to estimate the mitigated amount of emissions reductions.

Linear Projects

For proposed projects that are linear in nature (e.g., road or levee construction, pipeline installation, transmission lines), BAAQMD recommends using the most current version of Sacramento Metropolitan Air Quality Management District's (SMAQMD) Road Construction Emissions Model ([RoadMod](#)) to quantify construction-related criteria air pollutants and precursors. Similar to URBEMIS, RoadMod quantifies fugitive PM dust, exhaust, and off-gas emissions from the following construction-related activity phases: grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade, and paving. BAAQMD recommends using RoadMod in accordance with the user instructions and default assumptions unless project-specific information is available. The default assumptions are applicable to projects located within the SFBAAB. Also, URBEMIS inherently accounts for the on-site construction of roadways and the installation of project infrastructure. If the proposed project involves off-site improvements that

are linear in nature (e.g., roadway widening), use RoadMod in addition to URBEMIS to determine total emissions.

**Table B-1
Roadway Construction Emissions Model
Cell Reference for Unmitigated Off-Road Equipment Emissions**

Linear Construction Phase	NO _x	PM ₁₀	PM _{2.5}
Grubbing/Land Clearing	G155	H155	I155
Grading/Excavation	G195	H195	I195
Drainage/Utilities/Sub-Grade	G235	H235	I235
Paving	G275	H275	I275

Notes: NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.
Cell references refer to the *Data Entry* tab from the SMAQMD Road Construction Emissions Model.
Source: SMAQMD 2009.

NO_x Emission Reduction

Emissions of NO_x (lb/day) × (1 – [NO_x percent reduction])

PM₁₀ Emission Reduction

Emissions of PM₁₀ (lb/day) × (1 – [PM₁₀ percent reduction])

PM_{2.5} Emission Reduction

Emissions of PM_{2.5} (lb/day) × (1 – [PM_{2.5} percent reduction])

Users should use the *Emission Estimates* tab to calculate the total mitigated amount of emissions for each phase of construction. The total NO_x, PM₁₀, and PM_{2.5} exhaust emissions for each phase are contained in cells E6 to E9, H6 to H9, and K6 to K9, respectively. To calculate the total amount of mitigated emissions, first subtract the unmitigated off-road equipment exhaust emissions (Please refer to Table 8-2) from the total exhaust emissions to calculate total emissions without inclusion of off-road equipment exhaust emissions. Then, add the mitigated off-road exhaust emissions (calculated with the method described above) to the remaining emissions to calculate the total emissions with mitigated off-road construction equipment exhaust emissions. For PM₁₀ and PM_{2.5}, add the mitigated exhaust emissions with the mitigated fugitive PM dust emissions (calculated by RoadMod) to calculate the total amount of mitigated PM₁₀ and PM_{2.5} emissions.

Fugitive Particulate Matter Dust

BAAQMD recommends that for *Site Grading Soil Disturbance Mitigation* select (turn on) the soil stabilizing measure titled *Equipment loading/unloading*. To account for the implementation of the *Additional Construction Mitigation Measures 1 through 8*, alter the default percent reduction to 63 percent, which would result in a total reduction of 75 percent in fugitive PM dust emissions.

To quantify emission reductions associated with the implementation of the fugitive PM dust-related *Additional Construction Mitigation Measures* in RoadMod, rely on the *Emission Estimates* tab. RoadMod assumes a 50 percent reduction in fugitive PM dust emissions. Apply an additional 50 percent reduction to the fugitive PM dust emissions contained in the *Emission Estimates* tab of RoadMod to account for the implementation of the *Additional Construction Mitigation Measures 1 through 8*. The resulting total percent reduction from fugitive PM dust emissions would be 75



percent (i.e., $1 - (0.5 \times 0.5)$). The resultant amount of fugitive PM dust emissions should be added to the average daily mitigated exhaust PM emissions (methodology described below) to calculate the total amount of mitigated PM₁₀ and PM_{2.5} emissions.

Exhaust Emissions

BAAQMD recommends that for the *Off-Road Equipment Mitigation* select (turn on) the measure titled *Diesel particulate filter* and alter the default percent reduction for each to match those recommended by BAAQMD in Section 8.2. BAAQMD considers this as a surrogate for the implementation of the *Additional Construction Mitigation Measures*. BAAQMD recommends that, if implementing Measure 9, turn on the measure titled *Use aqueous diesel fuel* and alter the default percent reduction values to 20 percent for NO_x and 45 percent for PM₁₀, and PM_{2.5}.

For RoadMod, apply a 20 percent reduction for NO_x and a 45 percent reduction for PM₁₀ and PM_{2.5} to account for implementation of Measure 9 in the *Additional Construction Mitigation Measure*. To quantify the other exhaust-related emission reductions associated with the implementation of the *Additional Construction Mitigation Measures*, follow the same methodology described above for applying the reductions associated with the implementation of the *Basic Construction Mitigation Measures*.

Off-Gas Emissions

For quantification of off-gas-related *Additional Construction Mitigation Measures*, first select the *Mitigation* option in the *Enter Construction Data* module for the *Architectural Coating* phase. Then select (turn on) the measures applicable to the proposed project and alter the default percent reduction for each to match those recommended by BAAQMD in Section 8.2. BAAQMD considers this as a surrogate for the implementation of the *Additional Construction Mitigation Measures* listed in Section 8.2.

EXAMPLE PROJECT CONSTRUCTION-RELATED EMISSIONS CALCULATION

Description

This Example Project proposes development of 100 single-family residential units over a 2-year period. The project site would be approximately 33 acres (URBEMIS default assumption) and require an undetermined volume of fill materials to be imported to the site. In addition, the project would involve construction of a new access road to serve the development.

Screening Analysis

The project size is less than the construction screening level for single-family residential uses listed in Table 3-4. However, because the project includes the import of fill to the site, the construction screening levels cannot be used to address construction emissions. Therefore, a detailed quantitative analysis of construction-generated NO_x emissions should be performed using URBEMIS to estimate NO_x generated by construction of the residential units and using the RoadMod to estimate NO_x emissions from construction of the new access road.

Emissions Quantification

The size and type of land use proposed (i.e., single family housing) should be entered into the Land Use Module in URBEMIS. In this case, the project's total acres are equal to the default URBEMIS assumption; therefore, no override is necessary in the Acres data field. Modeling the construction emissions associated with single-family residential units in URBEMIS requires detailed information about the construction schedule (e.g., commencement date, types of construction activities required, and length of construction activities).

The fugitive PM dust emissions associated with fill activities should be estimated using the Fugitive Dust tab of the Mass Site Grading phase. For use of the Low Level of Detail quantification method, the volume of fill activities should be divided by the number of days that fill activities would occur. For example, if the project would require up to 20,000 yd³ of fill materials to be imported over a minimum of 40 work days, the user should enter 500 (i.e., 20,000 yd³ ÷ 40 days) into the Amount of Offsite Cut/Fill (cubic yards/day) data field. In addition, users should also input the total volume of fill materials to be imported into the Total Amount of Soil to Import (cubic yards) data field in the Soil Hauling tab. Off-road construction equipment for grading activities is estimated by URBEMIS based on the Maximum Daily Acreage Disturbed data field.

URBEMIS estimates the types and quantities of construction equipment in the Building Construction phase to develop the proposed project. For the Asphalt Paving phase, URBEMIS assumes the project requires asphalt paving for 25% of the total site. If more specific information can be provided, then user should turn off the Reset acreage with land use changes button in the Off Gas Emissions tab and override the Total Acreage to be Paved with Asphalt data field.

Due to the linear nature of the new access road to the project, daily mass emissions associated with its construction should be quantified using RoadMod. Users should obtain basic project information for the new access road and enter the information into the Data Entry tab of RoadMod. If project-specific information is not available RoadMod estimates the construction schedule for the road and the equipment used in each construction phase.

For analysis of the project's total average daily emissions, users should add emissions of each respective pollutant associated with development of the single-family residential units with the respective emissions associated with construction of the access road where construction activities are anticipated to overlap in the construction schedule. The average daily emissions of each pollutant that would occur throughout the entire construction period should be identified and compared with the District's threshold of significance. If the emissions would exceed the threshold of significance, construction emissions would be considered significant and all feasible mitigation measures to reduce emissions shall be implemented.

The user should keep in mind that the District's numeric thresholds for construction emissions apply to exhaust emissions only. The District recommends implementation of Basic Control Measures to reduce fugitive dust emissions for all projects, and Additional Control Measures to reduce fugitive dust emissions for significant projects.



C. SAMPLE AIR QUALITY SETTING

The Bay Area Air Quality Management District (BAAQMD) is the regional air quality agency for the San Francisco Bay Area Air Basin (SFBAAB), which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

C.1.1. Climate, Topography, Air Pollution Potential

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits resulting in a western coast gap, Golden Gate, and an eastern coast gap, Carquinez Strait, which allow air to flow in and out of the SFBAAB and the Central Valley.

The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

In the winter, the Pacific high-pressure cell weakens and shifts southward resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential.

High Pressure Cell

During the summer, the large-scale meteorological condition that dominates the West Coast is a semi-permanent high pressure cell centered over the northeastern Pacific Ocean. This high pressure cell keeps storms from affecting the California coast. Hence, the SFBAAB experiences little precipitation in the summer months. Winds tend to blow on shore out of the north/northwest.

The steady northwesterly flow induces upwelling of cold water from below. This upwelling produces a band of cold water off the California coast. When air approaches the California coast, already cool and moisture-laden from its long journey over the Pacific, it is further cooled as it crosses this bank of cold water. This cooling often produces condensation resulting in a high incidence of fog and stratus clouds along the Northern California coast in the summer.

Generally in the winter, the Pacific high weakens and shifts southward, winds tend to flow offshore, upwelling ceases and storms occur. During the winter rainy periods, inversions (layers of warmer air over colder air; see below) are weak or nonexistent, winds are usually moderate and air pollution potential is low. The Pacific high does periodically become dominant, bringing strong inversions, light winds and high pollution potential.

Topography

The topography of the SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys and bays. This complex terrain, especially the higher elevations, distorts the normal wind flow patterns in the SFBAAB. The greatest distortion occur when low-level inversions are present and the air beneath the inversion flows independently of air above the inversion, a condition that is common in the summer time.

The only major break in California's Coast Range occurs in the SFBAAB. Here the Coast Range splits into western and eastern ranges. Between the two ranges lies San Francisco Bay. The gap in the western coast range is known as the Golden Gate, and the gap in the eastern coast range is the Carquinez Strait. These gaps allow air to pass into and out of the SFBAAB and the Central Valley.

Wind Patterns

During the summer, winds flowing from the northwest are drawn inland through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more directly from the west as they stream through the Golden Gate. This channeling of wind through the Golden Gate produces a jet that sweeps eastward and splits off to the northwest toward Richmond and to the southwest toward San Jose when it meets the East Bay hills.

Wind speeds may be strong locally in areas where air is channeled through a narrow opening, such as the Carquinez Strait, the Golden Gate or the San Bruno gap. For example, the average wind speed at San Francisco International Airport in July is about 17 knots (from 3 p.m. to 4 p.m.), compared with only 7 knots at San Jose and less than 6 knots at the Farallon Islands.

The air flowing in from the coast to the Central Valley, called the sea breeze, begins developing at or near ground level along the coast in late morning or early afternoon. As the day progresses, the sea breeze layer deepens and increases in velocity while spreading inland. The depth of the sea breeze depends in large part upon the height and strength of the inversion. If the inversion is low and strong, and hence stable, the flow of the sea breeze will be inhibited and stagnant conditions are likely to result.

In the winter, the SFBAAB frequently experiences stormy conditions with moderate to strong winds, as well as periods of stagnation with very light winds. Winter stagnation episodes are characterized by nighttime drainage flows in coastal valleys. Drainage is a reversal of the usual daytime air-flow patterns; air moves from the Central Valley toward the coast and back down toward the Bay from the smaller valleys within the SFBAAB.

Temperature

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient (differential) in temperature is often created between the coast and the Central Valley, and small-scale local gradients are often produced along the shorelines of the ocean and bays. The temperature gradient near the ocean is also exaggerated, especially in summer, because of the upwelling of cold ocean bottom water along the coast. On summer afternoons the temperatures at the coast can be 35°F cooler than temperatures 15 to 20 miles inland. At night this contrast usually decreases to less than 10°.

In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large.

Precipitation

The SFBAAB is characterized by moderately wet winters and dry summers. Winter rains account for about 75 percent of the average annual rainfall. The amount of annual precipitation can vary greatly from one part of the SFBAAB to another even within short distances. In general, total annual rainfall can reach 40 inches in the mountains, but it is often less than 16 inches in sheltered valleys.



During rainy periods, ventilation (rapid horizontal movement of air and injection of cleaner air) and vertical mixing are usually high, and thus pollution levels tend to be low. However, frequent dry periods do occur during the winter where mixing and ventilation are low and pollutant levels build up.

Air Pollution Potential

The potential for high pollutant concentrations developing at a given location depends upon the quantity of pollutants emitted into the atmosphere in the surrounding area or upwind, and the ability of the atmosphere to disperse the contaminated air. The topographic and climatological factors discussed above influence the atmospheric pollution potential of an area. Atmospheric pollution potential, as the term is used here, is independent of the location of emission sources and is instead a function of factors described below.

Wind Circulation

Low wind speed contributes to the buildup of air pollution because it allows more pollutants to be emitted into the air mass per unit of time. Light winds occur most frequently during periods of low sun (fall and winter, and early morning) and at night. These are also periods when air pollutant emissions from some sources are at their peak, namely, commute traffic (early morning) and wood burning appliances (nighttime). The problem can be compounded in valleys, when weak flows carry the pollutants upvalley during the day, and cold air drainage flows move the air mass downvalley at night. Such restricted movement of trapped air provides little opportunity for ventilation and leads to buildup of pollutants to potentially unhealthy levels.

Wind-roses provide useful information for communities that contain industry, landfills or other potentially odorous or noxious land uses. Each wind-rose diagram provides a general indication of the proportion of time that winds blow from each compass direction. The longer the vector length, the greater the frequency of wind occurring from that direction. Such information may be particularly useful in planning buffer zones. For example, sensitive receptors such as residential developments, schools or hospitals are inappropriate uses immediately downwind from facilities that emit toxic or odorous pollutants, unless adequate separation is provided by a buffer zone. Caution should be taken in using wind-roses in planning and environmental review processes. A site on the opposite side of a hill or tall building, even a short distance from a meteorological monitoring station, may experience a significant difference in wind pattern. Consult BAAQMD meteorologists if more detailed wind circulation information is needed.

Inversions

An inversion is a layer of warmer air over a layer of cooler air. Inversions affect air quality conditions significantly because they influence the mixing depth, i.e., the vertical depth in the atmosphere available for diluting air contaminants near the ground. The highest air pollutant concentrations in the SFBAAB generally occur during inversions.

There are two types of inversions that occur regularly in the SFBAAB. One is more common in the summer and fall, while the other is most common during the winter. The frequent occurrence of elevated temperature inversions in summer and fall months acts to cap the mixing depth, limiting the depth of air available for dilution. Elevated inversions are caused by subsiding air from the subtropical high pressure zone, and from the cool marine air layer that is drawn into the SFBAAB by the heated low pressure region in the Central Valley.

The inversions typical of winter, called radiation inversions, are formed as heat quickly radiates from the earth's surface after sunset, causing the air in contact with it to rapidly cool. Radiation inversions are strongest on clear, low-wind, cold winter nights, allowing the build-up of such pollutants as carbon monoxide and particulate matter. When wind speeds are low, there is little mechanical turbulence to mix the air, resulting in a layer of warm air over a layer of cooler air next

to the ground. Mixing depths under these conditions can be as shallow as 50 to 100 meters, particularly in rural areas. Urban areas usually have deeper minimum mixing layers because of heat island effects and increased surface roughness. During radiation inversions downwind transport is slow, the mixing depths are shallow, and turbulence is minimal, all factors which contribute to ozone formation.

Although each type of inversion is most common during a specific season, either inversion mechanism can occur at any time of the year. Sometimes both occur simultaneously. Moreover, the characteristics of an inversion often change throughout the course of a day. The terrain of the SFBAAB also induces significant variations among subregions.

Solar Radiation

The frequency of hot, sunny days during the summer months in the SFBAAB is another important factor that affects air pollution potential. It is at the higher temperatures that ozone is formed. In the presence of ultraviolet sunlight and warm temperatures, reactive organic gases and oxides of nitrogen react to form secondary photochemical pollutants, including ozone.

Because temperatures in many of the SFBAAB inland valleys are so much higher than near the coast, the inland areas are especially prone to photochemical air pollution.

In late fall and winter, solar angles are low, resulting in insufficient ultraviolet light and warming of the atmosphere to drive the photochemical reactions. Ozone concentrations do not reach significant levels in the SFBAAB during these seasons.

Sheltered Terrain

The hills and mountains in the SFBAAB contribute to the high pollution potential of some areas. During the day, or at night during windy conditions, areas in the lee sides of mountains are sheltered from the prevailing winds, thereby reducing turbulence and downwind transport. At night, when wind speeds are low, the upper atmospheric layers are often decoupled from the surface layers during radiation conditions. If elevated terrain is present, it will tend to block pollutant transport in that direction. Elevated terrain also can create a recirculation pattern by inducing upvalley air flows during the day and reverse downvalley flows during the night, allowing little inflow of fresh air.

The areas having the highest air pollution potential tend to be those that experience the highest temperatures in the summer and the lowest temperatures in the winter. The coastal areas are exposed to the prevailing marine air, creating cooler temperatures in the summer, warmer temperatures in winter, and stratus clouds all year. The inland valleys are sheltered from the marine air and experience hotter summers and colder winters. Thus, the topography of the inland valleys creates conditions conducive to high air pollution potential.

Pollution Potential Related to Emissions

Although air pollution potential is strongly influenced by climate and topography, the air pollution that occurs in a location also depends upon the amount of air pollutant emissions in the surrounding area or transported from more distant places. Air pollutant emissions generally are highest in areas that have high population densities, high motor vehicle use and/or industrialization. These contaminants created by photochemical processes in the atmosphere, such as ozone, may result in high concentrations many miles downwind from the sources of their precursor chemicals.

Climatological Subregions

This section discusses the varying climatological and topographic conditions, and the resulting variations in air pollution potential, within inhabited subregions of the SFBAAB. All urbanized areas of the SFBAAB are included in one of 11 climatological subregions. Sparsely inhabited



areas are excluded from the subregional designations. Some of the climatological subregions discussed in this appendix overlap county boundaries. The Lead Agencies analyzing projects located close to the boundary between subregions may need to examine the characteristics of the neighboring subregions to adequately evaluate potential air quality impacts.

The information about each subregion includes location, topography and climatological factors relevant to air quality. Where relevant to air quality concerns, more localized subareas within a subregion are discussed. Each subregional section concludes with a discussion of pollution potential resulting from climatological and topographic variables and the major types of air pollutant sources in the subregion.

Carquinez Strait Region

The Carquinez Strait runs from Rodeo to Martinez. It is the only sea-level gap between the Bay and the Central Valley. The subregion includes the lowlands bordering the strait to the north and south, and includes the area adjoining Suisun Bay and the western part of the Sacramento-San Joaquin Delta as far east as Bethel Island. The subregion extends from Rodeo in the southwest and Vallejo in the northwest to Fairfield on the northeast and Brentwood on the southeast.

Prevailing winds are from the west in the Carquinez Strait. During the summer and fall months, high pressure offshore coupled with low pressure in the Central Valley causes marine air to flow eastward through the Carquinez Strait. The wind is strongest in the afternoon. Afternoon wind speeds of 15 to 20 mph are common throughout the strait region. Annual average wind speeds are 8 mph in Martinez, and 9 to 10 mph further east. Sometimes atmospheric conditions cause air to flow from the east. East winds usually contain more pollutants than the cleaner marine air from the west. In the summer and fall months, this can cause elevated pollutant levels to move into the central SFBAAB through the strait. These high pressure periods are usually accompanied by low wind speeds, shallow mixing depths, higher temperatures and little or no rainfall.

Summer mean maximum temperatures reach about 90° F. in the subregion. Mean minimum temperatures in the winter are in the high 30's. Temperature extremes are especially pronounced in sheltered areas farther from the moderating effects of the strait itself, e.g. at Fairfield.

Many industrial facilities with significant air pollutant emissions — e.g., chemical plants and refineries — are located within the Carquinez Strait Region. The pollution potential of this area is often moderated by high wind speeds. However, upsets at industrial facilities can lead to short-term pollution episodes, and emissions of unpleasant odors may occur at anytime. Receptors downwind of these facilities could suffer more long-term exposure to air contaminants than individuals elsewhere. It is important that local governments and other Lead Agencies maintain buffers zones around sources of air pollution sufficient to avoid adverse health and nuisance impacts on nearby receptors. Areas of the subregion that are traversed by major roadways, e.g. Interstate 80, may also be subject to higher local concentrations of carbon monoxide and particulate matter, as well as certain toxic air contaminants such as benzene.

Cotati and Petaluma Valleys

The subregion that stretches from Santa Rosa to the San Pablo Bay is often considered as two different valleys: the Cotati Valley in the north and the Petaluma Valley in the south. To the east, the valley is bordered by the Sonoma Mountains, while to the west is a series of low hills, followed by the Estero Lowlands, which open to the Pacific Ocean. The region from the Estero Lowlands to the San Pablo Bay is known as the Petaluma Gap. This low-terrain area allows marine air to travel into the SFBAAB.

Wind patterns in the Petaluma and Cotati Valleys are strongly influenced by the Petaluma Gap, with winds flowing predominantly from the west. As marine air travels through the Petaluma Gap, it splits into northward and southward paths moving into the Cotati and Petaluma valleys. The

southward path crosses San Pablo Bay and moves eastward through the Carquinez Strait. The northward path contributes to Santa Rosa's prevailing winds from the south and southeast. Petaluma's prevailing winds are from the northwest.

When the ocean breeze is weak, strong winds from the east can predominate, carrying pollutants from the Central Valley and the Carquinez Strait. During these periods, upvalley flows can carry the polluted air as far north as Santa Rosa.

Winds are usually stronger in the Petaluma Valley than the Cotati Valley because the former is directly in line with the Petaluma Gap. Petaluma's climate is similar to areas closer to the coast even though Petaluma is 28 miles from the ocean. Average annual wind speed at the Petaluma Airport is seven mph. The Cotati Valley, being slightly north of the Petaluma Gap, experiences lower wind speeds. The annual average wind speed in Santa Rosa is five mph.

Air temperatures are very similar in the two valleys. Summer maximum temperatures for this subregion are in the low-to-mid-80's, while winter maximum temperatures are in the high-50's to low-60's. Summer minimum temperatures are around 50 degrees, and winter minimum temperatures are in the high 30's.

Generally, air pollution potential is low in the Petaluma Valley because of its link to the Petaluma Gap and because of its low population density. There are two scenarios that could produce elevated pollutant levels: 1) stagnant conditions in the morning hours created when a weak ocean breeze meets a weak bay breeze, and 2) an eastern or southeastern wind pattern in the afternoon brings in pollution from the Carquinez Strait Region and the Central Valley.

The Cotati Valley has a higher pollution potential than does the Petaluma Valley. The Cotati Valley lacks a gap to the sea, contains a larger population and has natural barriers at its northern and eastern ends. There are also industrial facilities in and around Santa Rosa. Both valleys of this subregion are also threatened by increased motor vehicle traffic and the associated air contaminants. Population and motor vehicle use are increasing significantly, and housing costs and the suburbanization of employment are leading to more and longer commutes traversing the subregion.

Diablo and San Ramon Valleys

East of the Coast Range lay the Diablo and San Ramon Valleys. The valleys have a northwest to southeast orientation, with the northern portion known as Diablo Valley and the southern portion as San Ramon Valley. The Diablo Valley is bordered in the north by the Carquinez Strait and in the south by the San Ramon Valley. The San Ramon Valley is long and narrow and extends south from Walnut Creek to Dublin. At its southern end it opens onto the Amador Valley.

The mountains on the west side of these valleys block much of the marine air from reaching the valleys. During the daytime, there are two predominant flow patterns: an upvalley flow from the north and a westerly flow (wind from the west) across the lower elevations of the Coast Range. On clear nights, surface inversions separate the flow of air into two layers: the surface flow and the upper layer flow. When this happens, there are often drainage surface winds which flow downvalley toward the Carquinez Strait.

Wind speeds in these valleys generally are low. Monitoring stations in Concord and Danville report annual average wind speeds of 5 mph. Winds can increase in the afternoon near San Ramon because it is located at the eastern edge of the Crow Canyon gap. Through this gap, polluted air from cities near the Bay travels to the valley in the summer months.

Air temperatures in these valleys are cooler in the winter and warmer in the summer than are temperatures further west, as these valleys are far from the moderating effect of the Bay and



ocean. Mean summer maximum temperatures are in the low- to mid-80's. Mean winter minimum temperatures are in the high-30's to low-40's.

Pollution potential is relatively high in these valleys. On winter evenings, light winds combined with surface-based inversions and terrain that restricts air flow can cause pollutant levels to build up. San Ramon Valley can experience high pollution concentrations due to motor vehicle emissions and emissions from fireplaces and wood stoves. In the summer months, ozone and ozone precursors are often transported into the valleys from both the central SFBAAB and the Central Valley.

Livermore Valley

The Livermore Valley is a sheltered inland valley near the eastern border of SFBAAB. The western side of the valley is bordered by 1,000 to 1,500 foot hills with two gaps connecting the valley to the central SFBAAB, the Hayward Pass and Niles Canyon. The eastern side of the valley also is bordered by 1,000 to 1,500 foot hills with one major passage to the San Joaquin Valley called the Altamont Pass and several secondary passages. To the north lie the Black Hills and Mount Diablo. A northwest to southeast channel connects the Diablo Valley to the Livermore Valley. The south side of the Livermore Valley is bordered by mountains approximately 3,000 to 3,500 feet high.

During the summer months, when there is a strong inversion with a low ceiling, air movement is weak and pollutants become trapped and concentrated. Maximum summer temperatures in the Livermore Valley range from the high-80's to the low-90's, with extremes in the 100's. At other times in the summer, a strong Pacific high pressure cell from the west, coupled with hot inland temperatures causes a strong onshore pressure gradient which produces a strong, afternoon wind. With a weak temperature inversion, air moves over the hills with ease, dispersing pollutants.

In the winter, with the exception of an occasional storm moving through the area, air movement is often dictated by local conditions. At night and early morning, especially under clear, calm and cold conditions, gravity drives cold air downward. The cold air drains off the hills and moves into the gaps and passes. On the eastern side of the valley the prevailing winds blow from north, northeast and east out of the Altamont Pass. Winds are light during the late night and early morning hours. Winter daytime winds sometimes flow from the south through the Altamont Pass to the San Joaquin Valley. Average winter maximum temperatures range from the high-50's to the low-60's, while minimum temperatures are from the mid-to-high-30's, with extremes in the high teens and low-20's.

Air pollution potential is high in the Livermore Valley, especially for photochemical pollutants in the summer and fall. High temperatures increase the potential for ozone to build up. The valley not only traps locally generated pollutants but can be the receptor of ozone and ozone precursors from San Francisco, Alameda, Contra Costa and Santa Clara counties. On northeasterly wind flow days, most common in the early fall, ozone may be carried west from the San Joaquin Valley to the Livermore Valley.

During the winter, the sheltering effect of the valley, its distance from moderating water bodies, and the presence of a strong high pressure system contribute to the development of strong, surface-based temperature inversions. Pollutants such as carbon monoxide and particulate matter, generated by motor vehicles, fireplaces and agricultural burning, can become concentrated. Air pollution problems could intensify because of population growth and increased commuting to and through the subregion.

Marin County Basins

Marin County is bounded on the west by the Pacific Ocean, on the east by San Pablo Bay, on the south by the Golden Gate and on the north by the Petaluma Gap. Most of Marin's population lives in the eastern part of the county, in small, sheltered valleys. These valleys act like a series of miniature air basins.

Although there are a few mountains above 1500 feet, most of the terrain is only 800 to 1000 feet high, which usually is not high enough to block the marine layer. Because of the wedge shape of the county, northeast Marin County is further from the ocean than is the southeastern section. This extra distance from the ocean allows the marine air to be moderated by bayside conditions as it travels to northeastern Marin County. In southern Marin the distance from the ocean is short and elevations are lower, resulting in higher incidence of maritime air in that area.

Wind speeds are highest along the west coast of Marin, averaging about 8 to 10 miles per hour. The complex terrain in central Marin creates sufficient friction to slow the air flow. At Hamilton Air Force Base, in Novato, the annual average wind speeds are only 5 mph. The prevailing wind directions throughout Marin County are generally from the northwest.

In the summer months, areas along the coast are usually subject to onshore movement of cool marine air. In the winter, proximity to the ocean keeps the coastal regions relatively warm, with temperatures varying little throughout the year. Coastal temperatures are usually in the high-50's in the winter and the low-60's in the summer. The warmest months are September and October.

The eastern side of Marin County has warmer weather than the western side because of its distance from the ocean and because the hills that separate eastern Marin from western Marin occasionally block the flow of the marine air. The temperatures of cities next to the Bay are moderated by the cooling effect of the Bay in the summer and the warming effect of the Bay in the winter. For example, San Rafael experiences average maximum summer temperatures in the low-80's and average minimum winter temperatures in the low-40's. Inland towns such as Kentfield experience average maximum temperatures that are two degrees cooler in the winter and two degrees warmer in the summer.

Air pollution potential is highest in eastern Marin County, where most of population is located in semi-sheltered valleys. In the southeast, the influence of marine air keeps pollution levels low. As development moves further north, there is greater potential for air pollution to build up because the valleys are more sheltered from the sea breeze. While Marin County does not have many polluting industries, the air quality on its eastern side — especially along the U.S. 101 corridor — may be affected by emissions from increasing motor vehicle use within and through the county.

Napa Valley

The Napa Valley is bordered by relatively high mountains. With an average ridge line height of about 2000 feet, with some peaks approaching 3000 to 4000 feet, these mountains are effective barriers to the prevailing northwesterly winds. The Napa Valley is widest at its southern end and narrows in the north.

During the day, the prevailing winds flow upvalley from the south about half of the time. A strong upvalley wind frequently develops during warm summer afternoons, drawing air in from the San Pablo Bay. Daytime winds sometimes flow downvalley from the north. During the evening, especially in the winter, downvalley drainage often occurs. Wind speeds are generally low, with almost 50 percent of the winds less than 4 mph. Only 5 percent of the winds are between 16 and 18 mph, representing strong summertime upvalley winds and winter storms.

Summer average maximum temperatures are in the low 80's at the southern end of the valley and in the low 90's at the northern end. Winter average maximum temperatures are in the high-



50's and low-60's, and minimum temperatures are in the high to mid 30's with the slightly cooler temperatures in the northern end.

The air pollution potential in the Napa Valley could be high if there were sufficient sources of air contaminants nearby. Summer and fall prevailing winds can transport ozone precursors northward from the Carquinez Strait Region to the Napa Valley, effectively trapping and concentrating the pollutants when stable conditions are present. The local upslope and downslope flows created by the surrounding mountains may also recirculate pollutants already present, contributing to buildup of air pollution. High ozone concentrations are a potential problem to sensitive crops such as wine grapes, as well as to human health. The high frequency of light winds and stable conditions during the late fall and winter contribute to the buildup of particulate matter from motor vehicles, agriculture and wood burning in fireplaces and stoves.

Northern Alameda and Western Contra Costa Counties

This climatological subregion stretches from Richmond to San Leandro. Its western boundary is defined by the Bay and its eastern boundary by the Oakland-Berkeley Hills. The Oakland-Berkeley Hills have a ridge line height of approximately 1500 feet, a significant barrier to air flow. The most densely populated area of the subregion lies in a strip of land between the Bay and the lower hills.

In this area, marine air traveling through the Golden Gate, as well as across San Francisco and through the San Bruno Gap, is a dominant weather factor. The Oakland-Berkeley Hills cause the westerly flow of air to split off to the north and south of Oakland, which causes diminished wind speeds. The prevailing winds for most of this subregion are from the west. At the northern end, near Richmond, prevailing winds are from the south-southwest.

Temperatures in this subregion have a narrow range due to the proximity of the moderating marine air. Maximum temperatures during summer average in the mid-70's, with minimums in the mid-50's. Winter highs are in the mid- to high-50's, with lows in the low- to mid-40's.

The air pollution potential is lowest for the parts of the subregion that are closest to the bay, due largely to good ventilation and less influx of pollutants from upwind sources. The occurrence of light winds in the evenings and early mornings occasionally causes elevated pollutant levels.

The air pollution potential at the northern (Richmond) and southern (Oakland, San Leandro) parts of this subregion is marginally higher than communities directly east of the Golden Gate, because of the lower frequency of strong winds.

This subregion contains a variety of industrial air pollution sources. Some industries are quite close to residential areas. The subregion is also traversed by frequently congested major freeways. Traffic and congestion, and the motor vehicle emissions they generate, are increasing.

Peninsula

The peninsula region extends from northwest of San Jose to the Golden Gate. The Santa Cruz Mountains run up the center of the peninsula, with elevations exceeding 2000 feet at the southern end, decreasing to 500 feet in South San Francisco. Coastal towns experience a high incidence of cool, foggy weather in the summer. Cities in the southeastern peninsula experience warmer temperatures and fewer foggy days because the marine layer is blocked by the ridgeline to the west. San Francisco lies at the northern end of the peninsula. Because most of San Francisco's topography is below 200 feet, marine air is able to flow easily across most of the city, making its climate cool and windy.

The blocking effect of the Santa Cruz Mountains results in variations in summertime maximum temperatures in different parts of the peninsula. For example, in coastal areas and San Francisco

the mean maximum summer temperatures are in the mid-60's, while in Redwood City the mean maximum summer temperatures are in the low-80's. Mean minimum temperatures during the winter months are in the high-30's to low-40's on the eastern side of the Peninsula and in the low 40's on the coast.

Two important gaps in the Santa Cruz Mountains occur on the peninsula. The larger of the two is the San Bruno Gap, extending from Fort Funston on the ocean to the San Francisco Airport. Because the gap is oriented in the same northwest to southeast direction as the prevailing winds, and because the elevations along the gap are less than 200 feet, marine air is easily able to penetrate into the bay. The other gap is the Crystal Springs Gap, between Half Moon Bay and San Carlos. As the sea breeze strengthens on summer afternoons, the gap permits maritime air to pass across the mountains, and its cooling effect is commonly seen from San Mateo to Redwood City.

Annual average wind speeds range from 5 to 10 mph throughout the peninsula, with higher wind speeds usually found along the coast. Winds on the eastern side of the peninsula are often high in certain areas, such as near the San Bruno Gap and the Crystal Springs Gap.

The prevailing winds along the peninsula's coast are from the west, although individual sites can show significant differences. For example, Fort Funston in western San Francisco shows a southwest wind pattern while Pillar Point in San Mateo County shows a northwest wind pattern. On the east side of the mountains winds are generally from the west, although wind patterns in this area are often influenced greatly by local topographic features.

Air pollution potential is highest along the southeastern portion of the peninsula. This is the area most protected from the high winds and fog of the marine layer. Pollutant transport from upwind sites is common. In the southeastern portion of the peninsula, air pollutant emissions are relatively high due to motor vehicle traffic as well as stationary sources. At the northern end of the peninsula in San Francisco, pollutant emissions are high, especially from motor vehicle congestion. Localized pollutants, such as carbon monoxide, can build up in "urban canyons." Winds are generally fast enough to carry the pollutants away before they can accumulate.

Santa Clara Valley

The Santa Clara Valley is bounded by the Bay to the north and by mountains to the east, south and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. At the northern end of the valley, mean maximum temperatures are in the low-80's during the summer and the high-50's during the winter, and mean minimum temperatures range from the high-50's in the summer to the low-40's in the winter. Further inland, where the moderating effect of the Bay is not as strong, temperature extremes are greater. For example, in San Martin, located 27 miles south of the San Jose Airport, temperatures can be more than 10 degrees warmer on summer afternoons and more than 10 degrees cooler on winter nights.

Winds in the valley are greatly influenced by the terrain, resulting in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly drainage flow occurs during the late evening and early morning. In the summer the southern end of the valley sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds.

Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and



evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

The air pollution potential of the Santa Clara Valley is high. High summer temperatures, stable air and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo and Alameda Counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low level inversions, ozone can be recirculated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterlies in the afternoon. A similar recirculation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

Pollution sources are plentiful and complex in this subregion. The Santa Clara Valley has a high concentration of industry at the northern end, in the Silicon Valley. Some of these industries are sources of air toxics as well as criteria air pollutants. In addition, Santa Clara Valley's large population and many work-site destinations generate the highest mobile source emissions of any subregion in the SFBAAB.

Sonoma Valley

The Sonoma Valley is west of the Napa Valley. It is separated from the Napa Valley and from the Cotati and Petaluma Valleys by mountains. The Sonoma Valley is long and narrow, approximately 5 miles wide at its southern end and less than a mile wide at the northern end.

The climate is similar to that of the Napa Valley, with the same basic wind characteristics. The strongest upvalley winds occur in the afternoon during the summer and the strongest downvalley winds occur during clear, calm winter nights. Prevailing winds follow the axis of the valley, northwest/southeast, while some upslope flow during the day and downslope flow during the night occurs near the base of the mountains. Summer average maximum temperatures are usually in the high-80's, and summer minimums are around 50 degrees. Winter maximums are in the high-50's to the mid-60's, with minimums ranging from the mid-30's to low-40's.

As in the Napa Valley, the air pollution potential of the Sonoma Valley could be high if there were significant sources of pollution nearby. Prevailing winds can transport local and nonlocally generated pollutants northward into the narrow valley, which often traps and concentrates the pollutants under stable conditions. The local upslope and downslope flows set up by the surrounding mountains may also recirculate pollutants.

However, local sources of air pollution are minor. With the exception of some processing of agricultural goods, such as wine and cheese manufacturing, there is little industry in this valley. Increases in motor vehicle emissions and woodsmoke emissions from stoves and fireplaces may increase pollution as the valley grows in population and as a tourist attraction.

Southwestern Alameda County

This subregion encompasses the southeast side of San Francisco Bay, from Dublin Canyon to north of Milpitas. The subregion is bordered on the east by the East Bay hills and on the west by the bay. Most of the area is flat.

This subregion is indirectly affected by marine air flow. Marine air entering through the Golden Gate is blocked by the East Bay hills, forcing the air to diverge into northerly and southerly paths. The southern flow is directed down the bay, parallel to the hills, where it eventually passes over southwestern Alameda County. These sea breezes are strongest in the afternoon. The further from the ocean the marine air travels, the more the ocean's effect is diminished. Although the

climate in this region is affected by sea breezes, it is affected less so than the regions closer to the Golden Gate.

The climate of southwestern Alameda County is also affected by its close proximity to San Francisco Bay. The Bay cools the air with which it comes in contact during warm weather, while during cold weather the Bay warms the air. The normal northwest wind pattern carries this air onshore. Bay breezes push cool air onshore during the daytime and draw air from the land offshore at night.

Winds are predominantly out of the northwest during the summer months. In the winter, winds are equally likely to be from the east. Easterly-southeasterly surface flow into southern Alameda County passes through three major gaps: Hayward/Dublin Canyon, Niles Canyon and Mission Pass. Areas north of the gaps experience winds from the southeast, while areas south of the gaps experience winds from the northeast. Wind speeds are moderate in this subregion, with annual average wind speeds close to the Bay at about 7 mph, while further inland they average 6 mph.

Air temperatures are moderated by the subregion's proximity to the Bay and to the sea breeze. Temperatures are slightly cooler in the winter and slightly warmer in the summer than East Bay cities to the north. During the summer months, average maximum temperatures are in the mid-70's. Average maximum winter temperatures are in the high-50's to low-60's. Average minimum temperatures are in the low 40's in winter and mid-50's in the summer.

Pollution potential is relatively high in this subregion during the summer and fall. When high pressure dominates, low mixing depths and Bay and ocean wind patterns can concentrate and carry pollutants from other cities to this area, adding to the locally emitted pollutant mix. The polluted air is then pushed up against the East Bay hills. In the wintertime, the air pollution potential in southwestern Alameda County is moderate. Air pollution sources include light and heavy industry, and motor vehicles. Increasing motor vehicle traffic and congestion in the subregion may increase Southwest Alameda County pollution as well as that of its neighboring subregions.

C.1.2. Existing Ambient Air Quality: Criteria Air Pollutants

The California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (EPA) currently focus on the following air pollutants as indicators of ambient air quality: ozone, particulate matter (PM), nitrogen dioxide (NO₂), CO, sulfur dioxide (SO₂), and lead. Because these are the most prevalent air pollutants known to be deleterious to human health and extensive health-effects criteria documents are available, they are commonly referred to as "criteria air pollutants." Sources and health effects of the criteria air pollutants are summarized in Table C.2. Current state and federal air quality standards are available at <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf> and designations are available at <http://www.arb.ca.gov/desig/desig.htm>. See Table C.1 for current attainment status.

**Table C.1
Ambient Air Quality Standards and Designations**

Pollutant	Averaging Time	California		National Standards ^a		
		Standards ^{b, c}	Attainment Status ^d	Primary ^{c, e}	Secondary ^{c, f}	Attainment Status ^g
Ozone	1-hour	0.09 ppm (180 µg/m ³)	N (Serious)	– ^h	Same as Primary Standard	– ^h
	8-hour	0.070 ppm (137 µg/m ³)	–	0.075 ppm (147 µg/m ³)		N
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m ³)	A	35 ppm (40 mg/m ³)	–	U/A
	8-hour	9 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	–	0.053 ppm (100 µg/m ³)	Same as Primary Standard	U/A
	1-hour	0.18 ppm (339 µg/m ³)	A	–		–
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	–	–	0.030 ppm (80 µg/m ³)	–	A
	24-hour	0.04 ppm (105 µg/m ³)	A	0.14 ppm (365 µg/m ³)	–	
	3-hour	–	–	–	0.5 ppm (1300 µg/m ³)	
	1-hour	0.25 ppm (655 µg/m ³)	A	–	–	
Respirable Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	N	– ^h	Same as Primary Standard	U
	24-hour	50 µg/m ³		150 µg/m ³		
Fine Particulate Matter (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	N	15 µg/m ³	Same as Primary Standard	N ⁱ
	24-hour	–	–	35 µg/m ³		
Lead ⁱ	30-day Average	1.5 µg/m ³	A	–	–	–
	Calendar Quarter	–	–	1.5 µg/m ³	Same as Primary Standard	–

**Table C.1
Ambient Air Quality Standards and Designations**

Pollutant	Averaging Time	California		National Standards ^a		
		Standards ^{b, c}	Attainment Status ^d	Primary ^{c, e}	Secondary ^{c, f}	Attainment Status ^g
Sulfates	24-hour	25 µg/m ³	A	No National Standards		
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m ³)	U			
Vinyl Chloride ⁱ	24-hour	0.01 ppm (26 µg/m ³)	–			
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient of 0.23 per kilometer —visibility of 10 miles or more (0.07—30 miles or more for Lake Tahoe) because of particles when the relative humidity is less than 70%.	U			

^a National standards (other than ozone, PM, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM₁₀ 24-hour standard is attained when 99% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. The PM_{2.5} 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.

^b California standards for ozone, CO (except Lake Tahoe), SO₂ (1- and 24-hour), NO₂, PM, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

^c Concentration expressed first in units in which it was promulgated [i.e., parts per million (ppm) or micrograms per cubic meter (µg/m³)]. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

^d Unclassified (U): a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
 Attainment (A): a pollutant is designated attainment if the state standard for that pollutant was not violated at any site in the area during a 3-year period.
 Nonattainment (N): a pollutant is designated nonattainment if there was a least one violation of a state standard for that pollutant in the area.
 Nonattainment/Transitional (NT): is a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the standard for that pollutant.

^e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

^f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

^g Nonattainment (N): any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.
 Attainment (A): any area that meets the national primary or secondary ambient air quality standard for the pollutant.
 Unclassifiable (U): any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

^h The 1-hour ozone NAAQS was revoked on June 15, 2005 and the annual PM₁₀ NAAQS was revoked in 2006.

ⁱ ARB has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for this pollutant.

^j U.S EPA lowered the 24-hour PM_{2.5} standard from 65 µg/m³ to 35 µg/m³ in 2006. EPA issued attainment status designations for the 35 µg/m³ standard on December 22, 2008. EPA has designated the Bay Area as nonattainment for the 35 µg/m³ PM_{2.5} standard. The EPA designation will be effective 90 days after publication of the regulation in the Federal Register.



**Table C.2
Common Sources of Health Effects for Criteria Air Pollutants**

Pollutants	Sources	Health Effects
Ozone	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	Aggravation of respiratory and cardiovascular diseases; reduced lung function; increased cough and chest discomfort
Fine Particulate Matter (PM ₁₀ and PM _{2.5})	Stationary combustion of solid fuels; construction activities; industrial processes; atmospheric chemical reactions	Reduced lung function; aggravation of respiratory and cardiovascular diseases; increases in mortality rate; reduced lung function growth in children
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust; high temperature stationary combustion; atmospheric reactions	Aggravation of respiratory illness
Carbon Monoxide (CO)	Incomplete combustion of fuels and other carbon-containing substances, such as motor vehicle exhaust; natural events, such as decomposition of organic matter	Aggravation of some heart diseases; reduced tolerance for exercise; impairment of mental function; birth defects; death at high levels of exposure
Sulfur Dioxide (SO ₂)	Combination of sulfur-containing fossil fuels; smelting of sulfur-bearing metal ore; industrial processes	Aggravation of respiratory diseases; reduced lung function
Lead	Contaminated soil	Behavioral and hearing disabilities in children; nervous system impairment

Source: South Coast Air Quality Management District 2005; EPA 2009; EDAW 2009

Ozone, or smog, is not emitted directly into the environment, but is formed in the atmosphere by complex chemical reactions between ROG and NO_x in the presence of sunlight. Ozone formation is greatest on warm, windless, sunny days. The main sources of NO_x and ROG, often referred to as ozone precursors, are combustion processes (including motor vehicle engines) the evaporation of solvents, paints, and fuels, and biogenic sources. Automobiles are the single largest source of ozone precursors in the SFBAAB. Tailpipe emissions of ROG are highest during cold starts, hard acceleration, stop-and-go conditions, and slow speeds. They decline as speeds increase up to about 50 mph, then increase again at high speeds and high engine loads. ROG emissions associated with evaporation of unburned fuel depend on vehicle and ambient temperature cycles. Nitrogen oxide emissions exhibit a different curve; emissions decrease as the vehicle approaches 30 mph and then begin to increase with increasing speeds.

Ozone levels usually build up during the day and peak in the afternoon hours. Short-term exposure can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, it can aggravate existing respiratory diseases such as asthma, bronchitis and emphysema. Chronic exposure to high ozone levels can permanently damage lung tissue. Ozone can also damage plants and trees, and materials such as rubber and fabrics.

Particulate Matter refers to a wide range of solid or liquid particles in the atmosphere, including smoke, dust, aerosols, and metallic oxides. Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM₁₀. PM_{2.5} includes a subgroup of finer particles that have an aerodynamic diameter of 2.5 micrometers or less. Some particulate matter,

such as pollen, is naturally occurring. In the SFBAAB most particulate matter is caused by combustion, factories, construction, grading, demolition, agricultural activities, and motor vehicles. Extended exposure to particulate matter can increase the risk of chronic respiratory disease. PM_{10} is of concern because it bypasses the body's natural filtration system more easily than larger particles, and can lodge deep in the lungs. The EPA and the state of California revised their PM standards several years ago to apply only to these fine particles. $PM_{2.5}$ poses an increased health risk because the particles can deposit deep in the lungs and contain substances that are particularly harmful to human health. Motor vehicles are currently responsible for about half of particulates in the SFBAAB. Wood burning in fireplaces and stoves is another large source of fine particulates.

Nitrogen Dioxide (NO_2) is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO_2 . Aside from its contribution to ozone formation, nitrogen dioxide can increase the risk of acute and chronic respiratory disease and reduce visibility. NO_2 may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

Carbon Monoxide (CO) is an odorless, colorless gas. It is formed by the incomplete combustion of fuels. The single largest source of CO in the SFBAAB is motor vehicles. Emissions are highest during cold starts, hard acceleration, stop-and-go driving, and when a vehicle is moving at low speeds. New findings indicate that CO emissions per mile are lowest at about 45 mph for the average light-duty motor vehicle and begin to increase again at higher speeds. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease or anemia, as well as fetuses. Even healthy people exposed to high CO concentrations can experience headaches, dizziness, fatigue, unconsciousness, and even death.

Sulfur Dioxide (SO_2) is a colorless acid gas with a pungent odor. It has potential to damage materials and it can have health effects at high concentrations. It is produced by the combustion of sulfur-containing fuels, such as oil, coal and diesel. SO_2 can irritate lung tissue and increase the risk of acute and chronic respiratory disease.

Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the EPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The EPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically.

Monitoring Data

The BAAQMD operates a regional air quality monitoring network that regularly measures the concentrations of the five major criteria air pollutants. Air pollutant monitoring data is available at <http://www.arb.ca.gov/adam/welcome.html>. Air quality conditions in the SFBAAB have improved significantly since the BAAQMD was created in 1955. Ambient concentrations and the number of days on which the region exceeds standards have declined dramatically. Neither State nor



national ambient air quality standards of these chemicals have been violated in recent decades for nitrogen dioxide, sulfur dioxide, sulfates, lead, hydrogen sulfide, and vinyl chloride.

Emissions Inventory

The BAAQMD estimates emissions of criteria air pollutants from approximately nine hundred source categories. The estimates are based on BAAQMD permit information for stationary sources (e.g., manufacturing industries, refineries, dry-cleaning operations), plus more generalized estimates for area sources (e.g., space heating, landscaping activities, use of consumer products) and mobile sources (e.g., trains, ships and planes, as well as on-road and off-road motor vehicles). BAAQMD emissions inventory data is available at <http://www.arb.ca.gov/ei/maps/statemap/dismap.htm>.

C.1.2. Existing Ambient Air Quality: Toxic Air Contaminants

In addition to the criteria air pollutants listed above, another group of pollutants, commonly referred to as toxic air contaminants (TACs) or hazardous air pollutants can result in health effects that can be quite severe. Many TACs are confirmed or suspected carcinogens, or are known or suspected to cause birth defects or neurological damage. Secondly, many TACs can be toxic at very low concentrations. For some chemicals, such as carcinogens, there are no thresholds below which exposure can be considered risk-free.

Industrial facilities and mobile sources are significant sources of TACs. The electronics industry, including semiconductor manufacturing, has the potential to contaminate both air and water due to the highly toxic chlorinated solvents commonly used in semiconductor production processes. Sources of TACs go beyond industry. Various common urban facilities also produce TAC emissions, such as gasoline stations (benzene), hospitals (ethylene oxide), and dry cleaners (perchloroethylene). Automobile exhaust also contains TACs such as benzene and 1,3-butadiene. Most recently, diesel particulate matter was identified as a TAC by the ARB. Diesel PM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. BAAQMD research indicates that mobile-source emissions of diesel PM, benzene, and 1,3-butadiene represent a substantial portion of the ambient background risk from TACs in the SFBAAB.

C.1.3. Greenhouse Gases and Global Climate Change

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases (GHGs) that contribute to global warming or global climate change have a broader, global impact. Global warming is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds. The primary GHGs of concern are summarized in Table C.3. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space. Among the potential implications of global warming are rising sea levels, and adverse impacts to water supply, water quality, agriculture, forestry, and habitats. In addition, global warming may increase electricity demand for cooling, decrease the availability of hydroelectric power, and affect regional air quality and public health. Like most criteria and toxic air pollutants, much of the GHG production comes from motor vehicles. GHG emissions can be reduced to some degree by improved coordination of land use and transportation planning on the city, county, and subregional level, and other measures to reduce automobile use. Energy conservation measures also can contribute to reductions in GHG emissions.

**Table C.3
Examples of Greenhouse Gases**

Gas	Sources
Carbon dioxide (CO ₂)	Fossil fuel combustion in stationary and point sources; emission sources includes burning of oil, coal, gas.
Methane (CH ₄)	Incomplete combustion in forest fires, landfills, and leaks in natural gas and petroleum systems, agricultural activities, coal mining, wastewater treatment, and certain industrial processes.
Nitrous oxide (N ₂ O)	Fossil fuel combustion in stationary and point sources; other emission sources include agricultural soil management, animal manure management, sewage treatment, adipic acid production, and nitric acid production.
Chlorofluorocarbon (CFC), and Hydro-chlorofluorocarbon (HCFC)	Agents used in production of foam insulation; other sources include air conditioners, refrigerators, and solvents in cleaners.
Sulfur hexafluoride (SF ₆)	Electric insulation in high voltage equipment that transmits and distributes electricity, including circuit breakers, gas-insulated substations, and other switchgear used in the transmission system to manage the high voltages carried between generating stations and customer load centers.
Perfluorocarbons (PFC's)	Primary aluminum production and semiconductor manufacturing.
Source: EPA 2009	

California Greenhouse Gas Emissions Inventory

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. Emissions of CO₂ are byproducts of fossil fuel combustion. CH₄, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) is largely associated with agricultural practices and landfills. N₂O is also largely attributable to agricultural practices and soil management. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution, respectively, two of the most common processes of CO₂ sequestration.

California produced 474 million gross metric tons (MMT) of CO₂ equivalent (CO₂e) averaged over the period from 2002-2004. CO₂e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH₄ has the same contribution to the greenhouse effect as approximately 23 tons of CO₂. Therefore, CH₄ is a much more potent GHG than CO₂. Expressing emissions in CO₂e takes the contributions of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2002-2004, accounting for 38 percent of total GHG emissions in the state. This sector was followed by the electric power sector (including both in-state and out-of-state sources) (18 percent) and the industrial sector (21 percent).

California Greenhouse Gas Emissions Projections

The 1990 GHG emissions limit is approximately 430 MMT CO₂e, which must be met in California by 2020 per the requirements of AB 32 (discussed below in the Regulatory Setting). ARB's GHG inventory for all emissions sectors would require an approximate 28 percent reduction in GHG emissions from projected 2020 forecasts to meet the target emissions limit (equivalent to levels in 1990) established in AB 32. The AB 32 Scoping Plan, discussed further below, is ARB's plan for meeting this mandate.

C.1.4. Existing Ambient Air Quality: Odors and Dust

Other air quality issues of concern in the SFBAAB include nuisance impacts of odors and dust. Objectionable odors may be associated with a variety of pollutants. Common sources of odors include wastewater treatment plants, landfills, composting facilities, refineries and chemical plants. Similarly, nuisance dust may be generated by a variety of sources including quarries, agriculture, grading and construction. Odors rarely have direct health impacts, but they can be very unpleasant and can lead to anger and concern over possible health effects among the public. Each year the BAAQMD receives thousands of citizen complaints about objectionable odors. Dust emissions can contribute to increased ambient concentrations of PM₁₀, and can also contribute to reduced visibility and soiling of exposed surfaces.

REGULATORY SETTING

Air quality with respect to criteria air pollutants and TACs within the SFBAAB is regulated by such agencies as the BAAQMD, ARB, and EPA. Each of these agencies develops rules, regulations, policies, and/or goals to attain the goals or directives imposed through legislation. Although the EPA regulations may not be superseded, both state and local regulations may be more stringent.

C.1.5. Criteria Air Pollutants

Federal Air Quality Regulations

U.S. Environmental Protection Agency

At the federal level, EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the Federal Clean Air Act (FCAA), which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990.

The FCAA required EPA to establish primary and secondary NAAQS, which are available at <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. The FCAA also required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The Federal Clean Air Act Amendments of 1990 (FCAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA has responsibility to review all state SIPs to determine conformation to the mandates of the FCAAA and determine if implementation will achieve air quality goals. If the EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment area that imposes additional control measures. Failure to submit an approvable SIP or to implement the plan within the mandated timeframe may result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

State Air Quality Regulations

In 1992 and 1993, the California Air Resources Board (CARB) requested delegation of authority for the implementation and enforcement of specified New Source Performance Standards

(NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPS) to the following local agencies: Bay Area and South Coast Air Quality Management Districts (AQMDs). EPA's review of the State of California's laws, rules, and regulations showed them to be adequate for the implementation and enforcement of these federal standards, and EPA granted the delegations as requested.

California Air Resources Board

ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA), which was adopted in 1988. The CCAA requires that all air districts in the state endeavor to achieve and maintain the CAAQS by the earliest practical date. The act specifies that districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources, and provides districts with the authority to regulate indirect sources.

ARB is primarily responsible for developing and implementing air pollution control plans to achieve and maintain the NAAQS. The ARB is primarily responsible for statewide pollution sources and produces a major part of the SIP. Local air districts are still relied upon to provide additional strategies for sources under their jurisdiction. The ARB combines this data and submits the completed SIP to EPA.

Other ARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control and air quality management districts), establishing CAAQS (which in many cases are more stringent than the NAAQS), determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, and off-road vehicles.

Transport of Pollutants

The California Clean Air Act, Section 39610 (a), directs the ARB to "identify each district in which transported air pollutants from upwind areas outside the district cause or contribute to a violation of the ozone standard and to identify the district of origin of transported pollutants." The information regarding the transport of air pollutants from one basin to another was to be quantified to assist interrelated basins in the preparation of plans for the attainment of State ambient air quality standards. Numerous studies conducted by the ARB have identified air basins that are impacted by pollutants transported from other air basins (as of 1993). Among the air basins affected by air pollution transport from the SFBAAB are the North Central Coast Air Basin, the Mountain Counties Air Basin, the San Joaquin Valley Air Basin, and the Sacramento Valley Air Basin. The SFBAAB was also identified as an area impacted by the transport of air pollutants from the Sacramento region.

Local Air Quality Regulations

Bay Area Air Quality Management District

The BAAQMD attains and maintains air quality conditions in the SFBAAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the BAAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The BAAQMD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the FCAA, FCAAA, and the CCAA.

In 2009, the BAAQMD released the update to its CEQA Guidelines. This is an advisory document that provides the Lead Agency, consultants, and project applicants with uniform procedures for



addressing air quality in environmental documents. The handbook contains the following applicable components:

1. Criteria and thresholds for determining whether a project may have a significant adverse air quality impact;
2. Specific procedures and modeling protocols for quantifying and analyzing air quality impacts;
3. Methods available to mitigate air quality impacts;
4. Information for use in air quality assessments and environmental documents that will be updated more frequently such as air quality data, regulatory setting, climate, topography.

Air Quality Plans

As stated above, the BAAQMD prepares plans to attain ambient air quality standards in the SFBAAB. The BAAQMD prepares ozone attainment plans (OAP) for the national ozone standard and clean air plans (CAP) for the California standard both in coordination with the Metropolitan Transportation Commission and the Association of Bay Area Governments (ABAG).

With respect to applicable air quality plans, the BAAQMD prepared the *2010 Clean Air Plan* to address nonattainment of the national 1-hour ozone standard in the SFBAAB. The purpose of the 2010 Clean Air Plan is to:

1. Update the Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement “all feasible measures” to reduce ozone;
2. Consider the impacts of ozone control measures on particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
3. Review progress in improving air quality in recent years;
4. Establish emission control measures to be adopted or implemented in the 2009-2012 timeframe.

Similarly, the BAAQMD prepared the 2010 Clean Air Plan to address nonattainment of the CAAQS.

C.1.6. Toxic Air Contaminants

TACs, or in federal parlance under the FCAA, HAPs, are pollutants that result in an increase in mortality, a serious illness, or pose a present or potential hazard to human health. Health effects of TACs may include cancer, birth defects, and immune system and neurological damage.

TACs can be separated into carcinogens and noncarcinogens based on the nature of the physiological degradation associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts will not occur. Noncarcinogenic TACs differ in that there is a safe level in which it is generally assumed that no negative health impacts would occur. These levels are determined on a pollutant-by-pollutant basis.

It is important to understand that TACs are not considered criteria air pollutants and thus are not specifically addressed through the setting of ambient air quality standards. Instead, the EPA and ARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology (MACT and BACT) to limit emissions. These in conjunction with additional rules set forth by the BAAQMD establish the regulatory framework for TACs.

Federal Hazardous Air Pollutant Program

Title III of the FCAAA requires the EPA to promulgate national emissions standards for hazardous air pollutants (NESHAPs). The NESHAP may differ for major sources than for area sources of HAPs (major sources are defined as stationary sources with potential to emit more than 10 tons per year [TPY] of any HAP or more than 25 TPY of any combination of HAPs; all other sources are considered area sources). The emissions standards are to be promulgated in two phases. In the first phase (1992–2000), the EPA developed technology-based emission standards designed to produce the maximum emission reduction achievable. These standards are generally referred to as requiring MACT. These federal rules are also commonly referred to as MACT standards, because they reflect the Maximum Achievable Control Technology. For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), the EPA is required to promulgate health risk–based emissions standards where deemed necessary to address risks remaining after implementation of the technology-based NESHAP standards. The FCAAA required the EPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions, at a minimum to benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, §219 required the use of reformulated gasoline in selected U.S. cities (those with the most severe ozone nonattainment conditions) to further reduce mobile-source emissions.

State Toxic Air Contaminant Programs

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified over 21 TACs, and adopted the EPA's list of HAPs as TACs. Most recently, diesel exhaust particulate was added to the ARB list of TACs. Once a TAC is identified, ARB's then adopts an Airborne Toxics Control Measure for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate TBACT to minimize emissions. None of the TACs identified by ARB have a safe threshold.

The Hot Spots Act requires that existing facilities that emit toxic substances above specified level:

1. Prepare a toxic emission inventory;
2. Prepare a risk assessment if emissions are significant;
3. Notify the public of significant risk levels;
4. Prepare and implement risk reduction measure.

ARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new public transit bus fleet rule and emission standards for new urban buses. These new rules and standards provide for 1) more stringent emission standards for some new urban bus engines beginning with 2002 model year engines, 2) zero-emission bus demonstration and purchase requirements applicable to transit agencies, and 3) reporting requirements with which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Upcoming milestones include the low sulfur diesel fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide. Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially less TACs than under current conditions. Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) have been reduced



significantly over the last decade, and will be reduced further in California through a progression of regulatory measures [e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies. With implementation of ARB's Risk Reduction Plan, it is expected that diesel PM concentrations will be reduced by 75% in 2010 and 85% in 2020 from the estimated year 2000 level. Adopted regulations are also expected to continue to reduce formaldehyde emissions from cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

Local Air Quality Regulations

Bay Area Air Quality Management District

The BAAQMD has regulated TACs since the 1980s. At the local level, air pollution control or management districts may adopt and enforce ARB's control measures. Under BAAQMD Regulation 2-1 (General Permit Requirements), Regulation 2-2 (New Source Review), and Regulation 2-5 (New Source Review), all nonexempt sources that possess the potential to emit TACs are required to obtain permits from BAAQMD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including new source review standards and air toxics control measures. The BAAQMD limits emissions and public exposure to TACs through a number of programs. The BAAQMD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. In addition, the BAAQMD has adopted Regulation 11 Rules 2 and 14, which address asbestos demolition renovation, manufacturing, and standards for asbestos containing serpentine.

C.1.7. Greenhouse Gases and Global Climate Change

Federal Greenhouse Gas Regulations

Supreme Court Ruling

The U.S. Environmental Protection Agency (EPA) is the Federal agency responsible for implementing the Clean Air Act (CAA). The U.S. Supreme Court ruled in its decision in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120), issued on April 2, 2007, that carbon dioxide (CO₂) is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs.

EPA Actions

In response to the mounting issue of climate change, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO₂ per year. This publically available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act

On April 23, 2009, EPA published their Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CCA (Endangerment Finding) in the Federal Register. The Endangerment Finding is based on Section 202(a) of the CAA, which states that the Administrator (of EPA) should regulate and develop standards for “emission[s] of air pollution from any class of classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” The proposed rule addresses Section 202(a) in two distinct findings. The first addresses whether or not the concentrations of the six key GHGs (i.e., carbon dioxide [CO₂], methane [CH₄], nitrous oxide [N₂O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]) in the atmosphere threaten the public health and welfare of current and future generations. The second addresses whether or not the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and therefore the threat of climate change.

The Administrator proposed the finding that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CCA. The evidence supporting this finding consists of human activity resulting in “high atmospheric levels” of GHG emissions, which are very likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The Administrator also proposed the finding that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. The proposed finding cites that in 2006, motor vehicles were the second largest contributor to domestic GHG emissions (24 percent of total) behind electricity generation. Furthermore, in 2005, the U.S. was responsible for 18 percent of global GHG emissions. Therefore, GHG emissions from motor vehicles and motor vehicle engines were found to contribute to air pollution that endangers public health and welfare.

State Greenhouse Gas Regulations

Assembly Bill 1493 (2002)

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 requires that ARB develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by ARB to be vehicles whose primary use is noncommercial personal transportation in the state.”

To meet the requirements of AB 1493, in 2004 ARB approved amendments to the California Code of Regulations (CCR) adding GHG emissions standards to California’s existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1) require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily for the transportation of persons), beginning with the 2009 model year. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for the 2016 model year are approximately 37percent lower than the limits for the first year of the regulations, the 2009 model year. For light-duty trucks with LVW of 3,751 pounds to gross vehicle



weight (GVW) of 8,500 pounds, as well as medium-duty passenger vehicles, GHG emissions would be reduced approximately 24 percent between 2009 and 2016.

In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against ARB to prevent enforcement of 13 CCR Sections 1900 and 1961 as amended by AB 1493 and 13 CCR 1961.1 (*Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in Her Official Capacity as Executive Director of the California Air Resources Board, et al.*). The auto-makers' suit in the U.S. District Court for the Eastern District of California, contended California's implementation of regulations that, in effect, regulate vehicle fuel economy violates various federal laws, regulations, and policies.

On December 12, 2007, the Court found that if California receives appropriate authorization from EPA (the last remaining factor in enforcing the standard), these regulations would be consistent with and have the force of federal law, thus, rejecting the automakers' claim. This authorization to implement more stringent standards in California was requested in the form of a CAA Section 209, subsection (b) waiver in 2005. Since that time, EPA failed to act on granting California authorization to implement the standards. Governor Schwarzenegger and Attorney General Edmund G. Brown filed suit against EPA for the delay. In December 2007, EPA Administrator Stephen Johnson denied California's request for the waiver to implement AB 1493. Johnson cited the need for a national approach to reducing GHG emissions, the lack of a "need to meet compelling and extraordinary conditions", and the emissions reductions that would be achieved through the Energy Independence and Security Act of 2007 as the reasoning for the denial.

The state of California filed suit against EPA for its decision to deny the CAA waiver. The recent change in presidential administration directed EPA to reexamine its position for denial of California's CAA waiver and for its past opposition to GHG emissions regulation. California received the waiver, notwithstanding the previous denial by EPA, on June 30, 2009.

Assembly Bill 32 (2006), California Global Warming Solutions Act

In September 2006, the governor of California signed AB 32 (Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006, which enacted Sections 38500–38599 of the California Health and Safety Code. AB 32 requires the reduction of statewide GHG emissions to 1990 levels by 2020. This equates to an approximate 15 percent reduction compared to existing statewide GHG emission levels or a 30 percent reduction from projected 2020 "business as usual" emission levels. The required reduction will be accomplished through an enforceable statewide cap on GHG emissions beginning in 2012.

To effectively implement the statewide cap on GHG emissions, AB 32 directs ARB to develop and implement regulations that reduce statewide GHG emissions generated by stationary sources. Specific actions required of ARB under AB 32 include adoption of a quantified cap on GHG emissions that represent 1990 emissions levels along with disclosing how the cap was quantified, institution of a schedule to meet the emissions cap, and development of tracking, reporting, and enforcement mechanisms to ensure that the state achieves the reductions in GHG emissions needed to meet the cap.

In addition, AB 32 states that if any regulations established under AB 1493 (2002) cannot be implemented then ARB is required to develop additional, new regulations to control GHG emissions from vehicles as part of AB 32.

AB 32 Climate Change Scoping Plan

In December 2008, ARB adopted its *Climate Change Scoping Plan*, which contains the main strategies California will implement to achieve reduction of approximately 169 million metric tons (MMT) of CO₂e, or approximately 30% from the state's projected 2020 emission level of 596 MMT of CO₂e under a business-as-usual scenario (this is a reduction of 42 MMT CO₂e, or almost 10%,

from 2002-2004 average emissions). The *Scoping Plan* also includes ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The *Scoping Plan* calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_{2e});
- the Low-Carbon Fuel Standard (15.0 MMT CO_{2e});
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_{2e}); and
- a renewable portfolio standard for electricity production (21.3 MMT CO_{2e}).

ARB has not yet determined what amount of GHG reductions it recommends from local government operations; however, the *Scoping Plan* does state that land use planning and urban growth decisions will play an important role in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions(meanwhile, ARB is also developing an additional protocol for community emissions). ARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The *Scoping Plan* states that the ultimate GHG reduction assignment to local government operations is to be determined (ARB 2008). With regard to land use planning, the *Scoping Plan* expects approximately 5.0 MMT CO_{2e} will be achieved associated with implementation of SB 375, which is discussed further below.

Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008 Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020. Governor Schwarzenegger plans to propose legislative language that will codify the new higher standard.

Senate Bill 1368 (2006)

SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission (PUC) to establish a greenhouse gas emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The California Energy Commission (CEC) must establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Senate Bill 97 (2007)

SB 97, signed by governor of California in August 2007 (Chapter 185, Statutes of 2007; Public Resources Code, Sections 21083.05 and 21097), acknowledges climate change is a prominent environmental issue that requires analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Resources Agency by July 1, 2009 guidelines for mitigating GHG emissions or the effects of GHG emissions,



as required by CEQA. The California Resources Agency is required to certify and adopt these guidelines by January 1, 2010.

This bill also removes, both retroactively and prospectively, as legitimate causes of action in litigation any claim of inadequate CEQA analysis of effects of GHG emissions associated with environmental review for projects funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 (Proposition 1B) or the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1E). This provision will be repealed by provision of law on January 1, 2010 at that time such projects, if any remain unapproved, will no longer enjoy protection against litigation claims based on failure to adequately address issues related to GHG emissions.

Senate Bill 375 (2008)

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. As part of the alignment, SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) which prescribes land use allocation in that MPO's Regional Transportation Plan (RTP). The ARB, in consultation with MPOs, is required to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every 8 years but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. The ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned GHG emission reduction targets. If MPOs do not meet the GHG reduction targets, transportation projects located in the MPO boundaries would not be eligible for funding programmed after January 1, 2012.

This bill also extends the minimum time period for the Regional Housing Needs Allocation (RNHA) cycle from 5 years to 8 years for local governments located in an MPO that meets certain requirements. City or County land use policies (e.g., General Plans) are not required to be consistent with the RTP including associated SCSs or APSs. Qualified projects consistent with an approved SCS or APS and categorized as "transit priority projects" would receive incentives under new provisions of CEQA.

Executive Order S-3-05 (2005)

Governor Schwarzenegger signed Executive Order S-3-05 on June 1, 2005 which proclaimed California is vulnerable to the impacts of climate change. The executive order declared increased temperatures could reduce snowpack in the Sierra Nevada Mountains, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the executive order established targets for total GHG emissions which include reducing GHG emissions to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The executive order also directed the secretary of the California Environmental Protection Agency to coordinate a multiagency effort to reduce GHG emissions to the target levels. The secretary will submit biannual reports to the governor and legislature describing progress made toward reaching the emission targets; impacts of global warming on California's resources; and mitigation and adaptation plans to combat impacts of global warming.

To comply with the executive order, the Secretary of the California Environmental Protection Agency created the California Climate Action Team which is made up of members from various state agencies and commissions. The California Climate Action Team released its first report in March 2006 of which proposed achieving the GHG emissions targets by building on voluntary

actions of California businesses and actions by local governments and communities along with continued implementation of state incentive and regulatory programs.

Executive Order S-13-08

Governor Schwarzenegger signed Executive Order S-13-08 on November 14, 2008 which directs California to develop methods for adapting to climate change through preparation of a statewide plan. The executive order directs OPR, in cooperation with the California Resources Agency (CRA), to provide land use planning guidance related to sea level rise and other climate change impacts by May 30, 2009. The order also directs the CRA to develop a state Climate Adaptation Strategy by June 30, 2009 and to convene an independent panel to complete the first California Sea Level Rise Assessment Report. The assessment report is required to be completed by December 1, 2010 and required to include the following four items:

1. Project the relative sea level rise specific to California by taking into account issues such as coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates;
2. Identify the range of uncertainty in selected sea level rise projections;
3. Synthesize existing information on projected sea level rise impacts to state infrastructure (e.g., roads, public facilities, beaches), natural areas, and coastal and marine ecosystems; and
4. Discuss future research needs relating to sea level rise in California.

Executive Order S-1-07

Governor Schwarzenegger signed Executive Order S-1-07 in 2007 which proclaimed the transportation sector as the main source of GHG emissions in California. The executive order proclaims the transportation sector accounts for over 40 percent of statewide GHG emissions. The executive order also establishes a goal to reduce the carbon intensity of transportation fuels sold in California by a minimum of 10 percent by 2020.

In particular, the executive order established a Low-Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the “life-cycle carbon intensity” of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (*State Alternative Fuels Plan* adopted by CEC on December 24, 2007) and was submitted to ARB for consideration as an “early action” item under AB 32. The ARB adopted the LCFS on April 23, 2009.

Local Greenhouse Gas Regulations

Bay Area Air Quality Management District Climate Protection Program

The BAAQMD established a climate protection program to reduce pollutants that contribute to global climate change and affect air quality in the SFBAAB. The climate protection program includes measures that promote energy efficiency, reduce vehicle miles traveled, and develop alternative sources of energy all of which assist in reducing emissions of GHG and in reducing air pollutants that affect the health of residents. BAAQMD also seeks to support current climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

D. THRESHOLDS OF SIGNIFICANCE JUSTIFICATION



California Environmental Quality Act Guidelines Update

Thresholds of Significance

June 2, 2010

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Bay Area Air Quality Management District

Air Quality CEQA Thresholds of Significance

1. INTRODUCTION

Bay Area Air Quality Management District (BAAQMD or Air District) staff analyzed various options for California Environmental Quality Act (CEQA) air quality thresholds of significance for use within BAAQMD's jurisdiction. The analysis and evaluation undertaken by Air District staff is documented in the *Revised Draft Options and Justification Report – California Environmental Quality Act Thresholds of Significance* (Draft Options Report) (BAAQMD October 2009).

Air District staff hosted public workshops in February, April, September and October 2009, and April 2010 at several locations around the Bay Area. Air District staff also hosted additional workshops in each of the nine Bay Area counties specifically designed for, and to solicit input from, local agency staff. In addition, Air District staff met with regional stakeholder groups to discuss and receive input on the threshold options being evaluated. Throughout the course of the public workshops and stakeholder meetings Air District staff received many comments on the various options under consideration. Based on comments received and additional staff analysis, the threshold options and staff-recommended thresholds were further refined. The culmination of this nearly year and a half-long effort was presented in the Proposed Thresholds of Significance Report published on November 2, 2009 as the Air District staff's proposed air quality thresholds of significance.

The Air District Board of Directors (Board) held public hearings on November 18 and December 2, 2009 and January 6, 2010, to receive comments on staff's Proposed Thresholds of Significance (November 2, 2009; revised December 7, 2009). After public testimony and Board deliberations, the Board requested staff to present additional options for risk and hazard thresholds for Board consideration. This Report includes risks and hazards threshold options, as requested by the Board, in addition to staff's previously recommended thresholds of significance. The thresholds presented herein, adopted by the Air District Board of Directors, are intended to replace all of the Air District's currently recommended thresholds. The air quality thresholds of significance, and Board-requested risk and hazard threshold options, are provided in Table 1 at the end of this introduction.

1.1. BAAQMD/CEQA REGULATORY AUTHORITY

The BAAQMD has direct and indirect regulatory authority over sources of air pollution in the San Francisco Bay Area Air Basin (SFBAAB). CEQA requires that public agencies consider the potential adverse environmental impacts of any project that a public agency proposes to carry out, fund or approve. CEQA requires that a lead agency prepare an Environmental Impact Report (EIR) whenever it can be fairly argued (the "fair argument" standard), based on substantial evidence,⁷ that a project may have a significant effect⁸ on the environment, even if there is

⁷ "Substantial evidence" includes facts, reasonable assumptions predicated upon facts, or expert opinions supported by facts, but does not include argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate



substantial evidence to the contrary (CEQA Guidelines §15064). CEQA requires that the lead agency review not only a project's direct effects on the environment, but also the cumulative impacts of a project and other projects causing related impacts. When the incremental effect of a project is cumulatively considerable, the lead agency must discuss the cumulative impacts in an EIR. (CEQA Guidelines §15064).

The "fair argument" standard refers to whether a fair argument can be made that a project may have a significant effect on the environment (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84). The fair argument standard is generally considered a low threshold requirement for preparation of an EIR. The legal standards reflect a preference for requiring preparation of an EIR and for "resolving doubts in favor of environmental review." *Meija v. City of Los Angeles* (2005) 130 Cal. App. 4th 322, 332. "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data." (CEQA Guidelines §15064(b)).

In determining whether a project may have a significant effect on the environment, CEQA Guidelines Section 15064.7 provides that lead agencies may adopt and/or apply "thresholds of significance." A threshold of significance is "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant" (CEQA Guidelines §15064.7).

While thresholds of significance give rise to a presumption of insignificance, thresholds are not conclusive, and do not excuse a public agency of the duty to consider evidence that a significant effect may occur under the fair argument standard. *Meija*, 130 Cal. App. 4th at 342. "A public agency cannot apply a threshold of significance or regulatory standard 'in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.'" *Id.* This means that if a public agency is presented with factual information or other substantial evidence establishing a fair argument that a project may have a significant effect on the environment, the agency must prepare an EIR to study those impacts even if the project's impacts fall below the applicable threshold of significance.

Thresholds of significance must be supported by substantial evidence. This Report provides the substantial evidence in support of the thresholds of significance developed by the BAAQMD. If adopted by the BAAQMD Board of Directors, the Air District will recommend that lead agencies within the nine counties of the BAAQMD's jurisdiction use the thresholds of significance in this Report when considering the air quality impacts of projects under their consideration.

1.2. JUSTIFICATION FOR UPDATING CEQA THRESHOLDS

Any analysis of environmental impacts under CEQA includes an assessment of the nature and extent of each impact expected to result from the project to determine whether the impact will be treated as significant or less than significant. CEQA gives lead agencies discretion whether to classify a particular environmental impact as significant. Ultimately, formulation of a standard of significance requires the lead agency to make a policy judgment about where the line should be drawn distinguishing adverse impacts it considers significant from those that are not deemed significant. This judgment must, however, be based on scientific information and other factual data to the extent possible (CEQA Guidelines §15064(b)).

or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment. Cal. Pub. Res. C. §21080(c); see also CEQA Guidelines §15384.

⁸ A "significant effect" on the environment is defined as a "substantial, or potentially substantial, adverse change in the environment." Cal. Pub. Res. C. §21068; see also CEQA Guidelines §15382.

In the sense that advances in science provide new or refined factual data, combined with advances in technology and the gradual improvement or degradation of an environmental resource, the point where an environmental effect is considered significant is fluid over time. Other factors influencing this fluidity include new or revised regulations and standards, and emerging, new areas of concern.

In the ten years since BAAQMD last reviewed its recommended CEQA thresholds of significance for air quality, there have been tremendous changes that affect the quality and management of the air resources in the Bay Area. Traditional criteria air pollutant ambient air quality standards, at both the state and federal levels, have become increasingly more stringent. A new criteria air pollutant standard for fine particulate matter less than 2.5 microns in diameter (PM_{2.5}) has been added to federal and state ambient air quality standards. We have found, through technical advances in impact assessment, that toxic air contaminants are not only worse than previously thought from a health perspective, but that certain communities experience high levels of toxic air contaminants, giving rise to new regulations and programs to reduce the significantly elevated levels of ambient toxic air contaminant concentrations in the Bay Area.

In response to the elevated levels of toxic air contaminants in some Bay Area communities, the Air District created the Community Air Risk Evaluation (CARE) Program. Phase 1 of the BAAQMD's CARE program compiled and analyzed a regional emissions inventory of toxic air contaminants (TACs), including emissions from stationary sources, area sources, and on-road and off-road mobile sources. Phase 2 of the CARE Program conducted regional computer modeling of selected TAC species, species which collectively posed the greatest risk to Bay Area residents. In both Phases 1 and 2, demographic data were combined with estimates of TAC emissions or concentrations to identify communities that are disproportionately impacted from high concentrations of TACs. Bay Area Public Health Officers, in discussions with Air District staff and in comments to the Air District's Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality and Public Health), have recommended that PM_{2.5}, in addition to TACs, be considered in assessments of community-scale impacts of air pollution.

Another significant issue that affects the quality of life for Bay Area residents is the growing concern with global climate change. In just the past few years, estimates of the global atmospheric temperature and greenhouse gas concentration limits needed to stabilize climate change have been adjusted downward and the impacts of greenhouse gas emissions considered more dire. Previous scientific assessments assumed that limiting global temperature rise to 2-3°C above pre-industrial levels would stabilize greenhouse gas concentrations in the range of 450-550 parts per million (ppm) of carbon dioxide-equivalent (CO_{2e}). Now the science indicates that a temperature rise of 2°C would not prevent dangerous interference with the climate system. Recent scientific assessments suggest that global temperature rise should be kept below 2°C by stabilizing greenhouse gas concentrations below 350 ppm CO_{2e}, a significant reduction from the current level of 385 ppm CO_{2e}.

For the reasons stated above, and to further the goals of other District programs such as encouraging transit-oriented and infill development, BAAQMD has undertaken an effort to review all of its currently-recommended CEQA thresholds, revise them as appropriate, and develop new thresholds where appropriate. The overall goal of this effort is to develop CEQA significance criteria that ensure new development implements appropriate and feasible emission reduction measures to mitigate significant air quality impacts. The Air District's recommended CEQA significance thresholds have been vetted through a public review process and will be presented to the BAAQMD Board of Directors for adoption.



Table D-2 – Air Quality CEQA Thresholds of Significance			
Pollutant	Construction-Related	Operational-Related	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust only)	82	15
PM _{2.5}	54 (exhaust only)	54	10
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs Projects other than Stationary Sources	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr (residents + employees)	
GHGs Stationary Sources	None	10,000 MT/yr	
Risks and Hazards – New Source (All Areas) (Individual Project) <u>Staff Proposal</u>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	

Table D-2 – Air Quality CEQA Thresholds of Significance		
Pollutant	Construction-Related	Operational-Related
<p>Risks and Hazards – New Receptor (All Areas) (Individual Project)</p> <p><u>Staff Proposal</u></p>	<p>Same as Operational Thresholds*</p>	<p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM_{2.5} increase: > 0.3 µg/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p>Risks and Hazards (Individual Project)</p> <p><u>Tiered Thresholds Option</u></p>	<p>Same as Operational Thresholds*</p>	<p><u>Impacted Communities: Siting a New Source</u></p> <p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM_{2.5} increase: > 0.2 µg/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p>Risks and Hazards (Individual Project)</p> <p><u>Tiered Thresholds Option</u> (Continued)</p>	<p>Same as Operational Thresholds*</p>	<p><u>Impacted Communities: Siting a New Receptor</u> <u>All Other Areas: Siting a New Source or Receptor</u></p> <p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM_{2.5} increase: > 0.3 µg/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>



Table D-2 – Air Quality CEQA Thresholds of Significance

Pollutant	Construction-Related	Operational-Related
Risks and Hazards – New Source (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM _{2.5} : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
Risks and Hazards – New Receptor (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM _{2.5} : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Odors	None	Complaint History—Five confirmed complaints per year averaged over three years
Plan-Level		
Criteria Air Pollutants and Precursors	None	<ol style="list-style-type: none"> 1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase

Table D-2 – Air Quality CEQA Thresholds of Significance		
Pollutant	Construction-Related	Operational-Related
GHGs	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO ₂ e/ SP/yr (residents + employees)
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Odors	None	Identify the location of existing and planned sources of odors
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Regional Plans (Transportation and Air Quality Plans)		
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions
<p>Notes: CO = carbon monoxide; CO₂e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO₂ = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr= year.</p> <p>* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.</p>		

2. GREENHOUSE GAS THRESHOLDS

BAAQMD does not currently have an adopted threshold of significance for GHG emissions. BAAQMD currently recommends that lead agencies quantify GHG emissions resulting from new development and apply all feasible mitigation measures to lessen the potentially significant adverse impacts. One of the primary objectives in updating the current CEQA Guidelines is to identify a GHG significance threshold, analytical methodologies, and mitigation measures to ensure new land use development meets its fair share of the emission reductions needed to address the cumulative environmental impact from GHG emissions. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. As reviewed herein, climate change impacts include an increase in extreme heat days, higher ambient concentrations of air pollutants, sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental



impacts. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts.

2.1. THRESHOLDS OF SIGNIFICANCE

Project Type	Thresholds
Projects other than Stationary Sources	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr (residents + employees)
Stationary Sources	10,000 MT of CO ₂ e/yr
Plans	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO ₂ e/SP/yr (residents + employees)
Regional Plans (Transportation and Air Quality Plans)	No net increase in GHG emissions

2.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

BAAQMD’s approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. If mitigation can be applied to lessen the emissions such that the project meets its share of emission reductions needed to address the cumulative impact, the project would normally be considered less than significant.

As explained in the District’s *Revised Draft Options and Justifications Report* (BAAQMD 2009), there are several types of thresholds that may be supported by substantial evidence and be consistent with existing California legislation and policy to reduce statewide GHG emissions. In determining which thresholds to recommend, Staff studied numerous options, relying on reasonable, environmentally conservative assumptions on growth in the land use sector, predicted emissions reductions from statewide regulatory measures and resulting emissions inventories, and the efficacies of GHG mitigation measures. The thresholds recommended herein were chosen based on the substantial evidence that such thresholds represent quantitative and/or qualitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the state’s ability to meet its goals of reduced statewide GHG emissions. Staff notes that it does not believe there is only one threshold for GHG emissions that can be supported by substantial evidence.

GHG CEQA significance thresholds recommended herein are intended to serve as interim levels during the implementation of the AB 32 Scoping Plan and SB 375, which will occur over time. Until AB 32 has been fully implemented in terms of adopted regulations, incentives, and programs and until SB 375 required plans have been fully adopted, or the California Air Resources Board (ARB) adopts a recommended threshold, the BAAQMD recommends that local agencies in the Bay Area apply the GHG thresholds recommended herein.

If left unchecked, GHG emissions from new land use development in California will result in a cumulatively considerable amount of GHG emissions and a substantial conflict with the State's ability to meet the goals within AB 32. Thus, BAAQMD proposes to adopt interim GHG thresholds for CEQA analysis, which can be used by lead agencies within the Bay Area. This would help lead agencies navigate this dynamic regulatory and technological environment where the field of analysis has remained wide open and inconsistent. BAAQMD's framework for developing a GHG threshold for land development projects that is based on policy and substantial evidence follows.

2.2.1. Scientific and Regulatory Justification

Climate Science Overview

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, chlorofluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is *extremely unlikely* that global climate change of the past 50 years can be explained without the contribution from human activities (IPCC 2007a).

According to Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC), "Avoiding Dangerous Climate Change" means: "*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.*" Dangerous climate change defined in the UNFCCC is based on several key indicators including the potential for severe degradation of coral reef systems, disintegration of the West Antarctic Ice Sheet, and shut down of the large-scale, salinity- and thermally-driven circulation of the oceans. (UNFCCC 2009). The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm to 379 ppm in 2005 (IPCC 2007a). "Avoiding dangerous climate change" is generally understood to be achieved by stabilizing global average temperatures between 2 and 2.4°C above pre-industrial levels. In order to limit temperature increases to this level, ambient global CO₂ concentrations must stabilize between 350 and 400 ppm (IPCC 2007b).

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill 32, the California Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas emissions reduction goal into law. AB 32 finds and declares that "Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020, and establishes



regulatory, reporting, voluntary, and market mechanisms to achieve quantifiable reductions in GHG emissions to meet the statewide goal.

In December of 2008, ARB adopted its *Climate Change Scoping Plan (Scoping Plan)*, which is the State's plan to achieve GHG reductions in California, as required by AB 32 (ARB 2008). The Scoping Plan contains strategies California will implement to achieve a reduction of 169 MMT CO₂e emissions, or approximately 28 percent from the state's projected 2020 emission level of 596 MMT of CO₂e under a business-as-usual scenario (this is a reduction of 42 MMT of CO₂e, or almost 10 percent, from 2002-2004 average emissions), so that the state can return to 1990 emission levels, as required by AB 32.

While the Scoping Plan establishes the policy intent to control numerous GHG sources through regulatory, incentive, and market means, given the early phase of implementation and the level of control that local CEQA lead agencies have over numerous GHG sources, CEQA is an important and supporting tool in achieving GHG reductions overall in compliance with AB 32. In this spirit, BAAQMD is considering the adoption of thresholds of significance for GHG emissions for stationary source and land use development projects.

Senate Bill 375

Senate Bill (SB) 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emission technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for State funding programmed after January 1, 2012. New provisions of CEQA incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

The revised District CEQA Guidelines includes methodology consistent with the recently updated State CEQA Guidelines, which provides that certain residential and mixed use projects, and transit priority projects consistent with an applicable SCS or APS need not analyze GHG impacts from cars and light duty trucks (CEQA Guidelines §15183.5(c)).

2.2.2. Project-Level GHG Thresholds

Staff recommends setting GHG significance thresholds based on AB 32 GHG emission reduction goals while taking into consideration emission reduction strategies outlined in ARB's Scoping Plan. Staff proposes two quantitative thresholds for land use projects: a bright line threshold based on a "gap" analysis and an efficiency threshold based on emission levels required to be met in order to achieve AB 32 goals.

Staff also proposes one qualitative threshold for land use projects: if a project complies with a Qualified Greenhouse Gas Reduction Strategy (as defined in Section 2.3.4 below) that addresses the project it would be considered less than significant. As explained in detail in Section 2.3.4 below, compliance with a Qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs), would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measurable, and verifiable GHG reductions consistent with broad state goals such that projects approved under

qualified Greenhouse Gas Reduction Strategies or equivalent demonstrations would achieve their fair share of GHG emission reductions.

Land Use Projects “Gap-Based” Threshold

Staff took eight steps in developing this threshold approach, which are summarized here and detailed in the sections that follow. It should be noted that the “gap-based approach” used for threshold development is a conservative approach that focuses on a limited set of state mandates that appear to have the greatest potential to reduce land use development-related GHG emissions at the time of this writing. It is also important to note that over time, as the effectiveness of the State’s implementation of AB 32 (and SB 375) progresses, BAAQMD will need to reconsider the extent of GHG reductions needed over and above those from the implementation thereof for the discretionary approval of land use development projects. Although there is an inherent amount of uncertainty in the estimated capture rates (i.e., frequency at which project-generated emissions would exceed a threshold and would be subject to mitigation under CEQA) and the aggregate emission reductions used in the gap analysis, they are based on BAAQMD’s expertise, the best available data, and use conservative assumptions for the amount of emission reductions from legislation in derivation of the gap (e.g., only adopted legislation was relied upon). This approach is intended to attribute an appropriate share of GHG emission reductions necessary to reach AB 32 goals to new land use development projects in BAAQMD’s jurisdiction that are evaluated pursuant to CEQA.

Step 1 Estimate from ARB’s statewide GHG emissions inventory the growth in emissions between 1990 and 2020 attributable to “land use-driven” sectors of the emission inventory as defined by OPR’s guidance document (*CEQA and Climate Change*). Land use-driven emission sectors include Transportation (On-Road Passenger Vehicles; On-Road Heavy Duty), Electric Power (Electricity; Cogeneration), Commercial and Residential (Residential Fuel Use; Commercial Fuel Use) and Recycling and Waste (Domestic Waste Water Treatment).

Result: 1990 GHG emissions were 295.53 MMT CO₂e/yr and projected 2020 business-as-usual GHG emissions would be 400.22 MMT CO₂e/yr; thus a 26.2 percent reduction from statewide land use-driven GHG emissions would be necessary to meet the AB 32 goal of returning to 1990 emission levels by 2020. (See Table 2)

Step 2 Estimate the anticipated GHG emission reductions affecting the same land use-driven emissions inventory sectors associated with adopted statewide regulations identified in the AB 32 Scoping Plan.

Result: Estimated a 23.9 percent reduction can be expected in the land use-driven GHG emissions inventory from adopted Scoping Plan regulations, including AB 1493 (Pavley), LCFS, Heavy/Medium Duty Efficiency, Passenger Vehicle Efficiency, Energy-Efficiency Measures, Renewable Portfolio Standard, and Solar Roofs. (See Table 3)

Step 3 Determine any short fall or “gap” between the 2020 statewide emission inventory estimates and the anticipated emission reductions from adopted Scoping Plan regulations. This “gap” represents additional GHG emission reductions needed statewide from the land use-driven emissions inventory sectors, which represents new land use development’s share of the emission reductions needed to meet statewide GHG emission reduction goals.

Result: With the 23.9 percent reductions from AB 32 Scoping Measures, there is a “gap” of 2.3 percent in necessary additional GHG emissions reductions to meet AB 32



goals of a 26.2 percent reduction from statewide land use-driven GHG emissions to return to 1990 levels in 2020. (See Table 2)

- Step 4 Determine the percent reduction this “gap” represents in the “land use-driven” emissions inventory sectors from BAAQMD’s 2020 GHG emissions inventory. Identify the mass of emission reductions needed in the SFBAAB from land use-driven emissions inventory sectors.

Result: Estimated that a 2.3 percent reduction in BAAQMD’s projected 2020 emissions projections requires emissions reductions of 1.6 MMT CO₂e/yr from the land use-driven sectors. (See Table 4)

- Step 5 Assess BAAQMD’s historical CEQA database (2001-2008) to determine the frequency distribution trend of project sizes and types that have been subject to CEQA over the past several years.

Result: Determined historical patterns of residential, commercial and industrial development by ranges of average sizes of each development type. Results were used in Step 6 below to distribute anticipated Bay Area growth among different future project types and sizes.

- Step 6 Forecast new land use development for the Bay Area using DOF/EDD population and employment projections and distribute the anticipated growth into appropriate land use types and sizes needed to accommodate the anticipated growth (based on the trend analysis in Step 5 above). Translate the land use development projections into land use categories consistent with those contained in the Urban Emissions Model (URBEMIS).

Result: Based on population and employment projections and the trend analysis from Step 5 above, forecasted approximately 4,000 new development projects, averaging about 400 projects per year through 2020 in the Bay Area.

- Step 7 Estimate the amount of GHG emissions from each land use development project type and size using URBEMIS and post-model manual calculation methods (for emissions not included in URBEMIS). Determine the amount of GHG emissions that can reasonably and feasibly be reduced through currently available mitigation measures (“mitigation effectiveness”) for future land use development projects subject to CEQA (based on land use development projections and frequency distribution from Step 6 above).

Result: Based on the information available and on sample URBEMIS calculations, found that mitigation effectiveness of between 25 and 30 percent is feasible.

- Step 8 Conduct a sensitivity analysis of the numeric GHG mass emissions threshold needed to achieve the desired emissions reduction (i.e., “gap”) determined in Step 4. This mass emission GHG threshold is that which would be needed to achieve the emission reductions necessary by 2020 to meet the Bay Area’s share of the statewide “gap” needed from the land use-driven emissions inventory sectors.

Result: The results of the sensitivity analysis conducted in Step 8 found that reductions between about 125,000 MT/yr (an aggregate of 1.3 MMT in 2020) and over 200,000 MT/yr (an aggregate of over 2.0 MMT in 2020) were achievable and feasible. A mass emissions threshold of 1,100 MT of CO₂e/yr would result in approximately 59 percent of all projects being above the significance threshold (e.g., this is approximately the operational GHG emissions that would be associated with a 60 residential unit

subdivision) and must implement feasible mitigation measures to meet CEQA requirements. With an estimated 26 percent mitigation effectiveness, the 1,100 MT threshold would achieve 1.6 MMT CO₂e/yr in GHG emissions reductions.

Detailed Basis and Analysis

Derivation of Greenhouse Gas Reduction Goal

To meet the target emissions limit established in AB 32 (equivalent to levels in 1990), total GHG emissions would need to be reduced by approximately 28 percent from projected 2020 forecasts (ARB 2009a). The AB 32 Scoping Plan is ARB's plan for meeting this mandate (ARB 2008). While the Scoping Plan does not specifically identify GHG emission reductions from the CEQA process for meeting AB 32 derived emission limits, the scoping plan acknowledges that "other strategies to mitigate climate change . . . should also be explored." The Scoping Plan also acknowledges that "Some of the measures in the plan may deliver more emission reductions than we expect; others less . . . and new ideas and strategies will emerge." In addition, climate change is considered a significant environmental issue and, therefore, warrants consideration under CEQA. SB 97 represents the State Legislature's confirmation of this fact, and it directed the Governor's Office of Planning and Research (OPR) to develop CEQA Guidelines for evaluation of GHG emissions impacts and recommend mitigation strategies. In response, OPR released the *Technical Advisory: CEQA and Climate Change* (OPR 2008), and proposed revisions to the State CEQA guidelines (April 14, 2009) for consideration of GHG emissions. The California Natural Resources Agency adopted the proposed State CEQA Guidelines revisions on December 30, 2009 and the revisions were effective beginning March 18, 2010. It is known that new land use development must also do its fair share toward achieving AB 32 goals (or, at a minimum, should not hinder the State's progress toward the mandated emission reductions).

Foreseeable Scoping Plan Measures Emission Reductions and Remaining "Gap"

Step 1 of the Gap Analysis entailed estimating from ARB's statewide GHG inventory the growth in emissions between 1990 and 2020 attributable to land use driven sectors of the emissions inventory. As stated above, to meet the requirements set forth in AB 32 (i.e., achieve California's 1990-equivalent GHG emissions levels by 2020) California would need to achieve an approximate 28 percent reduction in emissions across all sectors of the GHG emissions inventory compared with 2020 projections. However, to meet the AB 32 reduction goals in the emissions sectors that are related to land use development (e.g., on-road passenger and heavy-duty motor vehicles, commercial and residential area sources [i.e., natural gas], electricity generation/consumption, wastewater treatment, and water distribution/consumption), staff determined that California would need to achieve an approximate 26 percent reduction in GHG emissions from these land use-driven sectors (ARB 2009a) by 2020 to return to 1990 land use emission levels.

Next, in Step 2 of the Gap Analysis, Staff determined the GHG emission reductions within the land use-driven sectors that are anticipated to occur from implementation of the Scoping Plan measures statewide, which are summarized in Table 2 and described below. Since the GHG emission reductions anticipated with the Scoping Plan were not accounted for in ARB's or BAAQMD's 2020 GHG emissions inventory forecasts (i.e., business as usual), an adjustment was made to include (i.e., give credit for) GHG emission reductions associated with key Scoping Plan measures, such as the Renewable Portfolio Standard, improvements in energy efficiency through periodic updates to Title 24, AB 1493 (Pavley) (which recently received a federal waiver to allow it to be enacted in law), the Low Carbon Fuel Standard (LCFS), and other measures. With reductions from these State regulations (Scoping Plan measures) taken into consideration and accounting for an estimated 23.9 percent reduction in GHG emissions, in Step 3 of the Gap Analysis Staff determined that the Bay Area would still need to achieve an additional 2.3 percent reduction from projected 2020 GHG emissions to meet the 1990 GHG emissions goal from the



land-use driven sectors. This necessary 2.3 percent reduction in projected GHG emissions from the land use sector is the “gap” the Bay Area needs to fill to do its share to meet the AB 32 goals. Refer to the following explanation and Tables 2 through 4 for data used in this analysis.

Because the transportation sector is the largest emissions sector of the state’s GHG emissions inventory, it is aggressively targeted in early actions and other priority actions in the Scoping Plan including measures concerning gas mileage (Pavley), fuel carbon intensity (LCFS) and vehicle efficiency measures.

**Table D-3 – California 1990, 2002-2004, and 2020 Land Use Sector GHG¹
(MMT CO₂e/yr)**

Sector	1990 Emissions	2002-2004 Average	2020 BAU Emissions Projections	% of 2020 Total
Transportation	137.98	168.66	209.06	52%
On-Road Passenger Vehicles	108.95	133.95	160.78	40%
On-Road Heavy Duty	29.03	34.69	48.28	12%
Electric Power	110.63	110.04	140.24	35%
Electricity	95.39	88.97	107.40	27%
Cogeneration ²	15.24	21.07	32.84	8%
Commercial and Residential	44.09	40.96	46.79	12%
Residential Fuel Use	29.66	28.52	32.10	8%
Commercial Fuel Use	14.43	12.45	14.63	4%
Recycling and Waste¹	2.83	3.39	4.19	1%
Domestic Wastewater Treatment	2.83	3.39	4.19	1%
TOTAL GROSS EMISSIONS	295.53	323.05	400.22	
% Reduction Goal from Statewide land use driven sectors (from 2020 levels to reach 1990 levels in these emission inventory sectors)			26.2%	
% Reduction from AB32 Scoping Plan measures applied to land use sectors (see Table 3)			-23.9%	
% Reduction needed statewide beyond Scoping Plan measures (Gap)			2.3%	
Notes: MMT CO ₂ e /yr = million metric tons of carbon dioxide equivalent emissions per year.				
¹ Landfills not included. See text.				
² Cogeneration included due to many different applications for electricity, in some cases provides substantial power for grid use, and because electricity use served by cogeneration is often amenable to efficiency requirements of local land use authorities.				
Sources: Data compiled by EDAW and ICF Jones & Stokes from ARB data.				

Pavley Regulations. The AB 32 Scoping Plan assigns an approximate 20 percent reduction in emissions from passenger vehicles associated with the implementation of AB 1493. The AB 32 Scoping Plan also notes that “AB 32 specifically states that if the Pavley regulations do not remain in effect, ARB shall implement alternative regulations to control mobile sources to achieve

equivalent or greater reductions of greenhouse gas emissions (HSC §38590).” Thus, it is reasonable to assume full implementation of AB 1493 standards, or equivalent programs that would be implemented by ARB. Furthermore, on April 1, 2010, U.S. EPA and the Department of Transportation’s National Highway Safety Administration (NHTSA) announced a joint final rule establishing a national program that will dramatically reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States after 2011. Under this national program, automobile manufacturers will be able to build a single light-duty national fleet that satisfies all requirements under both the national program and the standards of California and other states. Nonetheless, BAAQMD may need to revisit this methodology as the federal standards come on line to ensure that vehicle standards are as aggressive as contemplated in development of this threshold.

Affected Emissions Source	California Legislation	% Reduction from 2020 GHG inventory	End Use Sector (% of Bay Area LU Inventory)	Scaled % Emissions Reduction (credit)
Mobile	AB 1493 (Pavley)	19.7%	On road passenger/light truck transportation (45%)	8.9%
	LCFS	7.2%	On road passenger/light truck transportation (45%)	3.2%
	LCFS	7.2%	On road Heavy/Medium Duty Transportation (5%)	0.4%
	Heavy/Medium Duty Efficiency	2.9%	On road Heavy/Medium Duty Transportation (5%)	0.2%
	Passenger Vehicle Efficiency	2.8%	On road passenger/light truck transportation (45%)	1.3%
Area	Energy-Efficiency Measures	9.5%	Natural gas (Residential, 10%)	1.0%
			Natural gas (Non-residential, 13%)	1.2%
Indirect	Renewable Portfolio Standard	21.0%	Electricity (excluding cogen) (17%)	3.5%
	Energy-Efficiency Measures	15.7%	Electricity (26%)	4.0%
	Solar Roofs	1.5%	Electricity (excluding cogen) (17%)	0.2%
Total credits given to land use-driven emission inventory sectors from Scoping Plan measures				23.9%
Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; SB = Senate Bill; RPS = Renewable Portfolio Standard Please refer to Appendix D for detailed calculations. Sources: Data compiled by ICF Jones & Stokes.				

LCFS. According to the adopted LCFS rule (CARB, April 2009), the LCFS is expected to result in approximately 10 percent reduction in the carbon intensity of transportation fuels. However, a



portion of the emission reductions required from the LCFS would be achieved over the life cycle of transportation fuel production rather than from mobile-source emission factors. Based on CARB's estimate of nearly 16 MMT reductions in on-road emissions from implementation of the LCFS and comparison to the statewide on-road emissions sector, the LCFS is assumed to result in a 7.2 percent reduction compared to 2020 BAU conditions (CARB 2009e).

Sector	1990 Emissions	2007 Emissions	2020 Emissions Projections	% of 2020 Total²
Transportation	26.1	30.8	35.7	50%
On-Road Passenger Vehicles	23.0	27.5	32.0	
On-Road Heavy Duty	3.1	3.3	3.7	
Electric Power	25.1	15.2	18.2	26%
Electricity	16.5	9.9	11.8	
Cogeneration	8.6	5.3	6.4	
Commercial and Residential	8.9	15.0	16.8	24%
Residential Fuel Use	5.8	7.0	7.5	
Commercial Fuel Use	3.1	8.0	9.3	
Recycling and Waste¹	0.2	0.4	0.4	1%
Domestic Waste Water Treatment	0.2	0.4	0.4	
TOTAL GROSS EMISSIONS	60.3	61.4	71.1	
SFBAAB's "Fair Share" % Reduction (from 2020 levels to reach 1990 levels) with AB-32 Reductions (from Table 3)			2.3%	
SFBAAB's Equivalent Mass Emissions Land Use Reduction Target at 2020 (MMT CO ₂ e/yr)			1.6	
Notes: MMT CO ₂ e /yr = million metric tons of carbon dioxide equivalent emissions per year; SFBAAB = San Francisco Bay Area Air Basin.				
¹ Landfills not included.				
² Percentages do not sum exactly to 100% in table due to rounding.				
Please refer to Appendix D for detailed calculations.				
Sources: Data compiled by EDAW 2009, ICF Jones & Stokes 2009, BAAQMD 2008.				

Renewable Portfolio Standard, Energy Efficiency and Solar Roofs. Energy efficiency and renewable energy measures from the Scoping Plan were also included in the gap analysis. The Renewable Portfolio Standard (rules) will require the renewable energy portion of the retail electricity portfolio to be 33 percent in 2020. For PG&E, the dominant electricity provider in the Basin, approximately 12 percent of their current portfolio qualifies under the RPS rules and thus the gain by 2020 would be approximately 21 percent. The Scoping Plan also estimates that energy efficiency gains with periodic improvement in building and appliance energy standards and incentives will reach 10 to 15 percent for natural gas and electricity respectively. The final

state measure included in this gap analysis is the solar roof initiative, which is estimated to result in reduction of the overall electricity inventory of 1.5 percent.

Landfill emissions are excluded from this analysis. While land use development does generate waste related to both construction and operations, the California Integrated Waste Management Board (CIWMB) has mandatory diversion requirements that will, in all probability, increase over time to promote waste reductions, reuse, and recycle. The Bay Area has relatively high levels of waste diversion and extensive recycling efforts. Further, ARB has established and proposes to increase methane capture requirements for all major landfills. Thus, at this time, landfill emissions associated with land use development waste generation is not included in the land use sector inventory used to develop this threshold approach.

Industrial stationary sources thresholds were developed separately from the land use threshold development using a market capture approach as described below. However, mobile source and area source emissions, as well as indirect electricity emissions that derive from industrial use are included in the land use inventory above as these particular activities fall within the influence of local land use authorities in terms of the affect on trip generation and energy efficiency.

AB 32 mandates reduction to 1990-equivalent GHG levels by 2020, with foreseeable emission reductions from State regulations and key Scoping Plan measures taken into account, were applied to the land use-driven emission sectors within the SFBAAB (i.e., those that are included in the quantification of emissions from a land use project pursuant to a CEQA analysis [on-road passenger vehicles, commercial and residential natural gas, commercial and residential electricity consumption, and domestic waste water treatment], as directed by OPR in the Technical Advisory: *Climate Change and CEQA* [OPR 2008]). This translates to a 2.3 percent gap in necessary GHG emission reductions by 2020 from these sectors.

Land Use Projects Bright Line Threshold

In Steps 4 and 5 of the gap analysis, Staff determined that applying a 2.3 percent reduction to these land use emissions sectors in the SFBAAB's GHG emissions inventory would result in an equivalent fair share of 1.6 million metric tons per year (MMT/yr) reductions in GHG emissions from new land use development. As additional regulations and legislation aimed at reducing GHG emissions from land use-related sectors become available in the future, the 1.6 MMT GHG emissions reduction goal may be revisited and recalculated by BAAQMD.

In order to derive the 1.6 MMT "gap," a projected development inventory for the next ten years in the SFBAAB was calculated (see Table 4 and *Revised Draft Options and Justifications Report* (BAAQMD 2009)). CO_{2e} emissions were modeled for projected development in the SFBAAB and compiled to estimate the associated GHG emissions inventory. The GHG (i.e., CO_{2e}) CEQA threshold level was adjusted for projected land use development that would occur within BAAQMD's jurisdiction over the period from 2010 through 2020.

Projects with emissions greater than the threshold would be required to mitigate to the threshold level or reduce project emissions by a percentage (mitigation effectiveness) deemed feasible by the Lead Agency under CEQA compared to a base year condition. The base year condition is defined by an equivalent size and character of project with annual emissions using the defaults in URBEMIS and the California Climate Action Registry's General Reporting Protocol for 2008. By this method, land use project mitigation subject to CEQA would help close the "gap" remaining after application of the key regulations and measures noted above supporting overall AB 32 goals.

This threshold takes into account Steps 1-8 of the gap analysis described above to arrive at a numerical mass emissions threshold. Various mass emissions significance threshold levels (i.e.,

bright lines) could be chosen based on the mitigation effectiveness and performance anticipated to be achieved per project to meet the aggregate emission reductions of 1.6 MMT needed in the SFBAAB by 2020 (see Table 5 and *Revised Draft Options and Justifications Report* (BAAQMD 2009)). Staff recommends a 1,100 MT CO₂e per year threshold. Choosing a 1,100 MT mass emissions significance threshold level (equivalent to approximately 60 single-family units), would result in about 59 percent of all projects being above the significance threshold and having to implement feasible mitigation measures to meet their CEQA obligations. These projects account for approximately 92 percent of all GHG emissions anticipated to occur between now and 2020 from new land use development in the SFBAAB.

Project applicants and lead agencies could use readily available computer models to estimate a project's GHG emissions, based on project specific attributes, to determine if they are above or below the bright line numeric threshold. With this threshold, projects that are above the threshold level, after consideration of emission-reducing characteristics of the project as proposed, would have to reduce their emissions to below the threshold to be considered less than significant.

Establishing a “bright line” to determine the significance of a project’s GHG emissions impact provides a level of certainty to lead agencies in determining if a project needs to reduce its GHG emissions through mitigation measures and when an EIR is required.

Table D-6 – Operational GHG Threshold Sensitivity Analysis

Option	Mitigation Effectiveness Assumptions		Mass Emission Threshold Level (MT CO ₂ e/yr)	% of Projects Captured (>threshold)	% of Emissions Captured (> threshold)	Emissions Reduction per year (MT/yr)	Aggregate Emissions Reduction (MMT) at 2020	Threshold Project Size Equivalent (single family dwelling units)
	Performance Standards Applied to All Projects with Emissions < Threshold Level	Mitigation Effectiveness Applied to Emissions > Threshold Level						
1A	N/A	30%	975	60%	93%	201,664	2.0	53
1A	N/A	25%	110	96%	100%	200,108	2.0	66
1A	N/A	30%	1,225	21%	67%	159,276	1.6	67
1A	N/A	26%	1,100	59%	92%	159,877	1.6	60
1A	N/A	30%	2,000	14%	61%	143,418	1.4	109
1A	N/A	25%	1,200	58%	92%	136,907	1.4	66
1A	N/A	30%	3,000	10%	56%	127,427	1.3	164
1A	N/A	25%	1,500	20%	67%	127,303	1.3	82
1B	26%	N/A	N/A	100%	100%	208,594	2.1	N/A ¹
1C	5%	30%	1,900	15%	62%	160,073	1.6	104
1C	10%	25%	1,250	21%	67%	159,555	1.6	68
1C	5%	30%	3,000	10%	56%	145,261	1.5	164
1C	10%	25%	2,000	4%	61%	151,410	1.5	109
1C	10%	30%	10,000	2%	33%	125,271	1.3	547

MMT = million metric tons per year; MT CO₂e/yr = metric tons of carbon dioxide equivalent emissions per year; MT/yr = metric tons per year; N/A = not applicable.

¹ Any project subject to CEQA would trigger this threshold.

Please refer to Appendix E for detailed calculations.

Source: Data modeled by ICF Jones & Stokes.

Land Use Projects Efficiency-Based Threshold

GHG efficiency metrics can also be utilized as thresholds to assess the GHG efficiency of a project on a per capita basis (residential only projects) or on a “service population” basis (the sum of the number of jobs and the number of residents provided by a project) such that the project will allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal (allowable emissions), by the estimated 2020 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32. Staff believes it is more appropriate to base the land use efficiency threshold on the service population metric for the land use-driven emission inventory. This approach is appropriate because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use) and uses only the land use emissions inventory that is comprised of all land use projects. Staff will provide the methodology to calculate a project’s GHG emissions in the revised CEQA Guidelines, such as allowing infill projects up to a 50 percent or more reduction in daily vehicle trips if the reduction can be supported by close proximity to transit and support services, or a traffic study prepared for the project.

Table D-7 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - Land Use Inventory Sectors	
Land Use Sectors Greenhouse Gas Emissions Target	295,530,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO ₂ e)/SP ¹	4.6
Notes: AB = Assembly Bill; CO ₂ e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.	
¹ Greenhouse gas efficiency levels were calculated using only the “land use-related” sectors of ARB’s emissions inventory.	
Please refer to Appendix D for detailed calculations.	
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.	

Staff proposes a project-level efficiency threshold of 4.6 MT CO₂e/SP, the derivation of which is shown Table 6. This efficiency-based threshold reflects very GHG-efficient projects. As stated previously and below, staff anticipates that significance thresholds (rebuttable presumptions of significance at the project level) will function on an interim basis only until adequate programmatic approaches are in place at the city, county, and regional level that will allow the CEQA streamlining of individual projects. (See State CEQA Guidelines §15183.5 [“Tiering and Streamlining the Analysis of Greenhouse Gas Emissions”]).

2.2.3. Plan-Level GHG Thresholds

Staff proposes using a two step process for determining the significance of proposed plans and plan amendments for GHG. As a first step in assessing plan-level impacts, Staff is proposing that agencies that have adopted a qualified Greenhouse Gas Reduction Strategy (or have incorporated similar criteria in their general plan) and the general plan is consistent with the Greenhouse Gas Reduction Strategy, the general plan would be considered less than significant. In addition, as discussed above for project-level GHG impacts, Staff is proposing an efficiency threshold to assess plan-level impacts. Staff believes a programmatic approach to limiting GHG emissions is appropriate at the plan-level. Thus, as projects consistent with the Greenhouse Gas



Reduction Strategy are proposed, they may be able to tier off the plan and its environmental analysis.

GHG Efficiency Metrics for Plans

For local land use plans, a GHG-efficiency metric (e.g., GHG emissions per unit) would enable comparison of a proposed general plan to its alternatives and to determine if the proposed general plan meets AB 32 emission reduction goals.

AB 32 identifies local governments as essential partners in achieving California’s goal to reduce GHG emissions. Local governments have primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth and the changing needs of their jurisdiction. ARB has developed the Local Government Operations Protocol and is developing a protocol to estimate community-wide GHG emissions. ARB encourages local governments to use these protocols to track progress in reducing GHG emissions. ARB encourages local governments to institutionalize the community’s strategy for reducing its carbon footprint in its general plan. SB 375 creates a process for regional integration of land development patterns and transportation infrastructure planning with the primary goal of reducing GHG emissions from the largest sector of the GHG emission inventory, light duty vehicles.

If the statewide AB 32 GHG emissions reduction context is established, GHG efficiency can be viewed independently from the jurisdiction in which the plan is located. Expressing projected 2020 mass of emissions from land use-related emissions sectors by comparison to a demographic unit (e.g., population and employment) provides evaluation of the GHG efficiency of a project in terms of what emissions are allowable while meeting AB 32 targets.

Two approaches were considered for efficiency metrics. The “service population” (SP) approach would consider efficiency in terms of the GHG emissions compared to the sum of the number of jobs and the number of residents at a point in time. The per capita option would consider efficiency in terms of GHG emissions per resident only. Staff recommends that the efficiency threshold for plans be based on all emission inventory sectors because, unlike land use projects, general plans comprise more than just land use related emissions (e.g. industrial). Further, Staff recommends that the plan threshold be based on the service population metric as general plans include a mix of residents and employees. The Service Population metric would allow decision makers to compare GHG efficiency of general plan alternatives that vary residential and non-residential development totals, encouraging GHG efficiency through improving jobs/housing balance. This approach would not give preference to communities that accommodate more residential (population-driven) land uses than non-residential (employment driven) land uses which could occur with the per capita approach.

A SP-based GHG efficiency metric (see Table 7) was derived from the emission rates at the State level that would accommodate projected population and employment growth under trend forecast conditions, and the emission rates needed to accommodate growth while allowing for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020).

Table D-8 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - All Inventory Sectors	
All Inventory Sectors Greenhouse Gas Emissions Target	426,500,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584

AB 32 Goal GHG emissions (metric tons CO₂e)/SP¹

6.6

Notes: AB = Assembly Bill; CO₂e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.

¹ Greenhouse gas efficiency levels were calculated using only the “land use-related” sectors of ARB’s emissions inventory.

Please refer to Appendix D for detailed calculations.

Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.

If a general plan demonstrates, through dividing the emissions inventory projections (MT CO₂e) by the amount of growth that would be accommodated in 2020, that it could meet the GHG efficiency metrics in this section (6.6 MT CO₂e/SP from all emission sectors, as noted in Table 7), then the amount of GHG emissions associated with the general plan would be considered less than significant, regardless of its size (and magnitude of GHG emissions). In other words, the general plan would accommodate growth in a manner that would not hinder the State’s ability to achieve AB 32 goals, and thus, would be less than significant for GHG emissions and their contribution to climate change. The efficiency metric would not penalize well-planned communities that propose a large amount of development. Instead, the SP-based GHG efficiency metric acts to encourage the types of development that BAAQMD and OPR support (i.e., infill and transit-oriented development) because it tends to reduce GHG and other air pollutant emissions overall, rather than discourage large developments for being accompanied by a large mass of GHG emissions. Plans that are more GHG efficient would have no or limited mitigation requirements to help them complete the CEQA process more readily than plans that promote GHG inefficiencies, which will require detailed design of mitigation during the CEQA process and could subject a plan to potential challenge as to whether all feasible mitigation was identified and adopted. This type of threshold can shed light on a well-planned general plan that accommodates a large amount of growth in a GHG-efficient way.

When analyzing long-range plans, such as general plans, it is important to note that the planning horizon will often surpass the 2020 timeframe for implementation of AB 32. Executive Order S-3-05 establishes a more aggressive emissions reduction goal for the year 2050 of 80 percent below 1990 emissions levels. The year 2020 should be viewed as a milestone year, and the general plan should not preclude the community from a trajectory toward the 2050 goal. However, the 2020 timeframe is examined in this threshold evaluation because doing so for the 2050 timeframe (with respect to population, employment, and GHG emissions projections) would be too speculative. Advances in technology and policy decisions at the state level will be needed to meet the aggressive 2050 goals. It is beyond the scope of the analysis tools available at this time to examine reasonable emissions reductions that can be achieved through CEQA analysis in the year 2050. As the 2020 timeframe draws nearer, BAAQMD will need to reevaluate the threshold to better represent progress toward 2050 goals.

2.2.4. Greenhouse Gas Reduction Strategies

Finally, many local agencies have already undergone or plan to undergo efforts to create general or other plans that are consistent with AB 32 goals. The Air District encourages such planning efforts and recognizes that careful upfront planning by local agencies is invaluable to achieving the state’s GHG reduction goals. If a project is consistent with an adopted Qualified Greenhouse Gas Reduction Strategy that addresses the project’s GHG emissions, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent with CEQA Guidelines Sections 15064(h)(3) and 15183.5(b), which provides that a “lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or



mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem.”

A qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs) is one that is consistent with all of the AB 32 Scoping Plan measures and goals. The Greenhouse Gas Reduction Strategy should identify a land use design, transportation network, goals, policies and implementation measures that would achieve AB 32 goals. Strategies with horizon years beyond 2020 should consider continuing the downward reduction path set by AB 32 and move toward climate stabilization goals established in Executive Order S-3-05.

Qualified Greenhouse Gas Reduction Strategy

A qualified Greenhouse Gas Reduction Strategy adopted by a local jurisdiction should include the following elements as described in the State CEQA Guidelines Section 15183.5. The District’s revised CEQA Guidelines provides the methodology to determine if a Greenhouse Gas Reduction Strategy meets these requirements.

- (A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
- (C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- (D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- (E) Establish a mechanism to monitor the plan’s progress toward achieving the level and to require amendment if the plan is not achieving specified levels;
- (F) Be adopted in a public process following environmental review.

Local Climate Action Policies, Ordinances and Programs

Air District staff recognizes that many communities in the Bay Area have been proactive in planning for climate change but have not yet developed a stand-alone Greenhouse Gas Reduction Strategy that meets the above criteria. Many cities and counties have adopted climate action policies, ordinances and program that may in fact achieve the goals of AB 32 and a qualified Greenhouse Gas Reduction Strategy. Staff recommends that if a local jurisdiction can demonstrate that its collective set of climate action policies, ordinances and other programs is consistent with AB 32 and State CEQA Guidelines Section 15183.5, includes requirements or feasible measures to reduce GHG emissions and achieves one of the following GHG emission reduction goals,⁹ the AB 32 consistency demonstration should be considered equivalent to a qualified Greenhouse Gas Reduction Strategy:

- 1990 GHG emission levels,
- 15 percent below 2008 emission levels, or

⁹ Lead agencies using consistency with their jurisdiction’s climate action policies, ordinances and programs as a measure of significance under CEQA Guidelines section 15064(h)(3) and 15183.5(b) should ensure that the policies, ordinances and programs satisfy all of the requirements of that subsection before relying on them in a CEQA analysis.

- Meet the plan efficiency threshold of 6.6 MT CO₂e/service population/year.

Qualified Greenhouse Gas Reduction Strategies that are tied to the AB 32 reduction goals would promote reductions on a plan level without impeding the implementation of GHG-efficient development, and would recognize the initiative of many Bay Area communities who have already developed or are in the process of developing a GHG reduction plan. The details required above for a qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs) would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measurable, and verifiable GHG reductions consistent with broad state goals such that projects approved under qualified Greenhouse Gas Reduction Strategies or equivalent demonstrations would achieve their fair share of GHG emission reductions.

GHG Thresholds for Regional Plans

Regional plans include the Regional Transportation Plan prepared by the Metropolitan Transportation Commission (MTC) and air quality plans prepared by the Air District.

The Regional Transportation Plan (RTP), also called a Metropolitan Transportation Plan (MTP) or Long-Range Transportation Plan is the mechanism used in California by both Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) to conduct long-range (minimum of 20 years) planning in their regions. MTC functions as both the regional transportation planning agency, a state designation, and, for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of the Bay Area's transportation system that includes mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The performance of this system affects such public policy concerns as air quality, environmental resource consumption, social equity, "smart growth," economic development, safety, and security. Transportation planning recognizes the critical links between transportation and other societal goals. The planning process requires developing strategies for operating, managing, maintaining, and financing the area's transportation system in such a way as to advance the area's long-term goals.

The Air District periodically prepares and updates plans to achieve the goal of healthy air. Typically, a plan will analyze emissions inventories (estimates of current and future emissions from industry, motor vehicles, and other sources) and combine that information with air monitoring data (used to assess progress in improving air quality) and computer modeling simulations to test future strategies to reduce emissions in order to achieve air quality standards. Air quality plans usually include measures to reduce air pollutant emissions from industrial facilities, commercial processes, motor vehicles, and other sources. Bay Area air quality plans are prepared with the cooperation of MTC, the Association of Bay Area Governments (ABAG) and the Bay Conservation and Development Commission (BCDC).

The threshold of significance for regional plans is no net increase in emissions including greenhouse gas emissions. This threshold serves to answer the State CEQA Guidelines Appendix G sample question: "Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?"

2.2.5. Stationary Source GHG Threshold

Staff's recommended threshold for stationary source GHG emissions is based on estimating the GHG emissions from combustion sources for all permit applications submitted to the Air District in 2005, 2006 and 2007. The analysis is based only on CO₂ emissions from stationary sources, as that would cover the vast majority of the GHG emissions due to stationary combustion sources in



the SFBAAB. The estimated CO₂ emissions were calculated for the maximum permitted amount, i.e. emissions that would be emitted if the sources applying for a permit application operate at maximum permitted load and for the total permitted hours. All fuel types are included in the estimates. For boilers burning natural gas, diesel fuel is excluded since it is backup fuel and is used only if natural gas is not available. Emission values are estimated before any offsets (i.e., Emission Reduction Credits) are applied. GHG emissions from mobile sources, electricity use and water delivery associated with the operation of the permitted sources are not included in the estimates.

It is projected that a threshold level of 10,000 metric tons of CO₂e per year would capture approximately 95 percent of all GHG emissions from new permit applications from stationary sources in the SFBAAB. That threshold level was calculated as an average of the combined CO₂ emissions from all stationary source permit applications submitted to the Air District during the three year analysis period.

Staff recommends this 10,000 MT of CO₂/yr as it would address a broad range of combustion sources and thus provide for a greater amount of GHG reductions to be captured and mitigated through the CEQA process. As documented in the Scoping Plan, in order to achieve statewide reduction targets, emissions reductions need to be obtained through a broad range of sources throughout the California economy and this threshold would achieve this purpose. While this threshold would capture 95 percent of the GHG emissions from new permit applications, the threshold would do so by capturing only the large, significant projects. Permit applications with emissions above the 10,000 MT of CO₂/yr threshold account for less than 10 percent of stationary source permit applications which represent 95 percent of GHG emissions from new permits analyzed during the three year analysis period.

This threshold would be considered an interim threshold and Air District staff will reevaluate the threshold as AB 32 Scoping Plan measures such as cap and trade are more fully developed and implemented at the state level.

2.2.6. Summary of Justification for GHG Thresholds

The bright-line numeric threshold of 1,100 MT CO₂e/yr is a numeric emissions level below which a project's contribution to global climate change would be less than "cumulatively considerable." This emissions rate is equivalent to a project size of approximately 60 single-family dwelling units, and approximately 59 percent of all future projects and 92 percent of all emissions from future projects would exceed this level. For projects that are above this bright-line cutoff level, emissions from these projects would still be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 MT CO₂e per service population or better for mixed-use projects. Projects with emissions above 1,100 MT CO₂e/yr would therefore still be less than significant if they achieved project efficiencies below these levels. If projects as proposed exceed these levels, they would be required to implement mitigation measures to bring them back below the 1,100 MT CO₂e/yr bright-line cutoff or within the 4.6 MT CO₂e Service Population efficiency threshold. If mitigation did not bring a project back within the threshold requirements, the project would be cumulatively significant and could be approved only with a Statement of Overriding Considerations and a showing that all feasible mitigation measures have been implemented. Projects' GHG emissions would also be less than significant if they comply with a Qualified Greenhouse Gas Reduction Strategy.

As explained in the preceding analyses of these thresholds, the greenhouse gas emissions from land use projects expected between now and 2020 built in compliance with these thresholds would be approximately 26 percent below BAU 2020 conditions and thus would be consistent with achieving an AB 32 equivalent reduction. The 26 percent reduction from BAU 2020 from new

projects built in conformance with these thresholds would achieve an aggregate reduction of approximately 1.6 MMT CO₂e/yr, which is the level of emission reductions from new Bay Area land use sources needed to meet the AB 32 goals, per ARB's Scoping Plan as discussed above.

Projects with greenhouse gas emissions in conformance with these thresholds would therefore not be considered significant for purposes of CEQA. Although the emissions from such projects would add an incremental amount to the overall greenhouse gas emissions that cause global climate change impacts, emissions from projects consistent with these thresholds would not be a "cumulatively considerable" contribution under CEQA. Such projects would not be "cumulatively considerable" because they would be helping to solve the cumulative problem as a part of the AB 32 process.

California's response to the problem of global climate change is to reduce greenhouse gas emissions to 1990 levels by 2020 under AB 32 as a near-term measure and ultimately to 80 percent below 1990 levels by 2050 as the long-term solution to stabilizing greenhouse gas concentrations in the atmosphere at a level that will not cause unacceptable climate change impacts. To implement this solution, the Air Resources Board has adopted a Scoping Plan and budgeted emissions reductions that will be needed from all sectors of society in order to reach the interim 2020 target.

The land-use sector in the Bay Area needs to achieve aggregate emission reductions of approximately 1.6 MMT CO₂e/yr from new projects between now and 2020 to achieve this goal, as noted above, and each individual new project will need to achieve its own respective portion of this amount in order for the Bay Area land use sector as a whole to achieve its allocated emissions target. Building all of the new projects expected in the Bay Area between now and 2020 in accordance with the thresholds that District staff are proposing will achieve the overall appropriate share for the land use sector, and building each individual project in accordance with the thresholds will achieve that individual project's respective portion of the emission reductions needed to implement the AB 32 solution. For these reasons, projects built in conformance with the thresholds will be part of the solution to the cumulative problem, and not part of the continuing problem. They will allow the Bay Area's land use sector to achieve the emission reductions necessary from that sector for California to implement its solution to the cumulative problem of global climate change. As such, even though such projects will add an incremental amount of greenhouse gas emissions, their incremental contribution will be less than "cumulatively considerable" because they are helping to achieve the cumulative solution, not hindering it. Such projects will therefore not be "significant" for purposes of CEQA (see CEQA Guidelines §15064(h)(1)).

The conclusion that land use projects that comply with these thresholds is also supported by CEQA Guidelines Section 15030(a)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." In the case of greenhouse gas emissions associated with land use projects, achieving the amount of emission reductions below BAU that will be required to achieve the AB 32 goals is the project's "fair share" of the overall emission reductions needed under ARB's scoping plan to reach the overall statewide AB 32 emissions levels for 2020. If a project is designed to implement greenhouse gas mitigation measures that achieve a level of reductions consistent with what is required from all new land use projects to achieve the land use sector "budget" – *i.e.*, keeping overall project emissions below 1,100 MT CO₂e/yr or ensuring that project efficiency is better than 4.6 MT CO₂e/service population – then it will be implementing its share of the mitigation measures necessary to alleviate the cumulative impact, as shown in the analyses set forth above.



It is also worth noting that this “fair share” approach is flexible and will allow a project’s significance to be determined by how well it is designed from a greenhouse gas efficiency standpoint, and not just by the project’s size. For example, a large high-density infill project located in an urban core nearby to public transit and other alternative transportation options, and built using state-of-the-art energy efficiency methods and improvements such as solar panels, as well as all other feasible mitigation measures, would not become significant for greenhouse gas purposes (and thus require a Statement of Overriding Considerations in order to be approved) simply because it happened to be a large project. Projects such as this hypothetical development with low greenhouse gas emissions per service population are what California will need in the future in order to do its part in achieving a solution to the problem of global climate change. The determination of significance under CEQA should therefore take these factors into account, and the significance thresholds would achieve this important policy goal. In all, land use sector projects that comply with the GHG thresholds would not be “cumulatively considerable” because they would be helping to solve the cumulative problem as a part of the AB 32 process.

Likewise, new Air District permit applications for stationary sources that comply with the quantitative threshold of 10,000 MT CO₂e/yr would not be “cumulatively considerable” because they also would not hinder the state’s ability to solve the cumulative greenhouse gas emissions problem pursuant to AB 32. Unlike the land use sector, the AB 32 Scoping Plan measures, including the cap-and-trade program, provide for necessary emissions reductions from the stationary source sector to achieve AB 32 2020 goals.

While stationary source projects will need to comply with the cap-and-trade program once it is enacted and reduce their emissions accordingly, the program will be phased in over time starting in 2012 and at first will only apply to the very largest sources of GHG emissions. In the mean time, certain stationary source projects, particularly those with large GHG emissions, still will have a cumulatively considerable impact on climate change. The 10,000 MT CO₂e/yr threshold will capture 95 percent of the stationary source sector GHG emissions in the Bay Area. The five percent of emissions that are from stationary source projects below the 10,000 MT CO₂e/yr threshold account for a small portion of the Bay Area’s total GHG emissions from stationary sources and these emissions come from very small projects. Such small stationary source projects will not significantly add to the global problem of climate change, and they will not hinder the Bay Area’s ability to reach the AB 32 goal in any significant way, even when considered cumulatively. In Air District’s staff’s judgment, the potential environmental benefits from requiring EIRs and mitigation for these projects would be insignificant. In all, based on staff’s expertise, stationary source projects with emissions below 10,000 MT CO₂e/yr will not provide a cumulatively considerable contribution to the cumulative impact of climate change.

3. COMMUNITY RISK AND HAZARD THRESHOLDS

To address community risk from air toxics, the Air District initiated the Community Air Risk Evaluation (CARE) program in 2004 to identify locations with high levels of risk from ambient toxic air contaminants (TAC) co-located with sensitive populations and use the information to help focus mitigation measures. Through the CARE program, the Air District developed an inventory of TAC emissions for 2005 and compiled demographic and health indicator data. According to the findings of the CARE Program, diesel PM—mostly from on and off-road mobile sources—accounts for over 80 percent of the inhalation cancer risk from TACs in the Bay Area (BAAQMD 2006).

The Air District applied a regional air quality model using the 2005 emission inventory data to estimate excess cancer risk from ambient concentrations of important TAC species, including diesel PM, 1,3-butadiene, benzene, formaldehyde and acetaldehyde. The highest cancer risk

levels from ambient TAC in the Bay Area tend to occur in the core urban areas, along major roadways and adjacent to freeways and port activity. Cancer risks in areas along these major freeways are estimated to range from 200 to over 500 excess cases in a million for a lifetime of exposure. Priority communities within the Bay Area – defined as having higher emitting sources, highest air concentrations, and nearby low income and sensitive populations – include the urban core areas of Concord, eastern San Francisco, western Alameda County, Redwood City/East Palo Alto, Richmond/San Pablo, and San Jose.

Fifty percent of BAAQMD's population was estimated to have an ambient background inhalation cancer risk of less than 500 cases in one million, based on emission levels in 2005. Table 8 presents a summary of percentages of the population exposed to varying levels of cancer risk from ambient TACs. Approximately two percent of the SFBAAB population is exposed to background risk levels of less than 200 excess cases in one million. This is in contrast to the upper percentile ranges where eight percent of the SFBAAB population is exposed to background risk levels of greater than 1,000 excess cases per one million. To identify and reduce risks from TAC, this chapter presents thresholds of significance for both cancer risk and non-cancer health hazards.

Percentage of Population (Percent below level of ambient risk)	Ambient Cancer Risk (inhalation cancer cases in one million)
92	1,000
90	900
83	800
77	700
63	600
50	500
32	400
13	300
2	200
<1	100

Source: Data compiled by EDAW 2009.

Many scientific studies have linked fine particulate matter and traffic-related air pollution to respiratory illness (Hiltermann et al. 1997, Schikowski et al 2005, Vineis et al. 2007) and premature mortality (Dockery 1993, Pope et al. 1995, Jerrett et al. 2005). Traffic-related air pollution is a complex mix of chemical compounds (Schauer et al. 2006), often spatially correlated with other stressors, such as noise and poverty (Wheeler and Ben-Shlomo 2005). While such correlations can be difficult to disentangle, strong evidence for adverse health effects of fine particulate matter (PM_{2.5}) has been developed for regulatory applications in a study by the U.S. EPA. This study found that a 10 percent increase in PM_{2.5} concentrations increased the non-injury death rate by 10 percent (U.S. EPA 2006).

Public Health Officers for four counties in the San Francisco Bay Area in 2009 provided testimony to the Air District's Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality



and Public Health). Among the recommendations made, was that PM_{2.5}, in addition to TACs, be considered in assessments of community-scale impacts of air pollution. In consideration of the scientific studies and recommendations by the Bay Area Health Directors, it is apparent that, in addition to the significance thresholds for local-scale TAC, thresholds of significance are required for near-source, local-scale concentrations of PM_{2.5}.

3.1. **THRESHOLDS OF SIGNIFICANCE**

The thresholds of significance and Board-requested options are presented in this section:

- The **Staff Proposal** includes thresholds for cancer risk, non-cancer health hazards, and fine particulate matter.
- **Tiered Thresholds Option** includes tiered thresholds for new sources in impacted communities. Thresholds for receptors and cumulative impacts are the same as the Staff Proposal.

Proposal/Option	Construction-Related	Operational-Related
Project-Level – Individual Project		
Risks and Hazards – New Source (All Areas) (Individual Project) <u>Staff Proposal</u>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
Risks and Hazards – New Receptor (All Areas) (Individual Project) <u>Staff Proposal</u>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor

Proposal/Option	Construction-Related	Operational-Related
<p>Risks and Hazards (Individual Project)</p> <p><u>Tiered Thresholds Option</u></p>	<p>Same as Operational Thresholds*</p>	<p><u>Impacted Communities: Siting a New Source</u></p> <p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM_{2.5} increase: > 0.2 µg/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
	<p>Same as Operational Thresholds*</p>	<p><u>Impacted Communities: Siting a New Receptor</u></p> <p><u>All Other Areas: Siting a New Source or Receptor</u></p> <p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM_{2.5} increase: > 0.3 µg/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p>Accidental Release of Acutely Hazardous Air Pollutants</p>	<p>None</p>	<p>Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant</p>
<p>Project-Level – Cumulative</p>		



Proposal/Option	Construction-Related	Operational-Related
Risks and Hazards – New Source (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) <u>PM_{2.5}</u> : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
Risks and Hazards – New Receptor (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) <u>PM_{2.5}</u> : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
Plan-Level		
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas). 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways.
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Regional Plans (Transportation and Air Quality Plans)		
Risks and Hazards	None	No net increase in toxic air contaminants

* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

3.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

The goal of the thresholds is to ensure that no source creates, or receptor endures, a significant adverse impact from any individual project, and that the total of all nearby directly emitted risk and hazard emissions is also not significantly adverse. The thresholds for local risks and hazards from TAC and PM_{2.5} are intended to apply to all sources of emissions, including both permitted stationary sources and on- and off-road mobile sources, such as sources related to construction, busy roadways, or freight movement.

Thresholds for an individual new source are designed to ensure that the source does not contribute to a cumulatively significant impact. Cumulative thresholds for sources recognize that some areas are already near or at levels of significant impact. If within such an area there are receptors, or it can reasonably be foreseen that there will be receptors, then a cumulative significance threshold sets a level beyond which any additional risk is significant.

For new receptors – sensitive populations or the general public – thresholds of significance are designed to identify levels of contributed risk or hazards from existing local sources that pose a significant risk to the receptors. Single-source thresholds for receptors are provided to recognize that within the area defined there can be variations in risk levels that may be significant. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the area defined by the selected radius. Cumulative thresholds for receptors are designed to account for the effects of all sources within the defined area.

Cumulative thresholds, for both sources and receptors, must consider the size of the source area, defined by a radius from the proposed project. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the modeled risk and, until the radius approaches a regional length scale, the greater the expected modeled risk increment. If the area of impact considered were grown to the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

3.2.1. Scientific and Regulatory Justification

Regulatory Framework for TACs

Prior to 1990, the Clean Air Act required EPA to list air toxics it deemed hazardous and to establish control standards which would restrict concentrations of hazardous air pollutants (HAP) to a level that would prevent any adverse effects “with an ample margin of safety.” By 1990, EPA had regulated only seven such pollutants and it was widely acknowledged by that time that the original Clean Air Act had failed to address toxic air emissions in any meaningful way. As a result, Congress changed the focus of regulation in 1990 from a risk-based approach to technology-based standards. Title III, Section 112(b) of the 1990 Clean Air Act Amendment established this new regulatory approach. Under this framework, prescribed pollution control technologies based upon maximum achievable control technology (MACT) were installed without the a priori estimation of the health or environmental risk associated with each individual source. The law listed 188 HAPs that would be subject to the MACT standards. EPA issued 53 standards for 89 different types of major industrial sources of air toxics and eight categories of smaller sources such as dry cleaners. These requirements took effect between 1996 and 2002. Under the federal Title V Air Operating Permit Program, a facility with the potential to emit 10 tons of any toxic air pollutant, or 25 tons per year of any combination of toxic air pollutants, is defined as a major source HAPs. Title V permits include requirements for these facilities to limit toxic air pollutant emissions.



Several state and local agencies adopted programs to address gaps in EPA's program prior to the overhaul of the national program in 1990. California's program to reduce exposure to air toxics was established in 1983 by the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) and the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987). Under AB 1807, ARB and the Office of Environmental Health Hazard Assessment (OEHHA) determines if a substance should be formally identified as a toxic air contaminant (TAC) in California. OEHHA also establishes associated risk factors and safe concentrations of exposure.

AB 1807 was amended in 1993 by AB 2728, which required ARB to identify the 189 federal hazardous air pollutants as TACs. AB 2588 (Connelly, 1987) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Cancer Risk

Cancer risk from TACs is typically expressed in numbers of excess cancer cases per million persons exposed over a defined period of exposure, for example, over an assumed 70 year lifetime. The Air District is not aware of any agency that has established an acceptable level of cancer risk for TACs. However, a range of what constitutes a significant increment of cancer risk from any compound has been established by the U.S. EPA. EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility- and community-scale level considers a range of acceptable cancer risks from one in a million to one in ten thousand (100 in a million). The guidance considers an acceptable range of cancer risk increments to be from one in a million to one in ten thousand. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from HAPs by limiting additional risk to a level no higher than the one in ten thousand estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years. This goal is described in the preamble to the benzene National Emissions Standards for Hazardous Air Pollutants (NESHAP) rulemaking (54 Federal Register 38044, September 14, 1989) and is incorporated by Congress for EPA's residual risk program under Clean Air Act section 112(f).

Regulation 2, Rule 5 of the Air District specifies permit requirements for new and modified stationary sources of TAC. The Project Risk Requirement (2-5-302.1) states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project cancer risk exceeds 10.0 in one million.

Hazard Index for Non-cancer Health Effects

Non-cancer health hazards for chronic and acute diseases are expressed in terms of a hazard index (HI), a ratio of TAC concentration to a reference exposure level (REL), below which no adverse health effects are expected, even for sensitive individuals. As such, OEHHA has defined acceptable concentration levels, and also significant concentration increments, for compounds that pose non-cancer health hazards. If the HI for a compound is less than one, non-cancer chronic and acute health impacts have been determined to be less than significant.

State and Federal Ambient Air Quality Standards for PM_{2.5}

The Children's Environmental Health Protection Act (Senate Bill 25), passed by the California state legislature in 1999, requires ARB, in consultation with OEHHA, to "review all existing health-based ambient air quality standards to determine whether, based on public health, scientific literature and exposure pattern data, these standards adequately protect the public, including infants and children, with an adequate margin of safety." As a result of the review requirement, in 2002 ARB adopted an annual average California Ambient Air Quality Standard (CAAQS) for

PM_{2.5} of 12 ug/m³ that is not to be exceeded (California Code of Regulations, Title 17 § 70200, Table of Standards). The National Ambient Air Quality Standard (NAAQS) established an annual standard for PM_{2.5} (15 ug/m³) that is less stringent than the CAAQS, but also set a 24-hour average standard (35 ug/m³), which is not included in the CAAQS (Code of Federal Regulations, Title 40, Part 50.7).

Significant Impact Levels for PM_{2.5}

EPA recently proposed and documented alternative options for PM_{2.5} Significant Impact Levels (SILs) (Federal Register 40 CFR Parts 51 and 52, September 21, 2007). The EPA is proposing to facilitate implementation of a PM_{2.5} Prevention of Significant Deterioration (PSD) program in areas attaining the PM_{2.5} NAAQS by developing PM_{2.5} increments, or SILs. These “increments” are maximum increases in ambient PM_{2.5} concentrations (PM_{2.5} increments) allowed in an area above the baseline concentration.

The SIL is a threshold that would be applied to individual facilities that apply for a permit to emit a regulated pollutant in an area that meets the NAAQS. The State and EPA must determine if emissions from that facility will cause the air quality to worsen. If an individual facility projects an increase in emissions that result in ambient impacts greater than the established SIL, the permit applicant would be required to perform additional analyses to determine if those impacts will be more than the amount of the PSD increment. This analysis would combine the impact of the proposed facility when added to all other sources in the area.

The EPA is proposing such values for PM_{2.5} that will be used as screening tools by a major source subject to PSD to determine the subsequent level of analysis and data gathering required for a PSD permit application for emissions of PM_{2.5}. The SIL is one element of the EPA program to prevent deterioration in regional air quality and is utilized in the new source review (NSR) process. New source review is required under Section 165 of the Clean Air Act, whereby a permit applicant must demonstrate that emissions from the proposed construction and operation of a facility “will not cause, or contribute to, air pollution in excess of any maximum allowable increase or maximum allowable concentration for any pollutant.” The purpose of the SIL is to provide a screening level that triggers further analysis in the permit application process.

For the purpose of NSR, SILs are set for three types of areas: Class I areas where especially clean air is most desirable, including national parks and wilderness areas; Class II areas where there is not expected to be substantial industrial growth; and Class III areas where the highest relative level of industrial development is expected. In Class II and Class III areas, a PM_{2.5} concentration of 0.3, 0.8, and 1 µg/m³ has been proposed as a SIL. To arrive at the SIL PM_{2.5} option of 0.8 µg/m³, EPA scaled an established PM₁₀ SILs of 1.0 µg/m³ by the ratio of emissions of PM_{2.5} to PM₁₀ using the EPA’s 1999 National Emissions Inventory. To arrive at the SIL option of 0.3 µg/m³, EPA scaled the PM₁₀ SIL of 1.0 µg/m³ by the ratio of the current Federal ambient air quality standards for PM_{2.5} and PM₁₀ (15/50). These options represent what EPA currently considers as a range of appropriate SIL values.

EPA interprets the SIL to be the level of PM_{2.5} increment that represents a “significant contribution” to regional non-attainment. While SIL options were not designed to be thresholds for assessing community risk and hazards, they are being considered to protect public health at a regional level by helping an area maintain the NAAQS. Furthermore, since it is the goal of the Air District to achieve and maintain the NAAQS and CAAQS at both regional and local scales, the SILs may be reasonably be considered as thresholds of significance under CEQA for local-scale increments of PM_{2.5}.



Roadway Proximity Health Studies

Several medical research studies have linked near-road pollution exposure to a variety of adverse health outcomes impacting children and adults. Kleinman et al. (2007) studied the potential of roadway particles to aggravate allergic and immune responses in mice. Using mice that were not inherently susceptible, the researchers placed these mice at various distances downwind of State Road 60 and Interstate 5 freeways in Los Angeles to test the effect these roadway particles have on their immune system. They found that within five meters of the roadway, there was a significant allergic response and elevated production of specific antibodies. At 150 meters (492 feet) and 500 meters (1,640 feet) downwind of the roadway, these effects were not statistically significant.

Another significant study (Ven Hee et al. 2009) conducted a survey involving 3,827 participants that aimed to determine the effect of residential traffic exposure on two preclinical indicators of heart failure; left ventricular mass index (LVMI), measured by the cardiac magnetic resonance imaging (MRI), and ejection fraction. The studies classified participants based on the distance between their residence and the nearest interstate highway, state or local highway, or major arterial road. Four distance groups were defined: less than 50 meters (165 feet), 50-100 meters, 101-150 meters, and greater than 150 meters. After adjusting for demographics, behavioral, and clinical covariates, the study found that living within 50 meters of a major roadway was associated with a 1.4 g/m² higher LVMI than living more than 150 meters from one. This suggests an association between traffic-related air pollution and increased prevalence of a preclinical predictor of heart failure among people living near roadways.

To quantify the roadway concentrations of PM_{2.5} that contributed to the health impacts reported by Kleinman et al (2007), the Air District modeled the emissions and associated particulate matter concentrations for the roadways studied. To perform the modeling, emissions were estimated for Los Angeles using the EMFAC model and annual average vehicle traffic data taken from Caltrans was used in the roadway model (CAL3QHCR) to estimate the downwind PM_{2.5} concentrations at 50 meters and 150 meters. Additionally, emissions were assumed to occur from 10:00 a.m. to 2:00 p.m. corresponding to the time in which the mice were exposed during the study. The results of the modeling indicate that at 150 meters, where no significant health effects were found, the downwind concentration of PM_{2.5} was 0.78 µg/m³, consistent with the proposed EPA SIL option of 0.8 µg/m³.

Concentration-Response Function for PM_{2.5}

The U.S. EPA reevaluated the relative risk of premature death associated with PM_{2.5} exposure and developed a new relative risk factor (U.S. EPA 2006). This expert elicitation was prepared in support of the characterization of uncertainty in EPA's benefits analyses associated with reductions in exposure to particulate matter pollution. As recommended by the National Academy of Sciences, EPA used expert judgment to better describe the uncertainties inherent in their benefits analysis. Twelve experts participated in the study and provided not just a point estimate of the health effects of PM_{2.5}, but a probability distribution representing the range where they expected the true effect would be. Among the experts who directly incorporated their views on the likelihood of a causal relationship into their distributions, the central (median) estimates of the percent change in all-cause mortality in the adult U.S. population that would result from a permanent 1 µg/m³ drop in annual average PM_{2.5} concentrations ranged from 0.7 to 1.6 percent. The median of their estimates was 1.0 (% increase per 1 µg/m³ increase in PM_{2.5}), with a 90% confidence interval of 0.3 to 2.0 (medians of their 5th and 95th percentiles, respectively) (BAAQMD 2010). Subsequent to the EPA elicitation, Schwartz et al. (2008) examined the linearity of the concentration-response function of PM_{2.5}-mortality and showed that the response function was linear, with health effects clearly continuing below the current U.S. standard of 15 µg/m³, and that the effects of changes in exposure on mortality were seen within two years.

San Francisco Ordinance on Roadway Proximity Health Effects

In 2008, the City and County of San Francisco adopted an ordinance (San Francisco Health Code, Article 38 - Air Quality Assessment and Ventilation Requirement for Urban Infill Residential Development, Ord. 281-08, File No. 080934, December 5, 2008) requiring that public agencies in San Francisco take regulatory action to prevent future air quality health impacts from new sensitive uses proposed near busy roadways (SFDPH 2008). The regulation requires that developers screen sensitive use projects for proximity to traffic and calculate the concentration of PM_{2.5} from traffic sources where traffic volumes suggest a potential hazard. If modeled levels of traffic-attributable PM_{2.5} at a project site exceed an action level (currently set at 0.2 µg/m³) developers would be required to incorporate ventilation systems to remove 80 percent of PM_{2.5} from outdoor air. The regulation does not place any requirements on proposed sensitive uses if modeled air pollutant levels fall below the action threshold. This ordinance only considers impacts from on-road motor vehicles, not impacts related to construction equipment or stationary sources.

A report with supporting documentation for the ordinance (SFPHD 2008) provided a threshold to trigger action or mitigation of 0.2 µg/m³ of PM_{2.5} annual average exposure from roadway vehicles within a 150 meter (492 feet) maximum radius of a sensitive receptor. The report applied the concentration-response function from Jerrett et al. (2005) that attributed 14 percent increase in mortality to a 10 µg/m³ increase in PM_{2.5} to estimate an increase in non-injury mortality in San Francisco of about 21 excess deaths per million population per year from a 0.2 µg/m³ increment of annual average PM_{2.5}.

Distance for Significant Impact

The distance used for the radius around the project boundary should reflect the zone or area over which sources may have a significant influence. For cumulative thresholds, for both sources and receptors, this distance also determines the size of the source area, defined. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the risk and the greater the expected modeled risk increment. If the area of impact considered were grown to approach the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

A summary of research findings in ARB's Land Use Compatibility Handbook (ARB 2005) indicates that traffic-related pollutants were higher than regional levels within approximately 1,000 feet downwind and that differences in health-related effects (such as asthma, bronchitis, reduced lung function, and increased medical visits) could be attributed in part to the proximity to heavy vehicle and truck traffic within 300 to 1,000 feet of receptors. In the same summary report, ARB recommended avoiding siting sensitive land uses within 1,000 feet of a distribution center and major rail yard, which supports the use of a 1,000 feet evaluation distance in case such sources may be relevant to a particular project setting. A 1,000 foot zone of influence is also supported by Health & Safety Code §42301.6 (Notice for Possible Source Near School).

Some studies have shown that the concentrations of particulate matter tend to be reduced substantially or can even be indistinguishable from upwind background concentrations at a distance 1,000 feet downwind from sources such as freeways or large distribution centers. Zhu et al. (2002) conducted a systematic ultrafine particle study near Interstate 710, one of the busiest freeways in the Los Angeles Basin. Particle number concentration and size distribution were measured as a function of distances upwind and downwind of the I-710 freeway. Approximately 25 percent of the 12,180 vehicles per hour are heavy duty diesel trucks based on video counts conducted as part of the research. Measurements were taken at 13 feet, 23 feet, 55 feet, 252 feet, 449 feet, and 941 feet downwind and 613 feet upwind from the edge of the freeway. The particle number and supporting measurements of carbon monoxide and black carbon decreased



exponentially and all constituents simultaneously tracked with each other as one moves away from the freeway. Ultrafine particle size distribution changed markedly and its number concentrations dropped dramatically with increasing distance. The study found that ultrafine particle concentrations measured 941 feet downwind of I-710 were indistinguishable from the upwind background concentration.

Impacted Communities

Starting in 2006, the Air District's CARE program developed gridded TAC emissions inventories and compiled demographic information that were used to identify communities that were particularly impacted by toxic air pollution for the purposes of distributing grant and incentive funding. In 2009, the District completed regional modeling of TAC on a one kilometer by one kilometer grid system. This modeling was used to estimate cancer risk and TAC population exposures for the entire District. The information derived from the modeling was then used to update and refine the identification of impacted communities. One kilometer modeling yielded estimates of annual concentrations of five key compounds – diesel particulate matter, benzene, 1,3-butadiene, formaldehyde, and acetaldehyde – for year 2005. These concentrations were multiplied by their respective unit cancer risk factors, as established by OEHHA, to estimate the expected excess cancer risk per million people from these compounds.

Sensitive populations from the 2000 U.S. Census database were identified as youth (under 18) and seniors (over 64) and mapped to the same one kilometer grid used for the toxics modeling. Excess cancers from TAC exposure were determined by multiplying these sensitive populations by the model-estimated excess risk to establish a data set representing sensitive populations with high TAC exposures. TAC emissions (year 2005) were mapped to the one kilometer grid and also scaled by their unit cancer risk factor to provide a data set representing source regions for TAC emissions. Block-group level household income data from the U.S. Census database were used to identify block groups with family incomes where more than 40 percent of the population was below 185 percent of the federal poverty level (FPL). Poverty-level polygons that intersect high (top 50 percent) exposure cells and are within one grid cell of a high emissions cell (top 25 percent) were used to identify impacted areas. Boundaries were constructed along major roads or highways that encompass nearby high emission cells and low income areas. This method identified the following six areas as priority communities: (1) portions of the City of Concord; (2) Western Contra Costa County (including portions of the Cities of Richmond and San Pablo); (3) Western Alameda County along the Interstate-880 corridor (including portions of the Cities of Berkeley, Oakland, San Leandro, San Lorenzo, Hayward; (4) Portions of the City of San Jose. (5) Eastern San Mateo County (including portions of the Cities of Redwood City and East Palo Alto); and (6) Eastern portions of the City of San Francisco.

3.2.2. Construction, Land Use and Stationary Source Risk and Hazard Thresholds

The options for local risk and hazards thresholds of significance are based on U.S. EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. The thresholds consider reviews of recent health effects studies that link increased concentrations of fine particulate matter to increased mortality. The thresholds would apply to both siting new sources and siting new receptors.

For new sources of TACs, thresholds of significance for a single source are designed to ensure that emissions do not raise the risk of cancer or non-cancer health impacts to cumulatively significant levels. For new sources of PM_{2.5}, thresholds are designed to ensure that PM_{2.5} concentrations are maintained below state and federal standards in all areas where sensitive receptors or members of the general public live or may foreseeably live, even if at the local- or community-scale where sources of TACs and PM may be nearby.

Project Radius for Assessing Impacts

For a project proposing a new source or receptor it is recommended to assess impacts within 1,000 feet, taking into account both its individual and nearby cumulative sources (i.e. proposed project plus existing and foreseeable future projects). Cumulative sources are the combined total risk values of each individual source within the 1,000-foot evaluation zone. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

The 1,000 foot radius is consistent with findings in ARB's Land Use Compatibility Handbook (ARB 2005), the Health & Safety Code §42301.6 (Notice for Possible Source Near School), and studies such as that of Zhu et al (2002) which found that concentrations of particulate matter tend to be reduced substantially at a distance 1,000 feet downwind from sources such as freeways or large distribution centers.

Qualified Community Risk Reduction Plan

Within the framework of these thresholds, proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in excess of the thresholds below from any source would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Increased Cancer Risk to Maximally Exposed Individual (MEI)

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 10.0 in one million, assuming a 70 year lifetime exposure. Under Board Option 1, within Impacted Communities as defined through the CARE program, the significance level for cancer would be reduced to 5.0 in one million for new sources.

The 10.0 in one million cancer risk threshold for a single source is supported by EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. It is also the level set by the Project Risk Requirement in the Air District's Regulation 2, Rule 5 new and modified stationary sources of TAC, which states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project risk exceeds a cancer risk of 10.0 in one million.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Tiered Thresholds Option threshold of 5.0 in one million for new sources in an impacted community is that in these areas the cancer risk burden is higher than in other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the cumulative thresholds: specifically, if an area has



many existing TAC sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer TAC sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

Increased Non-Cancer Risk to MEI

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic or acute Hazard Index (HI) from any source greater than 1.0. This threshold is unchanged under Tiered Thresholds Option.

A HI less than 1.0 represents a TAC concentration, as determined by OEHHA that is at a health protective level. While some TACs pose non-carcinogenic, chronic and acute health hazards, if the TAC concentrations result in a HI less than one, those concentrations have been determined to be less than significant.

Increased Ambient Concentration of PM_{2.5}

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of PM_{2.5} from any source would result in an average annual increase greater than 0.3 µg/m³. Under Tiered Thresholds Option, within Impacted Communities as defined through the CARE program, the significance level for a PM_{2.5} increment is 0.2 µg/m³.

If one applies the concentration-response of the median of the EPA consensus review (EPA 2005, BAAQMD 2010) and attributes a 1 percent increase in mortality to a 1 µg/m³ increase in PM_{2.5}, one finds an increase in non-injury mortality in the Bay Area of about 20 excess deaths per million per year from a 0.3 µg/m³ increment of PM_{2.5}. This is consistent with the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to estimate the increase in mortality from a 0.2 µg/m³ PM_{2.5} increment.

The SFDPH recommended a lower threshold of significance for multiple sources but only considered roadway emissions within a 492 foot radius. This recommendation applies to a single source but considers all types of emissions within 1,000 feet. On balance, the Air District estimates that the SFDPH threshold and this one, in combination with the cumulative threshold for PM_{2.5}, will afford similar levels of health protection.

The PM_{2.5} threshold represents the lower range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a "significant contribution" to regional non-attainment. While this threshold was not designed to be a threshold for assessing community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Tiered Thresholds Option threshold of 0.2 µg/m³ for new sources in an impacted community is that these areas have higher levels of diesel particulate matter than do other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy

levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the cumulative thresholds: specifically, if an area has many existing PM_{2.5} sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer PM_{2.5} sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

Accidental Release of Acutely Hazardous Air Emissions

The BAAQMD currently recommends, at a minimum, that the lead agency, in consultation with the administering agency of the Risk Management Prevention Program (RMPP), find that any project resulting in receptors being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for a facility has a significant air quality impact. ERPG exposure level 2 is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action."

Staff proposes continuing with the current threshold for the accidental release of hazardous air pollutants. Staff recommends that agencies consult with the California Emergency Management Agency for the most recent guidelines and regulations for the storage of hazardous materials. Staff proposes that projects using or storing acutely hazardous materials locating near existing receptors, and projects resulting in receptors locating near facilities using or storing acutely hazardous materials be considered significant.

The current Accidental Release/Hazardous Air Emissions threshold of significance could affect all projects, regardless of size, and require mitigation for Accidental Release/Hazardous Air Emissions impacts.

3.2.3. Cumulative Risk and Hazard Thresholds

Qualified Community Risk Reduction Plan

Proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in excess of the following thresholds from the aggregate of cumulative sources would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.



Increased Cancer Risk to Maximally Exposed Individual (MEI)

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 100.0 in one million.

The significance threshold of 100 in a million increased excess cancer risk would be applied to the cumulative emissions. The 100 in a million threshold is based on EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from hazardous air pollutants (HAPs) by limiting risk to a level no higher than the one in ten thousand (100 in a million) estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years (NESHAP 54 Federal Register 38044, September 14, 1989; CAA section 112(f)). One hundred in a million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on the District's recent regional modeling analysis.

Increased Non-Cancer Risk to MEI

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic Hazard Index from any source greater than 10.0.

The Air District has developed an Air Toxics Hot Spots (ATHS) program that provides guidance for implementing the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly, 1987: chaptered in the California Health and Safety Code § 44300, et. al.). The ATHS provides that if the health risks resulting from the facility's emissions exceed significance levels established by the air district, the facility is required to conduct an airborne toxic risk reduction audit and develop a plan to implement measures that will reduce emissions from the facility to a level below the significance level. The Air District has established a non-cancer Hazard Index of ten (10.0) as ATHS mandatory risk reduction levels. The cumulative chronic non-cancer Hazard Index threshold is consistent with the Air District's ATHS program.

Increased Ambient Concentration of PM_{2.5}

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of PM_{2.5} from any source would result in an average annual increase greater than 0.8 µg/m³.

If one applies the concentration-response function from the U.S. EPA assessment (U.S. EPA 2006) and attributes a 10 percent increase in mortality to a 10 µg/m³ increase in PM_{2.5}, one finds an increase in non-injury mortality in the Bay Area of about 50 excess deaths per year from a 0.8 µg/m³ increment of PM_{2.5}. This is greater the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to estimate the increase in mortality from a 0.2 µg/m³ PM_{2.5} increment (SFDPH reported 21 excess deaths per year). However, SFDPH only considered roadway emissions within a 492 foot radius. This threshold applies to all types of emissions within 1,000 feet. In modeling applications for proposed projects, a larger radius results in a greater number of sources considered and higher modeled concentrations. On balance, the Air District estimates that the SFDPH threshold and this one, in combination with the individual source threshold for PM_{2.5}, will afford similar levels of health protection.

The cumulative PM_{2.5} threshold represents the middle range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a "significant contribution" to regional non-attainment. While this threshold was not designed to be a threshold for assessing community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and

maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison. Furthermore, the $0.8 \mu\text{g}/\text{m}^3$ threshold is consistent with studies (Kleinman et al 2007) that examined the potential health impacts of roadway particles.

3.2.4. Plan-Level Risk and Hazard Thresholds

Staff proposes plan-level thresholds that will encourage a programmatic approach to addressing the overall adverse conditions resulting from risks and hazards that many Bay Area communities experience. By designating overlay zones in land use plans, local land use jurisdictions can take preemptive action before project-level review to reduce the potential for significant exposures to risk and hazard emissions. While this will require more up-front work at the general plan level, in the long-run this approach is a more feasible approach consistent with Air District and CARB guidance about siting sources and sensitive receptors that is more effective than project by project consideration of effects that often has more limited mitigation opportunities. This approach would also promote more robust cumulative consideration of effects of both existing and future development for the plan-level CEQA analysis as well as subsequent project-level analysis.

For local plans to have a less-than-significant impact with respect to potential risks and hazards, overlay zones would have to be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid risk impacts should be reflected in local plan policies, land use map(s), and implementing ordinances (e.g., zoning ordinance). The overlay zones around existing and future risk sources would be delineated using the quantitative approaches described above for project-level review and the resultant risk buffers would be included in the General Plan (or the EIR for the General Plan) to assist in site planning. BAAQMD will provide guidance as to the methods used to establish the TAC buffers and what standards to be applied for acceptable exposure level in the updated CEQA Guidelines document. Special overlay zones of at least 500 feet (or an appropriate distance determined by modeling and approved by the Air District) on each side of all freeways and high volume roadways would be included in this threshold.

The threshold of significance for plan impacts could affect all plan adoptions and amendments and require mitigation for a plan's air quality impacts. Where sensitive receptors would be exposed above the acceptable exposure level, the plan impacts would be considered significant and mitigation would be required to be imposed either at the plan level (through policy) or at the project level (through project level requirements).

3.2.5. Community Risk Reduction Plans

The goal of a Community Risk Reduction Plan would be to bring TAC and $\text{PM}_{2.5}$ concentrations for the entire community covered by the Plan down to acceptable levels as identified by the local jurisdiction and approved by the Air District. This approach provides local agencies a proactive alternative to addressing communities with high levels of risk on a project-by-project approach. This approach is supported by CEQA Guidelines Section 15030(a)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." This approach is also further supported by CEQA Guidelines Section 15064(h)(3), which provides that a project's contribution to a cumulative effect is not considerable "if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem."



Qualified Community Risk Reduction Plans

- (A) A qualified Community Risk Reduction Plan adopted by a local jurisdiction should include, at a minimum, the following elements. The District's revised CEQA Guidelines provides the methodology to determine if a Community Risk Reduction Plan meets these requirements. Define a planning area;
- (B) Include base year and future year emissions inventories of TACs and PM2.5;
- (C) Include Air District–approved risk modeling of current and future risks;
- (D) Establish risk and exposure reduction goals and targets for the community in consultation with Air District staff;
- (E) Identify feasible, quantifiable, and verifiable measures to reduce emissions and exposures;
- (F) Include procedures for monitoring and updating the inventory, modeling and reduction measures in coordination with Air District staff;
- (G) Be adopted in a public process following environmental review.

4. CRITERIA POLLUTANT THRESHOLDS

4.1. THRESHOLDS OF SIGNIFICANCE

Project Construction	
Pollutant	Average Daily (pounds/day)
ROG (reactive organic gases)	54
NO _x (nitrogen oxides)	54
PM ₁₀ (exhaust) (particulate matter-10 microns)	82
PM _{2.5} (exhaust) (particulate matter-2.5 microns)	54
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices
Local CO (carbon monoxide)	None

Project Operations		
Pollutant	Average Daily (pounds/day)	Maximum Annual (tons/year)
ROG	54	10
NO _x	54	10
PM ₁₀	82	15
PM _{2.5}	54	10
Local CO	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

Plans
<ol style="list-style-type: none"> 1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase

Regional Plans (Transportation and Air Quality Plans)
No net increase in emissions of criteria air pollutants and precursors

4.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

4.2.1. Project Construction Criteria Pollutant Thresholds

Staff proposes criteria pollutant construction thresholds that add significance criteria for exhaust emissions to the existing fugitive dust criteria employed by the Air District. While our current Guidelines considered construction exhaust emissions controlled by the overall air quality plan, the implementation of new and more stringent state and federal standards over the past ten years now warrants additional control of this source of emissions.

The average daily criteria air pollutant and precursor emission levels shown above are recommended as the thresholds of significance for construction activity for exhaust emissions. These thresholds represent the levels above which a project's individual emissions would result in a considerable contribution (i.e., significant) to the SFBAAB's existing non-attainment air quality

conditions and thus establish a nexus to regional air quality impacts that satisfies CEQA requirements for evidence-based determinations of significant impacts.

For fugitive dust emissions, staff recommends following the current best management practices approach which has been a pragmatic and effective approach to the control of fugitive dust emissions. Studies have demonstrated (Western Regional Air Partnership, U.S.EPA) that the application of best management practices at construction sites have significantly controlled fugitive dust emissions. Individual measures have been shown to reduce fugitive dust by anywhere from 30 percent to more than 90 percent. In the aggregate best management practices will substantially reduce fugitive dust emissions from construction sites. These studies support staff's recommendation that projects implementing construction best management practices will reduce fugitive dust emissions to a less than significant level.

4.2.2. Project Operation Criteria Pollutant Thresholds

The thresholds for project operations are the average daily and maximum annual criteria air pollutant and precursor levels shown above. These thresholds are based on the federal BAAQMD Offset Requirements to ozone precursors for which the SFBAAB is designated as a non-attainment area which is an appropriate approach to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevention of a regionally cumulative significant impact (e.g. worsened status of non-attainment). Despite non-attainment area for state PM₁₀ and pending nonattainment for federal PM_{2.5}, the federal NSR Significant Emission Rate annual limits of 15 and 10 tons per year, respectively, are the thresholds as BAAQMD has not established an Offset Requirement limit for PM_{2.5} and the existing limit of 100 tons per year is much less stringent and would not be appropriate in light of our pending nonattainment designation for the federal 24-hour PM_{2.5} standard. These thresholds represent the emission levels above which a project's individual emissions would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. The thresholds would be an evaluation of the incremental contribution of a project to a significant cumulative impact. These threshold levels are well-established in terms of existing regulations as promoting review of emissions sources to prevent cumulative deterioration of air quality. Using existing environmental standards in this way to establish CEQA thresholds of significance under Guidelines section 15067.4 is an appropriate and effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other areas of environmental regulation. (See *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal. App. 4th 98, 111.¹⁰)

4.2.3. Local Carbon Monoxide Thresholds

The carbon monoxide thresholds are based solely on ambient concentration limits set by the California Clean Air Act for Carbon Monoxide and Appendix G of the State of California CEQA Guidelines.

Since the ambient air quality standards are health-based (i.e., protective of public health), there is substantial evidence (i.e., health studies that the standards are based on) in support of their use

¹⁰ The Court of Appeal in the *Communities for a Better Environment* case held that existing regulatory standards could not be used as a definitive determination of whether a project would be significant under CEQA where there is substantial evidence to the contrary. Staff's thresholds would not do that. The thresholds are levels at which a project's emissions would normally be significant, but would not be binding on a lead agency if there is contrary evidence in the record.

as CEQA significance thresholds. The use of the ambient standard would relate directly to the CEQA checklist question. By not using a proxy standard, there would be a definitive bright line about what is or is not a significant impact and that line would be set using a health-based level.

The CAAQS of 20.0 ppm and 9 ppm for 1-hour and 8-hour CO, respectively, would be used as the thresholds of significance for localized concentrations of CO. Carbon monoxide is a directly emitted pollutant with primarily localized adverse effects when concentrations exceed the health based standards established by the California Air Resources Board (ARB).

In addition, Appendix G of the State of California CEQA Guidelines includes the checklist question: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? Answering yes to this question would indicate that the project would result in a significant impact under CEQA. The use of the ambient standard would relate directly to this checklist question.

4.2.4. Plan-Level Criteria Pollutant Thresholds

This threshold achieves the same goals as the Air District's current approach while alleviating the existing analytical difficulties and the inconsistency of comparing a plan update with AQP growth projections that may be up to several years old. Eliminating the analytical inconsistency provides better nexus and proportionality for evaluating air quality impacts for plans.

Over the years staff has received comments on the difficulties inherent in the current approach regarding the consistency tests for population and VMT growth. First, the population growth estimates used in the most recent AQP can be up to several years older than growth estimates used in a recent plan update, creating an inconsistency in this analysis. Staff recommends that this test of consistency be eliminated because the Air District and local jurisdictions all use regional population growth estimates that are disaggregated to local cities and counties. In addition, the impact to air quality is not necessarily growth but where that growth is located. The second test, rate of increase in vehicle use compared to growth rate, will determine if planned growth will impact air quality. Compact infill development inherently has less vehicle travel and more transit opportunities than suburban sprawl.

Second, the consistency test of comparing the rate of increase in VMT to the rate of increase in population has been problematic at times for practitioners because VMT is not always available with the project analysis. Staff recommends that either the rate of increase in VMT or vehicle trips be compared to the rate of increase in population. Staff also recommends that the growth estimates used in this analysis be for the years covered by the plan. Staff also recommends that the growth estimates be obtained from the Association of Bay Area Governments since the Air District uses ABAG growth estimates for air quality planning purposes.

4.2.5. Criteria Pollutant Thresholds for Regional Plans

Regional plans include the Regional Transportation Plan prepared by the Metropolitan Transportation Commission (MTC) and air quality plans prepared by the Air District.

The Regional Transportation Plan (RTP), also called a Metropolitan Transportation Plan (MTP) or Long-Range Transportation Plan is the mechanism used in California by both Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) to conduct long-range (minimum of 20 years) planning in their regions. MTC functions as both the regional transportation planning agency, a state designation, and, for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of



comprehensive transportation system that includes mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The performance of this system affects such public policy concerns as air quality, environmental resource consumption, social equity, “smart growth,” economic development, safety, and security. Transportation planning recognizes the critical links between transportation and other societal goals. The planning process requires developing strategies for operating, managing, maintaining, and financing the area’s transportation system in such a way as to advance the area’s long-term goals.

The Air District periodically prepares and updates plans to achieve the goal of healthy air. Typically, a plan will analyze emissions inventories (estimates of current and future emissions from industry, motor vehicles, and other sources) and combine that information with air monitoring data (used to assess progress in improving air quality) and computer modeling simulations to test future strategies to reduce emissions in order to achieve air quality standards. Air quality plans usually include measures to reduce air pollutant emissions from industrial facilities, commercial processes, motor vehicles, and other sources. Bay Area air quality plans are prepared with the cooperation of MTC and the Association of Bay Area Governments (ABAG).

The threshold of significance for regional plans is no net increase in emissions including criteria pollutant emissions. This threshold serves to answer the State CEQA Guidelines Appendix G sample question: “Would the project Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?”

5. ODOR THRESHOLDS

5.1. THRESHOLDS OF SIGNIFICANCE

Project Operations – Source or Receptor	Plans
Five confirmed complaints per year averaged over three years	Identify the location, and include policies to reduce the impacts, of existing or planned sources of odors

5.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

Staff proposes revising the current CEQA significance threshold for odors to be consistent with the Air District’s regulation governing odor nuisances (Regulation 7—Odorous Substances). The current approach includes assessing the number of unconfirmed complaints which are not considered indicative of actual odor impacts. Basing the threshold on an average of five confirmed complaints per year over a three year period reflects the most stringent standards derived from the Air District rule and is therefore considered an appropriate approach to a CEQA evaluation of odor impacts.

Odors are generally considered a nuisance, but can result in a public health concern. Some land uses that are needed to provide services to the population of an area can result in offensive odors, such as filling portable propane tanks or recycling center operations. When a proposed project includes the siting of sensitive receptors in proximity to an existing odor source, or when siting a new source of potential odors, the following qualitative evaluation should be performed.

When determining whether potential for odor impacts exists, it is recommended that Lead Agencies consider the following factors and make a determination based on evidence in each qualitative analysis category:

Distance: Use the screening-level distances in Table 9.

Wind Direction: Consider whether sensitive receptors are located upwind or downwind from the source for the most of the year. If odor occurrences associated with the source are seasonal in nature, consider whether sensitive receptors are located downwind during the season in which odor emissions occur.

Complaint History: Consider whether there is a history of complaints associated with the source. If there is no complaint history associated with a particular source (perhaps because sensitive receptors do not already exist in proximity to the source), consider complaint-history associated with other similar sources in BAAQMD's jurisdiction with potential to emit the same or similar types of odorous chemicals or compounds, or that accommodate similar types of processes.

Character of Source: Consider the character of the odor source, for example, the type of odor events according to duration of exposure or averaging time (e.g., continuous release, frequent release events, or infrequent events).

Exposure: Consider whether the project would result in the exposure of a substantial number of people to odorous emissions.

Type of Operation Project Screening	Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Coffee Roaster	1 mile



California Integrated Waste Management Board (CIWMB). Facilities that are regulated by the CIWMB (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency's discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CIWMB regulated facilities with an adopted OIMP.

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BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION No. 2010-06

**A Resolution of the Board of Directors of the Bay Area Air Quality Management District
Adopting Thresholds For Use In Determining the Significance of Projects' Environmental
Effects Under the California Environmental Quality Act**

WHEREAS, pursuant to Title 14, Chapter 3, Article 5, Section 15064.7 of the California Code of Regulations ("Section 15064.7"), the California Resources Agency encourages public agencies to adopt "Thresholds of Significance" under the California Environmental Quality Act ("CEQA");

WHEREAS, pursuant to Section 15064.7, CEQA Thresholds of Significance are identifiable quantitative, qualitative or performance levels of a particular environmental effect, non-compliance with which means the effect will normally be determined to be "significant" under CEQA, and compliance with which means the effect normally will be determined to be less than significant under CEQA;

WHEREAS, the Board of Directors ("Board") of the Bay Area Air Quality Management District ("District") finds it necessary and appropriate to adopt CEQA Thresholds of Significance as set forth in Attachment A hereto for use by District staff and by other appropriate agencies in determining whether projects may have significant effects on the environment for purposes of CEQA environmental analyses;

WHEREAS, the CEQA Thresholds of Significance as set forth in Attachment A hereto do not alter the existing procedural and substantive requirements of CEQA under California law, but simply clarify the level at which, in the District's considered opinion, an environmental effect should normally be considered "significant" for purposes of existing CEQA law;

WHEREAS, the CEQA Thresholds of Significance set forth in Attachment A hereto were developed through an extensive public review process, which included public workshops, Board meetings and meetings with local government agency and non-government organization staff, including the cities of Berkeley, Colma, Daly City, Dublin, Fremont, Livermore, Oakland, Pleasanton, Richmond, San Leandro, San Mateo, San Francisco and Santa Rosa; the counties of Alameda, Contra Costa, Napa, Santa Clara, and Sonoma; and the CARE Task Force, the Alameda County Planning for Healthy Communities Network and the Governor's Office of Planning and Research Local Government Roundtable;

WHEREAS, District staff held ten public workshops throughout the Bay Area on February 26, 2009, April 27, 29 and 30, 2009, September 8, 9, and 10, 2009, October 2, 2009, and April 15 and 26, 2010; solicited Thresholds of Significance options for consideration; and published for public review and comment the Threshold Options Report on April 24, 2009, the CEQA Thresholds Options and Justification Report on October 8, 2009, and the Proposed Thresholds of Significance Report on November 2, 2009, December 7, 2009 and May 3, 2010;



meetings were held on November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010;

WHEREAS, at the November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010 public meetings, the subject matter of the Thresholds of Significance was discussed with interested persons in accordance with all provisions of law;

WHEREAS, the November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010 public meetings and the other public review opportunities that the District has provided regarding the Thresholds of Significance, constitute a public review process as required by Section 15064.7;

WHEREAS, District staff has prepared and presented to this Board the May 3, 2010, Proposed Thresholds of Significance report, which has been considered by this Board and is incorporated herein by reference;

WHEREAS, the documents and other materials that constitute the record of the public review process under Section 15064.7 on which this Resolution is based are located at the Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, 94109, and the custodian for these documents is Ms. Lisa Harper, Clerk of the Boards;

WHEREAS, District staff recommends adoption of the CEQA Thresholds of Significance set forth in Attachment A hereto;

WHEREAS, the Board of Directors concurs with District staff's recommendations and desires to adopt the CEQA Thresholds of Significance set forth in Attachment A hereto;

NOW, THEREFORE, BE IT RESOLVED that that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the CEQA Thresholds of Significance, pursuant to the authority granted by law, as set forth in Attachment A hereto, and discussed in the Proposed Thresholds of Significance report dated May 3, 2010, with instructions to staff to correct any typographical or formatting errors before final publication of the CEQA Thresholds of Significance.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that projects that do not comply with the CEQA Thresholds of Significance will normally be determined to have a significant effect on the environment for purposes of CEQA, and projects that comply with the CEQA Thresholds of Significance normally will be determined to have a less-than-significant effect on the environment for purposes of CEQA.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that Lead Agencies in the Bay Area apply the CEQA Thresholds of Significance, except for the Risk and Hazard thresholds for Receptor Projects, for Notices of Preparation issued, and environmental analyses begun, on or after the date of adoption of this Resolution.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that Lead Agencies in the Bay Area apply the CEQA Thresholds of Significance for the

Risk and Hazard thresholds for Receptor Projects for Notices of Preparation issued, and environmental analyses begun, after January 1, 2011.

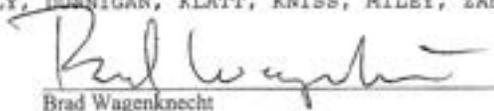
The foregoing Resolution was duly and regularly introduced, passed and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of Director KALRA, seconded by Director UULKEMA, on the 2nd day of JUNE, 2010, by the following vote of the Board:

AYES: BATES, GARNER, GIOIA, GROOM, HOSTERMAN, HUDSON, KALRA, MAR, ROSS, SPERING, TORLIATT, UULKEMA, YEAGER, WAGENKNECHT

NOES: NONE

RECUSED: HAGGERTY

ABSENT: BROWN, DALY, DUNNIGAN, KLATT, KNISS, MILEY, ZANE



Brad Wagenknecht
Chairperson of the Board of Directors

ATTEST:



John Gioia
Secretary of the Board of Directors



ATTACHMENT A

Proposed Air Quality CEQA Thresholds of Significance (May 3, 2010)			
Pollutant	Construction-Related	Operational-Related	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust)	82	82	15
PM _{2.5} (exhaust)	54	54	10
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs Projects other than Stationary Sources	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr (residents + employees)	
GHGs Stationary Sources	None	10,000 MT/yr	
Risks and Hazards – New Source (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Receptor (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Source (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM _{2.5} : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	

Proposed Air Quality CEQA Thresholds of Significance (May 3, 2010)		
Pollutant	Construction-Related	Operational-Related
Risks and Hazards – New Receptor (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM _{2.5} : > 0.5 µg/m ³ annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Odors	None	Complaint History—5 confirmed complaints per year averaged over three years
Plan-Level		
Criteria Air Pollutants and Precursors	None	1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
GHGs	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO ₂ e/ SP/yr (residents + employees)
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Odors	None	Identify locations of odor sources in general plan
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Regional Plans (Transportation and Air Quality Plans)		
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions
<small>Notes: CO = carbon monoxide; CO₂e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SP = service population; sp/yr = tons per year, yr = year.</small>		
<small>* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.</small>		



E. GLOSSARY

Aerosol -- Particle of solid or liquid matter that can remain suspended in the air because of its small size (generally under one micrometer in diameter).

Air Quality Management District (AQMD) -- Local agency charged with controlling air pollution and attaining air quality standards. The Bay Area Air Quality Management District is the regional AQMD that includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara Counties and the southern halves of Solano and Sonoma Counties.

Air Resources Board (ARB) -- The State of California agency responsible for air pollution control. Responsibilities include: establishing State ambient air quality standards, setting allowable emission levels for motor vehicles in California and oversight of local air quality management districts.

Area Sources -- Sources of air pollutants that individually emit relatively small quantities of air pollutants, but that may emit considerable quantities of emissions when aggregated over a large area. Examples include water heaters, lawn maintenance equipment, and consumer products.

Best Available Control Technology (BACT) -- The most stringent emissions control that has been achieved in practice, identified in a state implementation plan, or found by the District to be technologically feasible and cost-effective for a given class of sources.

California Clean Air Act (CCAA) -- Legislation enacted in 1988 mandating a planning process to attain state ambient air quality standards.

CALINE -- A model developed by the Air Resources Board that calculates carbon monoxide concentrations resulting from motor vehicle use.

Carbon Monoxide (CO) -- A colorless, odorless, toxic gas produced by the incomplete combustion of carbon-containing substances. It is emitted in large quantities by exhaust of gasoline-powered vehicles.

Carbon Dioxide (CO₂) -- A colorless, odorless gas that is an important contributor to Earth's greenhouse effect.

Carbon Dioxide Equivalent (CO₂E) -- A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

Chlorofluorocarbons (CFCs) -- A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. CFCs drift into the upper atmosphere where their chlorine components destroy stratospheric ozone.

Clean Air Act (CAA) -- Long-standing federal legislation, last amended in 1990, that is the legal basis for the national clean air programs.

Conformity -- A requirement in federal law and administrative practice that requires that projects will not be approved if they do not conform with the State Implementation Plan by: causing or contributing to an increase in air pollutant emissions, violating an air pollutant standard, or increasing the frequency of violations of an air pollutant standard.

Criteria Air Pollutants -- Air pollutants for which the federal or State government has established ambient air quality standards, or criteria, for outdoor concentration in order to protect public health. Criteria pollutants include: ozone, carbon monoxide, sulfur dioxide PM10 (previously total suspended particulate), nitrogen oxide, and lead.

EMFAC -- The computer model developed by the California Air Resources Board to estimate composite on-road motor vehicle emission factors by vehicle class.

Emission Factor -- The amount of a specific pollutant emitted from a specified polluting source per unit quantity of material handled, processed, or burned.

Emission Inventory -- A list of air pollutants emitted over a determined area by type of source. Typically expressed in mass per unit time.

Environmental Protection Agency (EPA) -- The federal agency responsible for control of air and water pollution, toxic substances, solid waste, and cleanup of contaminated sites.

Exceedance -- A monitored level of concentration of any air contaminant higher than national or state ambient air quality standards.

Global Warming Potential (GWP) -- The index used to translate the level of emissions of various gases into a common measure in order to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emissions of one kilogram of a greenhouse gas to that from emission of one kilogram of carbon dioxide over a period of time (usually 100 years).

Greenhouse Gas (GHG) -- Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), halogenated fluorocarbons (HCFCs), ozone (O₃), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and hydrofluorocarbons (HFCs).

Hazardous Air Pollutants -- Federal terminology for air pollutants which are not covered by ambient air quality standards but may reasonably be expected to cause or contribute to serious illness or death (see NESHAPs).

Health Risk Assessment -- An analysis where human exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risk.

Hot Spot -- A location where emissions from specific sources may expose individuals and population groups to elevated risks of adverse health effects and contribute to the cumulative health risks of emissions from other sources in the area.

Hydrogen Sulfide (H₂S) -- A gas characterized by "rotten egg" smell, found in the vicinity of oil refineries, chemical plants and sewage treatment plants.



Impacted Communities – Also known as priority communities, the Air District defines impacted communities within the Bay Area as having higher emitting sources, highest air concentrations, and nearby low income and sensitive populations. The Air District identified the following impacted communities: the urban core areas of Concord, eastern San Francisco, western Alameda County, Redwood City/East Palo Alto, Richmond/San Pablo, and San Jose.

Indirect Sources – Land uses and facilities that attract or generate motor vehicle trips and thus result in air pollutant emissions, e.g., shopping centers, office buildings, and airports.

Inversion -- The phenomenon of a layer of warm air over cooler air below. This atmospheric condition resists the natural dispersion and dilution of air pollutants.

Level of Service (LOS) -- A transportation planning term for a method of measurement of traffic congestion. The LOS compares actual or projected traffic volume to the maximum capacity of the road under study. LOS ranges from A through F. LOS A describes free flow conditions, while LOS F describes the most congested conditions, up to or over the maximum capacity for which the road was designed.

Mobile Source -- Any motor vehicle that produces air pollution, e.g., cars, trucks, motorcycles (on-road mobile sources) or airplanes, trains and construction equipment (off-road mobile sources).

National Ambient Air Quality Standards (NAAQS) -- Health-based pollutant concentration limits established by EPA that apply to outdoor air (see Criteria Air Pollutants).

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) – Emissions standards set by EPA for air pollutants not covered by NAAQS that may cause an increase in deaths or in serious, irreversible, or incapacitating illness.

Nitrogen Oxides (NO_x) -- Gases formed in great part from atmospheric nitrogen and oxygen when combustion takes place under conditions of high temperature and high pressure; NO_x is a precursor to the criteria air pollutant ozone.

Nonattainment Area -- Defined geographic area that does not meet one or more of the

Ambient Air Quality Standards for the criteria pollutants designated in the federal Clean Air Act and/or California Clean Air Act.

Ozone (O₃) -- A pungent, colorless, toxic gas. A product of complex photochemical processes, usually in the presence of sunlight. Tropospheric (lower atmosphere) ozone is a criteria air pollutant.

Particulate -- A particle of solid or liquid matter; soot, dust, aerosols, fumes and mists.

Photochemical Process -- The chemical changes brought about by the radiant energy of the sun acting upon various polluting substances. The products are known as photochemical smog.

PM_{2.5} -- Fine particulate matter (solid or liquid) with an aerodynamic diameter equal to or less than 2.5 micrometers. Individual particles of this size are small enough to be inhaled deeply into the lungs..

PM₁₀ -- Fine particulate matter (solid or liquid) with an aerodynamic diameter equal to or less than 10 micrometers. Individual particles of this size are small enough to be inhaled into human lungs; they are not visible to the human eye.

Precursor -- Compounds that change chemically or physically after being emitted into the air and eventually produce air pollutants. For example, organic compounds are precursors to ozone.

Prevention of Significant Deterioration (PSD) -- EPA program in which State and/or federal permits are required that are intended to restrict emissions for new or modified sources in places where air quality is already better than required to meet primary and secondary ambient air quality standards.

Reactive Organic Gases (ROG) -- Classes of organic compounds, especially olefins, substituted aromatics and aldehydes, that react rapidly in the atmosphere to form photochemical smog or ozone.

Sensitive Receptors -- Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals and residential areas.

State Implementation Plan (SIP) -- EPA-approved state plans for attaining and maintaining federal air quality standards.

Stationary Source -- A fixed, non-mobile source of air pollution, usually found at industrial or commercial facilities.

Sulfur Oxides (SO_x) -- Pungent, colorless gases formed primarily by the combustion of sulfur-containing fossil fuels, especially coal and oil. Considered a criteria air pollutant, sulfur oxides may damage the respiratory tract as well as vegetation.

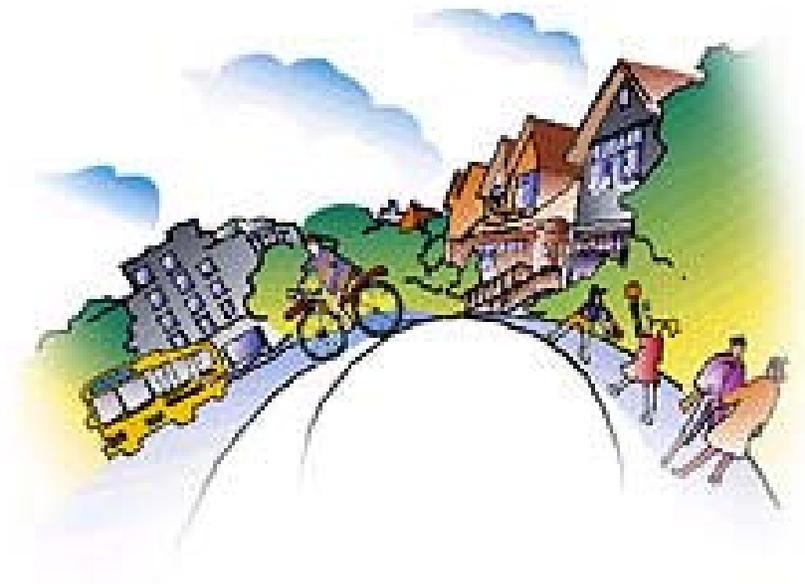
Toxic Air Contaminants -- Air pollutants which cause illness or death in relatively small quantities. Non-criteria air contaminants that, upon exposure, ingestion, inhalation, or assimilation into organisms either directly from the environment or indirectly by ingestion through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, or physical deformations in such organisms or their offspring.

Transportation Control Measures (TCMs) -- Measures to reduce traffic congestion and decrease emissions from motor vehicles by reducing vehicle use.

URBEMIS -- A computer model developed by the California Air Resources Board to estimate air pollutant emissions from motor vehicle trips associated with land use development.

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AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE



April 2005

California Environmental Protection Agency
California Air Resources Board



Air Agency Contacts

Federal-

U.S. EPA, Region 9

Phone: (866)-EPA-WEST
Website: www.epa.gov/region09
Email: r9.info@epa.gov

-State-

California Air Resources Board

Phone: (916) 322-2990 (public info)
(800) 363-7664 (public info)
(800) 952-5588 (complaints)
(866)-397-5462 (env. justice)
Website: www.arb.ca.gov
Email: helpline@arb.ca.gov

-Local-

Amador County APCD

Phone: (209) 257-0112
Website: www.amadorapcd.org
E-Mail: jharris@amadorapcd.org

Antelope Valley AQMD

Phone: (661) 723-8070
Complaint Line: (888) 732-8070
Website: www.avaqmd.ca.gov
E-Mail: bbanks@avaqmd.ca.gov

Bay Area AQMD

Phone: (415) 749-5000
Complaint Line: (800) 334-6367
Website: www.baaqmd.gov
E-Mail: webmaster@baaqmd.gov

Butte County AQMD

Phone: (530) 891-2882
Website: www.bcaqmd.org
E-Mail: air@bcaqmd.org

Calaveras County APCD

Phone: (209) 754-6504
E-Mail: jgrewal@co.calaveras.ca.us

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Yolo-Solano AQMD

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Website: www.ysaqmd.org
Email: administration@ysaqmd.org

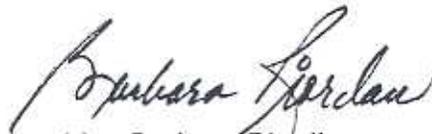
To My Local Government Colleagues....

I am pleased to introduce this informational guide to air quality and land use issues focused on community health. As a former county supervisor, I know from experience the complexity of local land use decisions. There are multiple factors to consider and balance. This document provides important public health information that we hope will be considered along with housing needs, economic development priorities, and other quality of life issues.

An important focus of this document is prevention. We hope the air quality information provided will help inform decision-makers about the benefits of avoiding certain siting situations. The overarching goal is to avoid placing people in harm's way. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities. What is encouraging is that the health risk is greatly reduced with distance. For that reason, we have provided some general recommendations aimed at keeping appropriate distances between sources of air pollution and land uses such as residences.

Land use decisions are a local government responsibility. The Air Resources Board's role is advisory and these recommendations do not establish regulatory standards of any kind. However, we hope that the information in this document will be seriously considered by local elected officials and land use agencies. We also hope that this document will promote enhanced communication between land use agencies and local air pollution control agencies. We developed this document in close coordination with the California Air Pollution Control Officers Association with that goal in mind.

I hope you find this document both informative and useful.



Mrs. Barbara Riordian
Interim Chairman
California Air Resources Board

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Acknowledgments

The ARB staff would like to acknowledge the exceptional contributions made to this document by members of the ARB Environmental Justice Stakeholders Group. Since 2001, ARB staff has consistently relied on this group to provide critical and constructive input on implementing the specifics of ARB's environmental justice policies and actions. The Stakeholders Group is convened by the ARB, and comprised of representatives from local land use and air agencies, community interest groups, environmental justice organizations, academia, and business. Their assistance and suggestions throughout the development of this Handbook have been invaluable.

Executive Summary

The Air Resources Board's (ARB) primary goal in developing this document is to provide information that will help keep California's children and other vulnerable populations out of harm's way with respect to nearby sources of air pollution. Recent air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. Also, ARB community health risk assessments and regulatory programs have produced important air quality information about certain types of facilities that should be considered when siting new residences, schools, day care centers, playgrounds, and medical facilities (i.e., sensitive land uses). Sensitive land uses deserve special attention because children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the non-cancer effects of air pollution. There is also substantial evidence that children are more sensitive to cancer-causing chemicals.

Focusing attention on these siting situations is an important preventative action. ARB and local air districts have comprehensive efforts underway to address new and existing air pollution sources under their respective jurisdictions. The issue of siting is a local government function. As more data on the connection between proximity and health risk from air pollution become available, it is essential that air agencies share what we know with land use agencies. We hope this document will serve that purpose.

The first section provides ARB recommendations regarding the siting of new sensitive land uses near freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities. This list consists of the air pollution sources that we have evaluated from the standpoint of the proximity issue. It is based on available information and reflects ARB's primary areas of jurisdiction – mobile sources and toxic air contaminants. A key air pollutant common to many of these sources is particulate matter from diesel engines. Diesel particulate matter (diesel PM) is a carcinogen identified by ARB as a toxic air contaminant and contributes to particulate pollution statewide.

Reducing diesel particulate emissions is one of ARB's highest public health priorities and the focus of a comprehensive statewide control program that is reducing diesel PM emissions each year. ARB's long-term goal is to reduce diesel PM emissions 85% by 2020. However, cleaning up diesel engines will take time as new engine standards phase in and programs to accelerate fleet turnover or retrofit existing engines are implemented. Also, these efforts are reducing diesel particulate emissions on a statewide basis, but do not yet capture every site where diesel vehicles and engines may congregate. Because living or going to school too close to such air pollution sources may increase both cancer and non-cancer health risks, we are recommending that proximity be considered in the siting of new sensitive land uses.

There are also other key toxic air contaminants associated with specific types of facilities. Most of these are subject to stringent state and local air district regulations. However, what we know today indicates that keeping new homes and other sensitive land uses from siting too close to such facilities would provide additional health protection. Chrome platers are a prime example of facilities that should not be located near vulnerable communities because of the cancer health risks from exposure to the toxic material used during their operations.

In addition to source specific recommendations, we also encourage land use agencies to use their planning processes to ensure the appropriate separation of industrial facilities and sensitive land uses. While we provide some suggestions, how to best achieve that goal is a local issue. In the development of these guidelines, we received valuable input from local government about the spectrum of issues that must be considered in the land use planning process. This includes addressing housing and transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. All of these factors are important considerations. The recommendations in the Handbook need to be balanced with other State and local policies.

Our purpose with this document is to highlight the potential health impacts associated with proximity to air pollution sources so planners explicitly consider this issue in planning processes. We believe that with careful evaluation, infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level. One suggestion for achieving this goal is more communication between air agencies and land use planners. Local air districts are an important resource that should be consulted regarding sources of air pollution in their jurisdictions. ARB staff will also continue to provide updated technical information as it becomes available.

Our recommendations are as specific as possible given the nature of the available data. In some cases, like refineries, we suggest that the siting of new sensitive land uses should be avoided immediately downwind. However, we leave definition of the size of this area to local agencies based on facility specific considerations. Also, project design that would reduce air pollution exposure may be part of the picture and we encourage consultation with air agencies on this subject.

In developing the recommendations, our first consideration was the adequacy of the data available for an air pollution source category. Using that data, we assessed whether we could reasonably characterize the relative exposure and health risk from a proximity standpoint. That screening provided the list of air pollution sources that we were able to address with specific recommendations. We also considered the practical implications of making hard and fast recommendations where the potential impact area is large, emissions will be reduced with time, and air agencies are in the process of looking at options for additional emission control. In the end, we tailored our recommendations to minimize the highest exposures for each source category independently. Due to the large variability in relative risk in the source categories, we chose not to apply

a uniform, quantified risk threshold as is typically done in air quality permitting programs. Instead, because these guidelines are not regulatory or binding on local agencies, we took a more qualitative approach in developing the distance-based recommendations.

Where possible, we recommend a minimum separation between a new sensitive land use and known air pollution risks. In other cases, we acknowledge that the existing health risk is too high in a relatively large area, that air agencies are working to reduce that risk, and that in the meantime, we recommend keeping new sensitive land uses out of the highest exposure areas. However, it is critical to note that our implied identification of the high exposure areas for these sources does not mean that the risk in the remaining impact area is insignificant. Rather, we hope this document will bring further attention to the potential health risk throughout the impact area and help garner support for our ongoing efforts to reduce health risk associated with air pollution sources. Areas downwind of major ports, rail yards, and other inter-modal transportation facilities are prime examples.

We developed these recommendations as a means to share important public health information. The underlying data are publicly available and referenced in this document. We also describe our rationale and the factors considered in developing each recommendation, including data limitations and uncertainties. These recommendations are advisory and should not be interpreted as defined “buffer zones.” We recognize the opportunity for more detailed site-specific analyses always exists, and that there is no “one size fits all” solution to land use planning.

As California continues to grow, we collectively have the opportunity to use all the information at hand to avoid siting scenarios that may pose a health risk. As part of ARB’s focus on communities and children’s health, we encourage land use agencies to apply these recommendations and work more closely with air agencies. We also hope that this document will help educate a wider audience about the value of preventative action to reduce environmental exposures to air pollution.

1. ARB Recommendations on Siting New Sensitive Land Uses

Protecting California's communities and our children from the health effects of air pollution is one of the most fundamental goals of state and local air pollution control programs. Our focus on children reflects their special vulnerability to the health impacts of air pollution. Other vulnerable populations include the elderly, pregnant women, and those with serious health problems affected by air pollution. With this document, we hope to more effectively engage local land use agencies as partners in our efforts to reduce health risk from air pollution in all California communities.

Later sections emphasize the need to strengthen the connection between air quality and land use in both planning and permitting processes. Because the siting process for many, but not all air pollution sources involves permitting by local air districts, there is an opportunity for interagency coordination where the proposed location might pose a problem. To enhance the evaluation process from a land use perspective, section 4 includes recommended project related questions to help screen for potential proximity related issues.

Unlike industrial and other stationary sources of air pollution, the siting of new homes or day care centers does not require an air quality permit. Because these situations fall outside the air quality permitting process, it is especially important that land use agencies be aware of potential air pollution impacts.

The following recommendations address the issue of siting "sensitive land uses" near specific sources of air pollution; namely:

- High traffic freeways and roads
- Distribution centers
- Rail yards
- Ports
- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities

The recommendations for each category include a summary of key information and guidance on what to avoid from a public health perspective.

Sensitive individuals refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses where sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses).

We are characterizing sensitive land uses as simply as we can by using the example of residences, schools, day care centers, playgrounds, and medical facilities. However, a variety of facilities are encompassed. For example, residences can include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds could be play areas associated with parks or community centers.

In developing these recommendations, ARB first considered the adequacy of the data available for each air pollution source category. We assessed whether we could generally characterize the relative exposure and health risk from a proximity standpoint. The documented non-cancer health risks include triggering of asthma attacks, heart attacks, and increases in daily mortality and hospitalization for heart and respiratory diseases. These health impacts are well documented in epidemiological studies, but less easy to quantify from a particular air pollution source. Therefore, the cancer health impacts are used in this document to provide a picture of relative risk. This screening process provided the list of source categories we were able to address with specific recommendations. In evaluating the available information, we also considered the practical implications of making hard and fast recommendations where the potential impact area is large, emissions will be reduced with time, and air agencies are in the process of looking at options for additional emission control. Due to the large variability in relative risk between the source categories, we chose not to apply a uniform, quantified risk threshold as is typically done in regulatory programs. Therefore, in the end, we tailored our recommendations to minimize the highest exposures for each source category independently. Additionally, because this guidance is not regulatory or binding on local agencies, we took a more qualitative approach to developing distance based recommendations.

Where possible, we recommend a minimum separation between new sensitive land uses and existing sources. However, this is not always possible, particularly where there is an elevated health risk over large geographical areas. Areas downwind of ports and rail yards are prime examples. In such cases, we recommend doing everything possible to avoid locating sensitive receptors within the highest risk zones. Concurrently, air agencies and others will be working to reduce the overall risk through controls and measures within their scope of authority.

The recommendations were developed from the standpoint of siting new sensitive land uses. Project-specific data for new and existing air pollution sources are available as part of the air quality permitting process. Where such information is available, it should be used. Our recommendations are designed to fill a gap where information about existing facilities may not be readily available. These recommendations are only guidelines and are not designed to substitute for more specific information if it exists.

A summary of our recommendations is shown in Table 1-1. The basis and references¹ supporting each of these recommendations, including health studies, air quality modeling and monitoring studies is discussed below beginning with freeways and summarized in Table 1-2. As new information becomes available, it will be included on ARB's community health web page.

¹Detailed information on these references are available on ARB's website at: <http://www.ARB.ca.gov/ch/landuse.htm>.

Table 1-1

**Recommendations on Siting New Sensitive Land Uses
Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical
Facilities***

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	<ul style="list-style-type: none"> • Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

***Notes:**

- These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

- Recommendations are based primarily on data showing that the air pollution exposures addressed here (i.e., localized) can be reduced as much as 80% with the recommended separation.
- The relative risk for these categories varies greatly (see Table 1-2). To determine the actual risk near a particular facility, a site-specific analysis would be required. Risk from diesel PM will decrease over time as cleaner technology phases in.
- These recommendations are designed to fill a gap where information about existing facilities may not be readily available and are not designed to substitute for more specific information if it exists. The recommended distances take into account other factors in addition to available health risk data (see individual category descriptions).
- Site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses.
- This table does not imply that mixed residential and commercial development in general is incompatible. Rather it focuses on known problems like dry cleaners using perchloroethylene that can be addressed with reasonable preventative actions.
- A summary of the basis for the distance recommendations can be found in Table 1-2.

Table 1-2

Summary of Basis for Advisory Recommendations

Source Category	Range of Relative Cancer Risk^{1,2}	Summary of Basis for Advisory Recommendations
Freeways and High-Traffic Roads	300 – 1,700	<ul style="list-style-type: none"> In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70% drop off in particulate pollution levels at 500 feet.
Distribution Centers ³	Up to 500	<ul style="list-style-type: none"> Because ARB regulations will restrict truck idling at distribution centers, transport refrigeration unit (TRU) operations are the largest onsite diesel PM emission source followed by truck travel in and out of distribution centers. Based on ARB and South Coast District emissions and modeling analyses, we estimate an 80 percent drop-off in pollutant concentrations at approximately 1,000 feet from a distribution center.
Rail Yards	Up to 500	<ul style="list-style-type: none"> The air quality modeling conducted for the Roseville Rail Yard Study predicted the highest impact is within 1,000 feet of the Yard, and is associated with service and maintenance activities. The next highest impact is between a half to one mile of the Yard, depending on wind direction and intensity.
Ports	Studies underway	<ul style="list-style-type: none"> ARB will evaluate the impacts of ports and develop a new comprehensive plan that will describe the steps needed to reduce public health impacts from port and rail activities in California. In the interim, a general advisory is appropriate based on the magnitude of diesel PM emissions associated with ports.
Refineries	Under 10	<ul style="list-style-type: none"> Risk assessments conducted at California refineries show risks from air toxics to be under 10 chances of cancer per million.⁴ Distance recommendations were based on the amount and potentially hazardous nature of many of the pollutants released as part of the refinery process, particularly during non-routine emissions releases.
Chrome Platers	10-100	<ul style="list-style-type: none"> ARB modeling and monitoring studies show localized risk of hexavalent chromium diminishing significantly at 300 feet. There are data limitations in both the modeling and monitoring studies. These include variability of plating activities and uncertainty of emissions such as fugitive dust. Hexavalent chromium is one of the most potent toxic air contaminants. Considering these factors, a distance of 1,000 feet was used as a precautionary measure.
Dry Cleaners Using Perchloroethylene (perc)	15-150	<ul style="list-style-type: none"> Local air district studies indicate that individual cancer risk can be reduced by as much as 75 percent by establishing a 300 foot separation between a sensitive land use and a one-machine perc dry cleaning operation. For larger operations (2 machines or more), a separation of 500 feet can reduce risk by over 85 percent.

Source Category	Range of Relative Cancer Risk ^{1,2}	Summary of Basis for Advisory Recommendations
Gasoline Dispensing Facilities (GDF) ⁵	<p>Typical GDF: Less than 10</p> <p>Large GDF: Between Less than 10 and 120</p>	<ul style="list-style-type: none"> Based on the CAPCOA Gasoline Service Station Industry-wide Risk Assessment Guidelines, most typical GDFs (less than 3.6 million gallons per year) have a risk of less than 10 at 50 feet under urban air dispersion conditions. Over the last few years, there has been a growing number of extremely large GDFs with sales over 3.6 and as high as 19 million gallons per year. Under rural air dispersion conditions, these large GDFs can pose a larger risk at a greater distance.

¹For cancer health effects, risk is expressed as an estimate of the increased chances of getting cancer due to facility emissions over a 70-year lifetime. This increase in risk is expressed as chances in a million (e.g., 10 chances in a million).

²The estimated cancer risks are a function of the proximity to the specific category and were calculated independent of the regional health risk from air pollution. For example, the estimated regional cancer risk from air toxics in the Los Angeles region (South Coast Air Basin) is approximately 1,000 in a million.

³Analysis based on refrigerator trucks.

⁴Although risk assessments performed by refineries indicate they represent a low cancer risk, there is limited data on non-cancer effects of pollutants that are emitted from these facilities. Refineries are also a source of non-routine emissions and odors.

⁵A typical GDF in California dispenses under 3.6 million gallons of gasoline per year. The cancer risk for this size facility is likely to be less than 10 in a million at the fence line under urban air dispersion conditions.

A large GDF has fuel throughputs that can range from 3.6 to 19 million gallons of gasoline per year. The upper end of the risk range (i.e., 120 in a million) represents a hypothetical worst case scenario for an extremely large GDF under rural air dispersion conditions.

Freeways and High Traffic Roads

Air pollution studies indicate that living close to high traffic and the associated emissions may lead to adverse health effects beyond those associated with regional air pollution in urban areas. Many of these epidemiological studies have focused on children. A number of studies identify an association between adverse non-cancer health effects and living or attending school near heavily traveled roadways (see findings below). These studies have reported associations between residential proximity to high traffic roadways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children.

One such study that found an association between traffic and respiratory symptoms in children was conducted in the San Francisco Bay Area. Measurements of traffic-related pollutants showed concentrations within 300 meters (approximately 1,000 feet) downwind of freeways were higher than regional values. Most other studies have assessed exposure based on proximity factors such as distance to freeways or traffic density.

These studies linking traffic emissions with health impacts build on a wealth of data on the adverse health effects of ambient air pollution. The data on the effects of proximity to traffic-related emissions provides additional information that can be used in land use siting and regulatory actions by air agencies. The key observation in these studies is that close proximity increases both exposure and the potential for adverse health effects. Other effects associated with traffic emissions include premature death in elderly individuals with heart disease.

Key Health Findings

- Reduced lung function in children was associated with traffic density, especially trucks, within 1,000 feet and the association was strongest within 300 feet. (Brunekreef, 1997)
- Increased asthma hospitalizations were associated with living within 650 feet of heavy traffic and heavy truck volume. (Lin, 2000)
- Asthma symptoms increased with proximity to roadways and the risk was greatest within 300 feet. (Venn, 2001)
- Asthma and bronchitis symptoms in children were associated with proximity to high traffic in a San Francisco Bay Area community with good overall regional air quality. (Kim, 2004)
- A San Diego study found increased medical visits in children living within 550 feet of heavy traffic. (English, 1999)

In these and other proximity studies, the distance from the roadway and truck traffic densities were key factors affecting the strength of the association with adverse health effects. In the above health studies, the association of traffic-related emissions with adverse health effects was seen within 1,000 feet and was

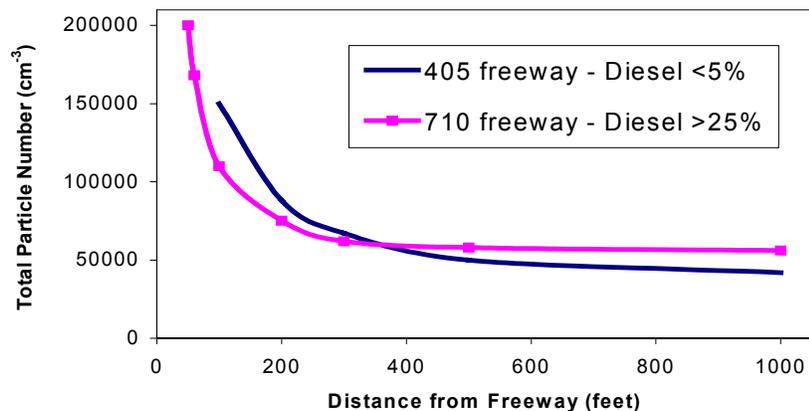
strongest within 300 feet. This demonstrates that the adverse effects diminished with distance.

In addition to the respiratory health effects in children, proximity to freeways increases potential cancer risk and contributes to total particulate matter exposure. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risk from motor vehicle traffic – diesel particulate matter (diesel PM) from trucks, and benzene and 1,3-butadiene from passenger vehicles. On a typical urban freeway (truck traffic of 10,000-20,000/day), diesel PM represents about 70 percent of the potential cancer risk from the vehicle traffic. Diesel particulate emissions are also of special concern because health studies show an association between particulate matter and premature mortality in those with existing cardiovascular disease.

Distance Related Findings

A southern California study (Zhu, 2002) showed measured concentrations of vehicle-related pollutants, including ultra-fine particles, decreased dramatically within approximately 300 feet of the 710 and 405 freeways. Another study looked at the validity of using distance from a roadway as a measure of exposure

**Figure 1-1
Decrease In Concentration of Freeway Diesel PM Emissions
With Distance**



to traffic related air pollution (Knape, 1999). This study showed that concentrations of traffic related pollutants declined with distance from the road, primarily in the first 500 feet.

These findings are consistent with air quality modeling and risk analyses done by ARB staff that show an estimated range of potential cancer risk that decreases with distance from freeways. The estimated risk varies with the local meteorology, including wind pattern. As an example, at 300 feet downwind from a freeway (Interstate 80) with truck traffic of 10,000 trucks per day, the potential cancer risk was as high as 100 in one million (ARB Roseville Rail Yard Study). The cancer health risk at 300 feet on the upwind side of the freeway was much

less. The risk at that distance for other freeways will vary based on local conditions – it may be higher or lower. However, in all these analyses the relative exposure and health risk dropped substantially within the first 300 feet. This phenomenon is illustrated in Figure 1-1.

State law restricts the siting of new schools within 500 feet of a freeway, urban roadways with 100,000 vehicles/day, or rural roadways with 50,000 vehicles with some exceptions.² However, no such requirements apply to the siting of residences, day care centers, playgrounds, or medical facilities. The available data show that exposure is greatly reduced at approximately 300 feet. In the traffic-related studies the additional health risk attributable to the proximity effect was strongest within 1,000 feet.

The combination of the children's health studies and the distance related findings suggests that it is important to avoid exposing children to elevated air pollution levels immediately downwind of freeways and high traffic roadways. These studies suggest a substantial benefit to a 500-foot separation.

The impact of traffic emissions is on a gradient that at some point becomes indistinguishable from the regional air pollution problem. As air agencies work to reduce the underlying regional health risk from diesel PM and other pollutants, the impact of proximity will also be reduced. In the meantime, as a preventative measure, we hope to avoid exposing more children and other vulnerable individuals to the highest concentrations of traffic-related emissions.

Recommendation

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

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Distribution Centers

Distribution centers or warehouses are facilities that serve as a distribution point for the transfer of goods. Such facilities include cold storage warehouses, goods transfer facilities, and inter-modal facilities such as ports. These operations involve trucks, trailers, shipping containers, and other equipment with diesel engines. A distribution center can be comprised of multiple centers or warehouses within an area. The size can range from several to hundreds of acres, involving a number of different transfer operations and long waiting periods. A distribution center can accommodate hundreds of diesel trucks a day that deliver, load, and/or unload goods up to seven days a week. To the extent that these trucks are transporting perishable goods, they are equipped with diesel-powered transport refrigeration units (TRUs) or TRU generator sets.

The activities associated with delivering, storing, and loading freight produces diesel PM emissions. Although TRUs have relatively small diesel-powered engines, in the normal course of business, their emissions can pose a significant health risk to those nearby. In addition to onsite emissions, truck travel in and out of distribution centers contributes to the local pollution impact.

ARB is working to reduce diesel PM emissions through regulations, financial incentives, and enforcement programs. In 2004, ARB adopted two airborne toxic control measures that will reduce diesel PM emissions associated with distribution centers. The first will limit nonessential (or unnecessary) idling of diesel-fueled commercial vehicles, including those entering from other states or countries. This statewide measure, effective in 2005, prohibits idling of a vehicle more than five minutes at any one location.³ The elimination of unnecessary idling will reduce the localized impacts caused by diesel PM and other air toxics

³ For further information on the Anti-Idling ATCM, please click on:
<http://www.arb.ca.gov/toxics/idling/outreach/factsheet.pdf>

in diesel vehicle exhaust. This should be a very effective new strategy for reducing diesel PM emissions at distribution centers as well as other locations.

The second measure requires that TRUs operating in California become cleaner over time. The measure establishes in-use performance standards for existing TRU engines that operate in California, including out-of-state TRUs. The requirements are phased-in beginning in 2008, and extend to 2019.⁴

ARB also operates a smoke inspection program for heavy-duty diesel trucks that focuses on reducing truck emissions in California communities. Areas with large numbers of distribution centers are a high priority.

Key Health Findings

Diesel PM has been identified by ARB as a toxic air contaminant and represents 70 percent of the known potential cancer risk from air toxics in California. Diesel PM is an important contributor to particulate matter air pollution. Particulate matter exposure is associated with premature mortality and health effects such as asthma exacerbation and hospitalization due to aggravating heart and lung disease.

Distance Related Findings

Although distribution centers are located throughout the state, they are usually clustered near transportation corridors, and are often located in or near population centers. Diesel PM emissions from associated delivery truck traffic and TRUs at these facilities may result in elevated diesel PM concentrations in neighborhoods surrounding those sites. Because ARB regulations will restrict truck idling at distribution centers, the largest continuing onsite diesel PM emission source is the operation of TRUs. Truck travel in and out of distribution centers also contributes to localized exposures, but specific travel patterns and truck volumes would be needed to identify the exact locations of the highest concentrations.

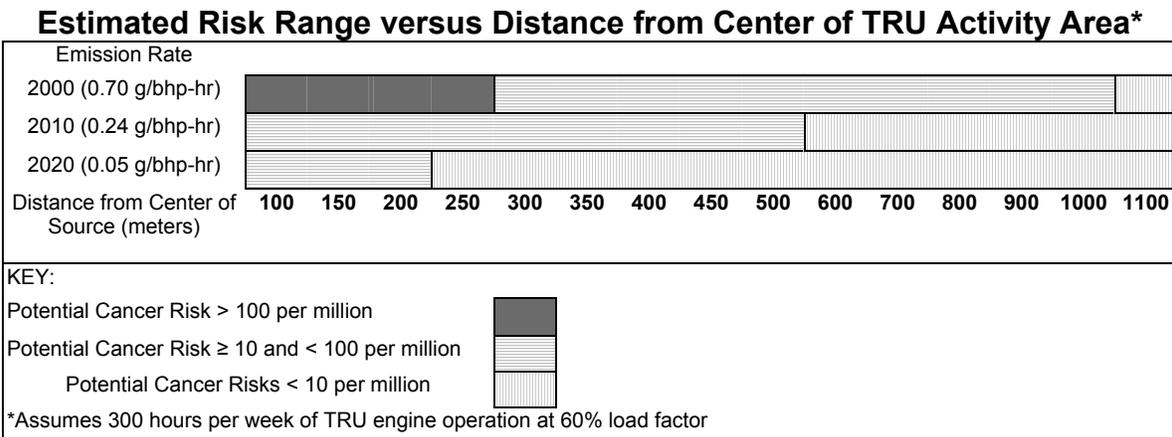
As part of the development of ARB's regulation for TRUs, ARB staff performed air quality modeling to estimate exposure and the associated potential cancer risk of onsite TRUs for a typical distribution center. For an individual person, cancer risk estimates for air pollution are commonly expressed as a probability of developing cancer from a lifetime (i.e., 70 years) of exposure. These risks were calculated independent of regional risk. For example, the estimated regional cancer risk from air toxics in the Los Angeles region (South Coast Air Basin) is approximately 1,000 additional cancer cases per one million population.

⁴ For further information on the Transport Refrigeration Unit ATCM, please click on: <http://www.arb.ca.gov/diesel/documents/trufa.pdf>

The diesel PM emissions from a facility are dependent on the size (horsepower), age, and number of engines, emission rates, the number of hours the truck engines and/or TRUs operate, distance, and meteorological conditions at the site. This assessment assumes a total on-site operating time for all TRUs of 300 hours per week. This would be the equivalent of 40 TRU-equipped trucks a day, each loading or unloading on-site for one hour, 12 hours a day and seven days a week.

As shown in Figure 1-2 below, at this estimated level of activity and assuming a current fleet diesel PM emission rate, the potential cancer risk would be over 100 in a million at 800 feet from the center of the TRU activity. The estimated potential cancer risk would be in the 10 to 100 per million range between 800 to 3,300 feet and fall off to less than 10 per million at approximately 3,600 feet. However with the implementation of ARB’s regulation on TRUs, the risk will be significantly reduced.⁵ We have not conducted a risk assessment for distribution centers based on truck traffic alone, but on an emissions basis, we would expect similar risks for a facility with truck volumes in the range of 100 per day.

Figure 1-2

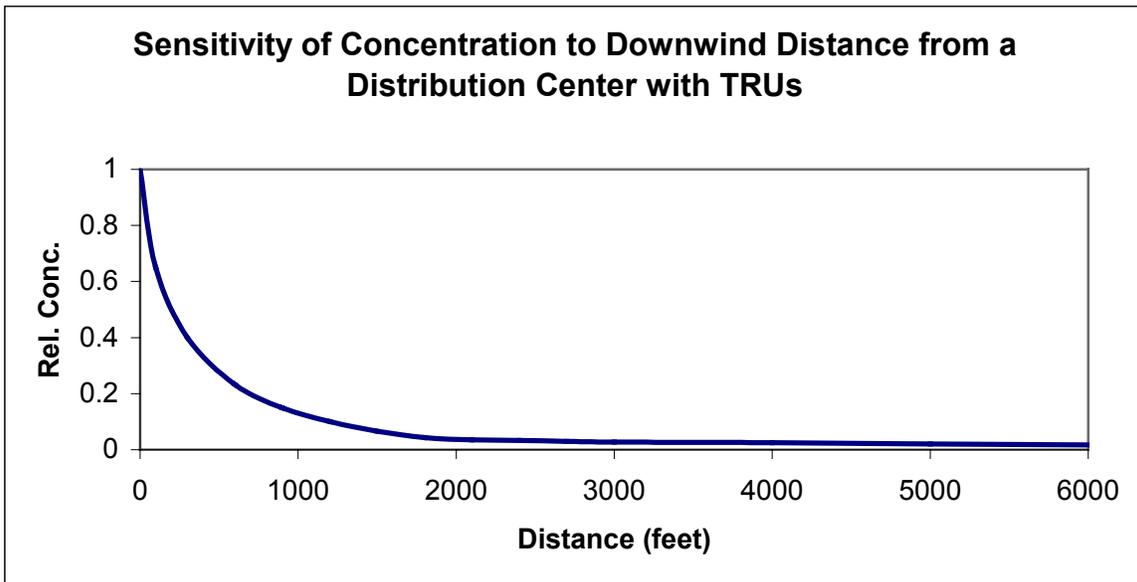


The estimated potential cancer risk level in Figure 1-2 is based on a number of assumptions that may not reflect actual conditions for a specific site. For example, increasing or decreasing the hours of diesel engine operations would change the potential risk levels. Meteorological and other facility specific parameters can also impact the results. Therefore, the results presented here are not directly applicable to any particular facility or operation. Rather, this information is intended to provide an indication as to the potential relative levels of risk that may be observed from operations at distribution centers. As shown in Figure 1-2, the estimated risk levels will decrease over time as lower-emitting diesel engines are used.

⁵ These risk values assume an exposure duration of 70 years for a nearby resident and uses the methodology specified in the 2003 OEHHA health risk assessment guidelines.

Another air modeling analysis, performed by the South Coast Air Quality Management District (South Coast AQMD), evaluated the impact of diesel PM emissions from distribution center operations in the community of Mira Loma in southern California. Based on dispersion of diesel PM emissions from a large distribution center, Figure 1-3 shows the relative pollution concentrations at varying distances downwind. As Figure 1-3 shows, there is about an 80 percent drop off in concentration at approximately 1,000 feet.

Figure 1-3
Decrease In Relative Concentration of Risk
With Distance



Both the ARB and the South Coast AQMD analyses indicate that providing a separation of 1,000 feet would substantially reduce diesel PM concentrations and public exposure downwind of a distribution center. While these analyses do not provide specific risk estimates for distribution centers, they provide an indication of the range of risk and the benefits of providing a separation. ARB recommends a separation of 1,000 feet based on the combination of risk analysis done for TRUs and the decrease in exposure predicted with the South Coast AQMD modeling. However, ARB staff plans to provide further information on distribution centers as we collect more data and implement the TRU control measure.

Taking into account the configuration of distribution centers can also reduce population exposure and risk. For example, locating new sensitive land uses away from the main entry and exit points helps to reduce cancer risk and other health impacts.

Recommendations

- Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating TRUs per day, or where TRU unit operations exceed 300 hours per week).
- Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.

References

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- *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*. SCAQMD (August 2003) http://www.aqmd.gov/ceqa/handbook/diesel_analysis.doc
- “*Mira Loma Study: Analysis of the Impact of Diesel Particulate Emissions from Warehouse/Distribution Center Operations*”, PowerPoint presentation. SCAQMD (July 31, 2002)

Rail Yards

Rail yards are a major source of diesel particulate air pollution. They are usually located near inter-modal facilities, which attract heavy truck traffic, and are often sited in mixed industrial and residential areas. ARB, working with the Placer County air district and Union Pacific Railroad, recently completed a study⁶ of the Roseville Rail Yard (Yard) in northern California that focused on the health risk from diesel particulate. A comprehensive emissions analysis and air quality modeling were conducted to characterize the estimated potential cancer risk associated with the facility.

⁶ To review the study, please click on: <http://www.arb.ca.gov/diesel/documents/rstudy.htm>

The Yard encompasses about 950 acres on a one-quarter mile wide by four-mile long strip of land that parallels Interstate 80. It is surrounded by commercial, industrial, and residential properties. The Yard is one of the largest service and maintenance rail yards in the West with over 30,000 locomotives visiting annually.

Using data provided by Union Pacific Railroad, the ARB determined the number and type of locomotives visiting the Yard annually and what those locomotives were doing - moving, idling, or undergoing maintenance testing. Union Pacific provided the annual, monthly, daily, and hourly locomotive activity in the yard including locomotive movements; routes for arrival, departure, and through trains; and locomotive service and testing. This information was used to estimate the emissions of particulate matter from the locomotives, which was then used to model the potential impacts on the surrounding community.

The key findings of the study are:

- Diesel PM emissions in 2000 from locomotive operations at the Roseville Yard were estimated at about 25 tons per year.
- Of the total diesel PM in the Yard, moving locomotives accounted for about 50 percent, idling locomotives about 45 percent, and locomotive testing about five percent.
- Air quality modeling predicts potential cancer risks greater than 500 in a million (based on 70 years of exposure) in a 10-40 acre area immediately adjacent to the Yard's maintenance operations.
- The risk assessment also showed elevated cancer risk impacting a larger area covering about a 10 by 10 mile area around the Yard.

The elevated concentrations of diesel PM found in the study contribute to an increased risk of cancer and premature death due to cardiovascular disease, and non-cancer health effects such as asthma and other respiratory illnesses. The magnitude of the risk, the general location, and the size of the impacted area depended on the meteorological data used to characterize conditions at the Yard, the dispersion characteristics, and exposure assumptions. In addition to these variables, the nature of locomotive activity will influence a risk characterization at a particular rail yard. For these reasons, the quantified risk estimates in the Roseville Rail Yard Study cannot be directly applied to other rail yards. However, the study does indicate the health risk due to diesel PM from rail yards needs to be addressed. ARB, in conjunction with the U.S. Environmental Protection Agency (U.S. EPA), and local air districts, is working with the rail industry to identify and implement short term, mid-term and long-term mitigation strategies. ARB also intends to conduct a second rail study in southern California to increase its understanding of rail yard operations and the associated public health impacts.

Key Health Findings

Diesel PM has been identified by ARB as a toxic air contaminant and represents 70 percent of the known potential cancer risk from air toxics in California. Diesel PM is an important contributor to particulate matter air pollution. Particulate matter exposure is associated with premature mortality and health effects such as asthma exacerbation and hospitalization due to aggravating heart and lung disease.

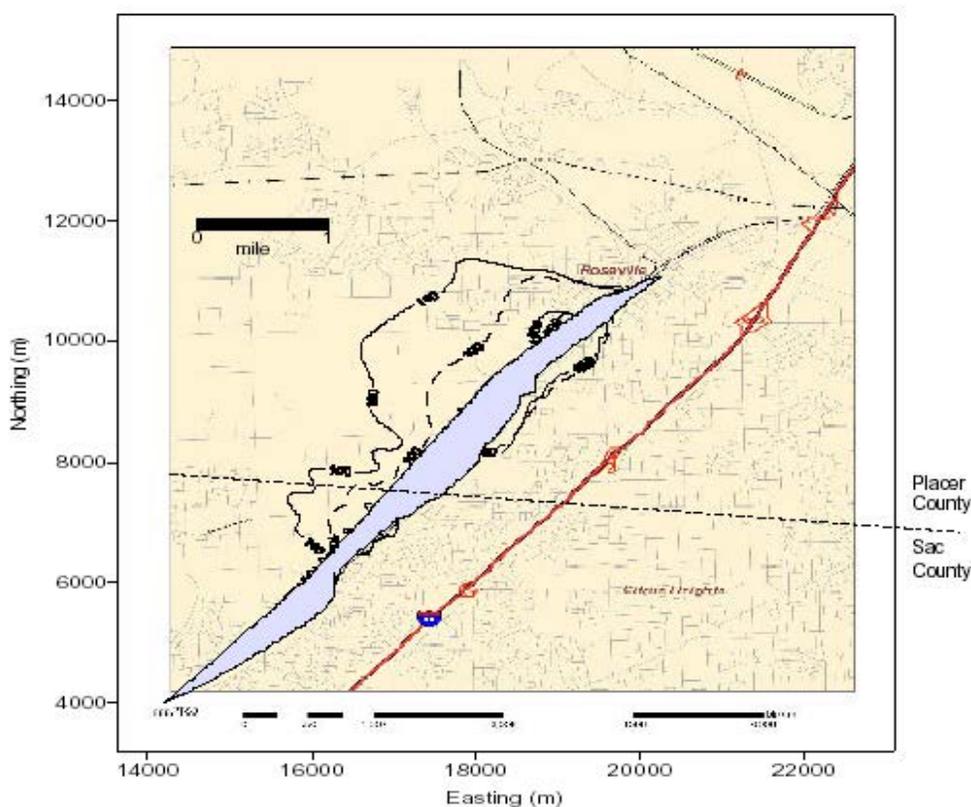
Distance Related Findings

Two sets of meteorological data were used in the Roseville study because of technical limitations in the data. The size of the impact area was highly dependent on the meteorological data set used. The predicted highest impact area ranged from 10 - 40 acres with the two different meteorological data sets. This area, with risks estimated above 500 in a million, is adjacent to an area that includes a maintenance shop (see Figure 1-4). The high concentration of diesel PM emissions is due to the number of locomotives and nature of activities in this area, particularly idling locomotives.

The area of highest impact is within 1,000 feet of the Yard. The next highest impact zone as defined in the report had a predicted risk between 500 and 100 in one million and extends out between a half to one mile in some spots, depending on which meteorological conditions were assumed. The impact areas are irregular in shape making it difficult to generalize about the impact of distance at a particular location. However, the Roseville Rail Yard Study clearly indicates that the localized health risk is high, the impact area is large, and mitigation of the locomotive diesel PM emissions is needed.

For facilities like rail yards and ports, the potential impact area is so large that the real solution is to substantially reduce facility emissions. However, land use planners can avoid encroaching upon existing rail facilities and those scheduled for expansion. We also recommend that while air agencies tackle this problem, land use planners try not to add new sensitive individuals into the highest exposure areas. Finally, we recommend that land use agencies consider the potential health impacts of rail yards in their planning and permitting processes. Additional limitations and mitigation may be feasible to further reduce exposure on a site-specific basis.

Figure 1-4
Estimated Cancer Risk from the Yard
(100 and 500 in a million risk isopleths)



Notes: 100/Million Contours: Solid Line – Roseville Met Data; Dashed Line-McClellan Met Data, Urban Dispersion Coefficients, 80th Percentile Breathing Rate, All Locomotives' Activities (23 TPY), 70-Year Exposure

Recommendation

- Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard⁷.
- Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.

References

- *Roseville Rail Yard Study*. ARB (2004)

⁷ The rail yard risk analysis was conducted for the Union Pacific rail yard in Roseville, California. This rail yard is one of the largest in the state. There are other rail yards in California with comparable levels of activity that should be considered "major" for purposes of this Handbook.

Ports

Air pollution from maritime port activities is a growing concern for regional air quality as well as air quality in nearby communities. The primary air pollutant associated with port operations is directly emitted diesel particulate. Port-related activities also result in emissions that form ozone and secondary particulate in the atmosphere. The emission sources associated with ports include diesel engine-powered ocean-going ships, harbor craft, cargo handling equipment, trucks, and locomotives. The size and concentration of these diesel engines makes ports one of the biggest sources of diesel PM in the state. For that reason, ARB has made it a top priority to reduce diesel PM emissions at the ports, in surrounding communities, and throughout California.

International, national, state, and local government collaboration is critical to reducing port emissions based on both legal and practical considerations. For example, the International Maritime Organization (IMO) and the U.S. EPA establish emission standards for ocean-going vessels and U.S.-flagged harbor craft, respectively. ARB is pursuing further federal actions to tighten these standards. In addition, ARB and local air districts are reducing emissions from ports through a variety of approaches. These include: incentive programs to fund cleaner engines, enhanced enforcement of smoke emissions from ships and trucks, use of dockside electricity instead of diesel engines, cleaner fuels for ships, harbor craft, locomotives, and reduced engine idling. The two ATCMs that limit truck idling and reduce emissions from TRUs (discussed under “Distribution Centers”) also apply to ports.

ARB is also developing several other regulations that will reduce port-related emissions. One rule would require ocean-going ships to use a cleaner marine diesel fuel to power auxiliary engines while in California coastal waters and at dock. Ships that frequently visit California ports would also be required to further reduce their emissions. ARB has adopted a rule that would require harbor craft to use the same cleaner diesel fuel used by on-road trucks in California. In 2005, ARB will consider a rule that would require additional controls for in-use harbor craft, such as the use of add-on emission controls and accelerated turnover of older engines.

Key Health Findings

Port activities are a major source of diesel PM. Diesel PM has been identified by ARB as a toxic air contaminant and represents 70 percent of the known potential cancer risk from air toxics in California. Diesel PM is an important contributor to particulate matter air pollution. Particulate matter exposure is associated with premature mortality and health effects such as asthma exacerbation and hospitalization due to aggravating heart and lung disease.

Distance Related Findings

The Ports of Los Angeles and Long Beach provide an example of the emissions impact of port operations. A comprehensive emissions inventory was completed in June 2004. These ports combined are one of the world's largest and busiest seaports. Located in San Pedro Bay, about 20 miles south of downtown Los Angeles, the port complex occupies approximately 16 square miles of land and water. Port activities include five source categories that produce diesel emissions. These are ocean-going vessels, harbor craft, cargo handling equipment, railroad locomotives, and heavy-duty trucks.

The baseline emission inventory provides emission estimates for all major air pollutants. This analysis focuses on diesel PM from in-port activity because these emissions have the most potential health impact on the areas adjacent to the port. Ocean vessels are the largest overall source of diesel PM related to the ports, but these emissions occur primarily outside of the port in coastal waters, making the impact more regional in nature.

The overall in-port emission inventory for diesel particulate for the ports of Los Angeles and Long Beach is estimated to be 550 tons per year. The emissions fall in the following major categories: ocean-going vessels (17%), harbor craft (25%), cargo handling (47%), railroad locomotive (3%), and heavy duty vehicles (8%). In addition to in-port emissions, ship, rail, and trucking activities also contribute to regional emissions and increase emissions in nearby neighborhoods. Off-port emissions associated with related ship, rail, and trucking activities contribute an additional 680 tons per year of diesel particulate at the Port of Los Angeles alone.

To put this in perspective, the diesel PM emissions estimated for the Roseville Yard in ARB's 2004 study are 25 tons per year. The potential cancer risk associated with these emissions is 100 in one million at a distance of one mile, or one half mile, depending on the data set used. This rail yard covers one and a half square miles. The Los Angeles and Long Beach ports have combined diesel PM emissions of 550 tons per year emitted from a facility that covers a much larger area - 16 miles. The ports have about twice the emission density of the rail yard - 34 tons per year per square mile compared to 16 tons per year per square mile. However, while this general comparison is illustrative of the overall size of the complex, a detailed air quality modeling analysis would be needed to assess the potential health impact on specific downwind areas near the ports.

ARB is in the process of evaluating the various port-related emission sources from the standpoint of existing emissions, growth forecasts, new control options, regional air quality impacts, and localized health risk. A number of public processes - both state and local - are underway to address various aspects of these issues. Until more of these analyses are complete, there is little basis for recommending a specific separation between new sensitive land uses and ports.

For example, the type of data we have showing the relationship between air pollutant concentrations and distance from freeways is not yet available.

Also, the complexity of the port facilities makes a site-specific analysis critical. Ports are a concentration of multiple emission sources with differing dispersion and other characteristics. In the case of the Roseville rail yard, we found a high, very localized impact associated with a particular activity, service and maintenance. By contrast, the location, size, and nature of impact areas can be expected to vary substantially for different port activities. For instance, ground level emissions from dockside activities would behave differently from ship stack level emissions.

Nonetheless, on an emissions basis alone, we expect locations downwind of ports to be substantially impacted. For that reason, we recommend that land use agencies track the current assessment efforts, and consider limitations on the siting of new sensitive land uses in areas immediately downwind of ports.

Recommendations

Avoid siting new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.

References

- *Roseville Rail Yard Study*. ARB (2004)
- Final Draft, "*Port-Wide Baseline Air Emissions Inventory*." Port of Los Angeles (June 2004)
- Final Draft, "*2002 Baseline Air Emissions Inventory*." Port of Long Beach (February 2004)

Petroleum Refineries

A petroleum refinery is a complex facility where crude oil is converted into petroleum products (primarily gasoline, diesel fuel, and jet fuel), which are then transported through a system of pipelines and storage tanks for final distribution by delivery truck to fueling facilities throughout the state. In California, most crude oil is delivered either by ship from Alaska or foreign sources, or is delivered via pipeline from oil production fields within the state. The crude oil then undergoes many complex chemical and physical reactions, which include distillation, catalytic cracking, reforming, and finishing. These refining processes have the potential to emit air contaminants, and are subject to extensive emission controls by district regulations.

As a result of these regulations covering the production, marketing, and use of gasoline and other oil by-products, California has seen significant regional air quality benefits both in terms of cleaner fuels and cleaner operating facilities. In

the 1990s, California refineries underwent significant modifications and modernization to produce cleaner fuels in response to changes in state law. Nevertheless, while residual emissions are small when compared to the total emissions controlled from these major sources, refineries are so large that even small amounts of fugitive, uncontrollable emissions and associated odors from the operations, can be significant. This is particularly the case for communities that may be directly downwind of the refinery. Odors can cause health symptoms such as nausea and headache. Also, because of the size, complexity, and vast numbers of refinery processes onsite, the occasional refinery upset or malfunction can potentially result in acute or short-term health effects to exposed individuals.

Key Health Findings

Petroleum refineries are large single sources of emissions. For volatile organic compounds (VOCs), eight of the ten largest stationary sources in California are petroleum refineries. For oxides of nitrogen (NO_x), four of the ten largest stationary sources in California are petroleum refineries. Both of these compounds react in the presence of sunlight to form ozone. Ozone impacts lung function by irritating and damaging the respiratory system. Petroleum refineries are also large stationary sources of both particulate matter under 10 microns in size (PM₁₀) and particulate matter under 2.5 microns in size (PM_{2.5}). Exposure to particulate matter aggravates a number of respiratory illnesses, including asthma, and is associated with premature mortality in people with existing cardiac and respiratory disease. Both long-term and short-term exposure can have adverse health impacts. Finer particles pose an increased health risk because they can deposit deep in the lung and contain substances that are particularly harmful to human health. NO_x are also significant contributors to the secondary formation of PM_{2.5}.

Petroleum refineries also emit a variety of toxic air pollutants. These air toxics vary by facility and process operation but may include: acetaldehyde, arsenic, antimony, benzene, beryllium, 1,3-butadiene, cadmium compounds, carbonyl sulfide, carbon disulfide, chlorine, dibenzofurans, diesel particulate matter, formaldehyde, hexane, hydrogen chloride, lead compounds, mercury compounds, nickel compounds, phenol, 2,3,7,8 tetrachlorodibenzo-p-dioxin, toluene, and xylenes (mixed) among others. The potential health effects associated with these air toxics can include cancer, respiratory irritation, and damage to the central nervous system, depending on exposure levels.

Distance Related Findings

Health risk assessments for petroleum refineries have shown risks from toxic air pollutants that have quantifiable health risk values to be around 10 potential cancer cases per million. Routine air monitoring and several air monitoring studies conducted in the San Francisco Bay Area (Crockett) and the South Coast Air Basin (Wilmington) have not identified significant health risks specifically

associated with refineries. However, these studies did not measure diesel PM as no accepted method currently exists, and there are many toxic air pollutants that do not have quantifiable health risk values.

In 2002, ARB published a report on the results of the state and local air district air monitoring done near oil refineries. The purpose of this evaluation was to try to determine how refinery-related emissions might impact nearby communities. This inventory of air monitoring activities included 10 ambient air monitoring stations located near refineries in Crockett and four stations near refineries in Wilmington. These monitoring results did not identify significant increased health risks associated with the petroleum refineries. In 2002-2003, ARB conducted additional monitoring studies in communities downwind of refineries in Crockett and Wilmington. These monitoring results also did not indicate significant increased health risks from the petroleum refineries.

Consequently, there are no air quality modeling or air monitoring data that provides a quantifiable basis for recommending a specific separation between refineries and new sensitive land uses. However, in view of the amount and potentially hazardous nature of many of the pollutants released as part of the refinery process, we believe the siting of new sensitive land uses immediately downwind should be avoided. Land use agencies should consult with the local air district when considering how to define an appropriate separation for refineries within their jurisdiction.

Recommendations

- Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.

References

- *Review of Current Ambient Air Monitoring Activities Related to California Bay Area and South Coast Refineries.* ARB (March 2002)
<http://www.arb.ca.gov/aaqm/qmosqual/special/mldrefinery.pdf>
- *Community Air Quality Monitoring: Special Studies – Crockett.* ARB (September 2004)
<http://www.arb.ca.gov/ch/communities/studies/crockett/crockett.htm>
- *Wilmington Study - Air Monitoring Results.* ARB (2003)
<http://www.arb.ca.gov/ch/communities/studies/wilmington/wilmington.htm>

Chrome Plating Operations

Chrome plating operations rely on the use of the toxic metal hexavalent chromium, and have been subject to ARB and local air district control programs for many years. Regulation of chrome plating operations has reduced statewide emissions substantially. However, due to the nature of chrome plating

operations and the highly toxic nature of hexavalent chromium, the remaining health risk to nearby residents is a continuing concern.

Chrome plating operations convert hexavalent chromium in solution to a chromium metal layer by electroplating, and are categorized based upon the thickness of the chromium metal layer applied. In “decorative plating”, a layer of nickel is first plated over a metal substrate. Following this step, a thin layer of chromium is deposited over the nickel layer to provide a decorative and protective finish, for example, on faucets and automotive wheels. “Hard chrome plating” is a process in which a thicker layer of chromium metal is deposited directly on metal substrates such as engine parts, industrial machinery, and tools to provide greater protection against corrosion and wear.

Hexavalent chromium is emitted into the air when an electric current is applied to the plating bath. Emissions are dependent upon the amount of electroplating done per year and the control requirements. A unit of production referred to as an ampere-hour represents the amount of electroplating produced. Small facilities have an annual production rate of 100,000 – 500,000 ampere-hours, while medium-size facilities may have a production rate of 500,000 to about 3 million ampere-hours. The remaining larger facilities have a range of production rates that can be as high as 80 million ampere-hours.

The control requirements, which reduce emissions from the plating tanks, vary according to the size and type of the operation. Facilities either install add-on pollution control equipment, such as filters and scrubbers, or in-tank controls, such as fume suppressants and polyballs. With this combination of controls, the overall hexavalent chromium emissions have been reduced by over 90 percent. Larger facilities typically have better controls that can achieve efficiencies greater than 99 percent. However, even with stringent controls, the lack of maintenance and good housekeeping practices can lead to problems. And, since the material itself is inherently dangerous, any lapse in compliance poses a significant risk to nearby residents.

A 2002 ARB study in the San Diego community of Barrio Logan measured unexpectedly high concentrations of hexavalent chromium near chrome platers. The facilities were located in a mixed-use area with residences nearby. The study found that fugitive dust laden with hexavalent chromium was an important source of emissions that likely contributed to the elevated cancer risk. Largely as a result of this study, ARB is in the process of updating the current requirements to further reduce the emissions from these facilities.

In December 2004, the ARB adopted an ATCM to reduce emissions of hexavalent chromium and nickel from thermal spraying operations through the installation of best available control technology. The ATCM requires all existing facilities to comply with its requirements by January 1, 2006. New and modified thermal spraying operations must comply upon initial startup. An existing thermal spraying facility may be exempt from the minimum control efficiency

requirements of the ATCM if it is located at least 1,640 feet from the nearest sensitive receptor and emits no more than 0.5 pound per year of hexavalent chromium.⁸

Key Health Findings

Hexavalent chromium is one of the most toxic air pollutants regulated by the State of California. Hexavalent chromium is a carcinogen and has been identified in worker health studies as causing lung cancer. Exposure to even very low levels of hexavalent chromium should be avoided.

The California Office of Environmental Health Hazard Assessment has found that: 1) many epidemiological studies show a strong association between hexavalent chromium exposure in the work place and respiratory cancer; and 2) all short-term assays reported show that hexavalent chromium compounds can cause damage to human DNA.

Hexavalent chromium when inhaled over a period of many years can cause a variety of non-cancer health effects. These health effects include damage to the nose, blood disorders, lung disease, and kidney damage. The non-cancer health impacts occur with exposures considerably higher than exposures causing significant cancer risks. It is less likely that the public would be exposed to hexavalent chromium at levels high enough to cause these non-cancer health effects. Non-cancer health effects, unlike cancer health effects, have a threshold or exposure level below which non-cancer health effects would not be expected.

Distance Related Findings

ARB's 2002 Barrio Logan Study measured concentrations of hexavalent chromium in the air near two chrome plating facilities. The study was conducted from December 2001 to May 2002. There were two chrome platers on the street - one decorative and one hard plater. The purpose of the study was to better understand the near source impact of hexavalent chromium emissions. Air monitors were placed at residences next to the platers and at varying distances down the street. The monitors were moved periodically to look at the spatial distribution of the impact. Source testing and facility inspections identified one of the facilities as the likely source.

The first two weeks of monitoring results showed unexpectedly high levels of hexavalent chromium at a number of the monitoring sites. The high concentrations were intermittent. The concentrations ranged from 1 to 22 ng/m³ compared to the statewide average of 0.1 ng/m³. If these levels were to continue for 70 years, the potential cancer risk would be 150 in one million. The highest value was found at an air monitor behind a house adjacent to one of the

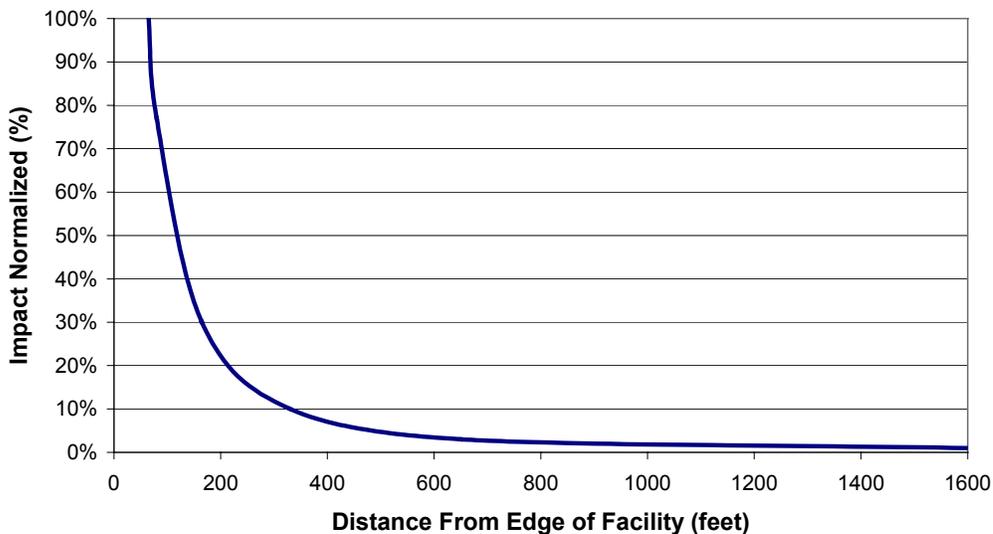
⁸ For further information on the ATCM, please refer to:
<http://www.arb.ca.gov/regact/thermspr/thermalspr.htm>

plating facilities—approximately 30 feet from the back entrance. Lower, but significant concentrations were found at an ambient air monitor 250 feet away.

The monitoring covered a period when the facility was not operating its plating tank. During this period, one of the highest concentrations was measured at an adjacent house. It appears that chromium-laden dust was responsible for high concentrations at this location since there was no plating activity at the time. Dust samples from the facility were tested and found to contain high levels of hexavalent chromium. On the day the highest concentration was measured at the house next door, a monitor 350 feet away from the plater's entrance showed very little impact. Similar proximity effects are shown in ARB modeling studies.

Figure 1-5 shows how the relative health risk varies as a function of distance from a chrome plater. This analysis is based on a medium-sized chrome plater with an annual production rate of 3 million ampere-hours. As shown in Figure 1- 5, the potential health risk drops off rapidly, with over 90 percent reduction in risk within 300 feet. This modeling was done in 2003 as part of a review of ARB's current air toxic control measure for chrome platers and is based on data from a recent ARB survey of chrome platers in California. The emission

Figure 1-5
Risk vs. Distance From Chrome Plater
(Based on plating tank emissions)



rates are only for plating operations. Because there are insufficient data available to directly quantify the impacts, the analysis does not include fugitive emissions, which the Barrio Logan analysis indicated could be significant.

Both the ARB Barrio Logan monitoring results and ARB's 2003 modeling analysis suggests that the localized emissions impact of a chrome plater diminishes significantly at 300 feet. However, in developing our recommendation, we also considered the following factors:

- some chrome platers will have higher volumes of plating activity,
- potential dust impacts were not modeled,
- we have only one monitoring study looking at the impact of distance, and,
- hexavalent chromium is one of the most potent toxic air contaminants ARB has identified.

Given these limitations in the analysis, we recommend a separation of 1,000 feet as a precautionary measure. For large chrome platers, site specific information should be obtained from the local air district.

Recommendation

- Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.

References

- *Ambient Air Monitoring for Hexavalent Chromium and Metals in Barrio Logan: May 2001 through May 2002.* ARB, Monitoring and Laboratory Division (October 14, 2003)
- *Draft Barrio Logan Report.* ARB, Planning and Technical Support Division (November 2004)
- *Proposed Amendments to the Hexavalent Chromium Control Measure for Decorative and Hard Chrome Plating and Chromic Acid Anodizing Facilities.* ARB (April 1998)
- Murchison, Linda; Suer, Carolyn; Cook, Jeff. "*Neighborhood Scale Monitoring in Barrio Logan,*" (AWMA Annual Conference Proceedings, June 2003)

Dry Cleaners Using Perchloroethylene (Perc Dry Cleaners)

Perchloroethylene (perc) is the solvent most commonly used by the dry cleaning industry to clean clothes or other materials. The ARB and other public health agencies have identified perc as a potential cancer-causing compound. Perc persists in the atmosphere long enough to contribute to both regional air pollution and localized exposures. Perc dry cleaners are the major source of perc emissions in California.

Since 1990, the statewide concentrations and health risk from exposure to perc has dropped over 70 percent. This is due to a number of regulatory requirements on perc dry cleaners and other sources, including degreasing operations, brake cleaners, and adhesives. ARB adopted an Airborne Toxic Control Measure (ATCM) for Perc Emissions from Dry Cleaning Operations in 1993. ARB has also prohibited the use of perc in aerosol adhesives and automotive brake cleaners.

Perc dry cleaners statewide are required to comply with ARB and local air district regulations to reduce emissions. However, even with these controls, some emissions continue to occur. Air quality studies indicate that there is still the potential for significant risks even near well-controlled dry cleaners. The South Coast AQMD has adopted a rule requiring that all new dry cleaners use alternatives to perc and that existing dry cleaners phase out the use of perc by December 2020. Over time, transition to non-toxic alternatives should occur. However, while perc continues to be used, a preventative approach should be taken to siting of new sensitive land uses.

Key Health Findings

Inhalation of perc may result in both cancer and non-cancer health effects. An assessment by California's Office of Environmental Health Hazard Assessment (OEHHA) concluded that perc is a potential human carcinogen and can cause non-cancer health effects. In addition to the potential cancer risk, the effects of long-term exposure include dizziness, impaired judgment and perception, and damage to the liver and kidneys. Workers have shown signs of liver toxicity following chronic exposure to perc, as well as kidney dysfunction and neurological effects. Non-cancer health effects occur with higher exposure levels than those associated with significant cancer risks. The public is more likely to be exposed to perchloroethylene at levels causing significant cancer risks than to levels causing non-cancer health effects. Non-cancer health effects, unlike cancer health effects, have a threshold or exposure level below which non-cancer health effects would not be expected. The ARB formally identified perc as a toxic air contaminant in October 1991.

One study has determined that inhalation of perc is the predominant route of exposure to infants living in apartments co-located in the same building with a business operating perc dry cleaning equipment. Results of air sampling within co-residential buildings indicate that dry cleaners can cause a wide range of exposures depending on the type and maintenance of the equipment. For example, a well-maintained state-of-the-art system may have risks in the range of 10 in one million, whereas a badly maintained machine with major leaks can have potential cancer risks of thousands in one million.

The California Air Pollution Control Officers Association (CAPCOA) is developing Industry-wide Risk Assessment Guidelines for Perchloroethylene Dry Cleaners which, when published, will provide detailed information on public health risk from exposure to emissions from this source.

Distance Related Findings

Risk created by perc dry cleaning is dependent on the amount of perc emissions, the type of dry cleaning equipment, proximity to the source, and how the emissions are released and dispersed (e.g., type of ventilation system, stack parameters, and local meteorology). Dry cleaners are often located near

residential areas, and near shopping centers, schools, day-care centers, and restaurants.

The vast majority of dry cleaners in California have one dry cleaning machine per facility. The South Coast AQMD estimates that an average well-controlled dry cleaner uses about 30 to 160 gallons of cleaning solvent per year, with an average of about 100 gallons. Based on these estimates, the South Coast AQMD estimates a potential cancer risk between 25 to 140 in one million at residential locations 75 feet or less from the dry cleaner, with an average of about 80 in one million. The estimate could be as high as 270 in one million for older machines.

CAPCOA's draft industry-wide risk assessment of perc dry cleaning operations indicates that the potential cancer risk for many dry cleaners may be in excess of potential cancer risk levels adopted by the local air districts. The draft document also indicates that, in general, the public's exposure can be reduced by at least 75 percent, by providing a separation distance of about 300 feet from the operation. This assessment is based on a single machine with perc use of about 100 gallons per year. At these distances, the potential cancer risk would be less than 10 potential cases per million for most scenarios.

The risk would be proportionately higher for large, industrial size, dry cleaners. These facilities typically have two or more machines and use 200 gallons or more per year of perc. Therefore, separation distances need to be greater for large dry cleaners. At a distance of 500 feet, the remaining risk for a large plant can be reduced by over 85 percent.

In California, a small number of dry cleaners that are co-located (sharing a common wall, floor, or ceiling) with a residence have the potential to expose the inhabitants of the residence to high levels of perc. However, while special requirements have been imposed on these existing facilities, the potential for exposure still exists. Avoiding these siting situations in the future is an important preventative measure.

Local air districts are a source of information regarding specific dry cleaning operations—particularly for large industrial operations with multiple machines. The 300 foot separation recommended below reflects the most common situation – a dry cleaner with only one machine. While we recommend 500 feet when there are two or more machines, site specific information should be obtained from the local air district for some very large industrial operations. Factors that can impact the risk include the number and type of machines, controls used, source configuration, building dimensions, terrain, and meteorological data.

Recommendation

- Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines provide 500 feet. For operations with 3 or more machines, consult with the local air district.
- Do not site new sensitive land uses in the same building with perc dry cleaning operations.

References

- *Proposed Amended Rule 1421 – Control of Perchloroethylene Emissions from Dry Cleaning Systems*, Final Staff Report. South Coast AQMD. (October 2002)
- *Air Toxic Control Measure for Emissions of Perchloroethylene from Dry Cleaning Operations*. ARB (1994)
(<http://www.arb.ca.gov/toxics/atcm/percatcm.htm>)
- “An Assessment of Tetrachloroethylene in Human Breast Milk”, Judith Schreiber, New York State Department of Health – Bureau of Toxic Substance Assessment, *Journal of Exposure Analysis and Environmental Epidemiology*, Vol.2, Suppl.2, pp. 15-26, 1992.
- *Draft Air Toxics “Hot Spots” Program Perchloroethylene Dry Cleaner Industry-wide Risk Assessment Guidelines*. (CAPCOA (November 2002)
- *Final Environmental Assessment for Proposed Amended Rule 1421 – Control of Perchloroethylene Emissions from Dry Cleaning Systems*. South Coast AQMD. (October 18, 2002)

Gasoline Dispensing Facilities

Refueling at gasoline dispensing facilities releases benzene into the air. Benzene is a potent carcinogen and is one of the highest risk air pollutants regulated by ARB. Motor vehicles and motor vehicle-related activity account for over 90 percent of benzene emissions in California. While gasoline-dispensing facilities account for a small part of total benzene emissions, near source exposures for large facilities can be significant.

Since 1990, benzene in the air has been reduced by over 75 percent statewide, primarily due to the implementation of emissions controls on motor vehicle vapor recovery equipment at gas stations, and a reduction in benzene levels in gasoline. However, benzene levels are still significant. In urban areas, average benzene exposure is equivalent to about 50 in one million.

Gasoline dispensing facilities tend to be located in areas close to residential and shopping areas. Benzene emissions from the largest gas stations may result in near source health risk beyond the regional background and district health risk thresholds. The emergence of very high gasoline throughput at large retail or

wholesale outlets makes this a concern as these types of outlets are projected to account for an increasing market share in the next few years.

Key Health Findings

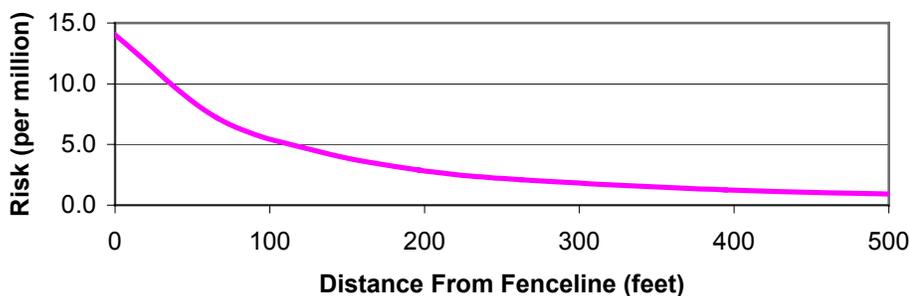
Benzene is a human carcinogen identified by ARB as a toxic air contaminant. Benzene also can cause non-cancer health effects above a certain level of exposure. Brief inhalation exposure to high concentrations can cause central nervous system depression. Acute effects include central nervous system symptoms of nausea, tremors, drowsiness, dizziness, headache, intoxication, and unconsciousness. It is unlikely that the public would be exposed to levels of benzene from gasoline dispensing facilities high enough to cause these non-cancer health effects.

Distance Related Findings

A well-maintained vapor recovery system can decrease emissions of benzene by more than 90% compared with an uncontrolled facility. Almost all facilities have emission control systems. Air quality modeling of the health risks from gasoline dispensing facilities indicate that the impact from the facilities decreases rapidly as the distance from the facility increases.

Statistics reported in the ARB's staff reports on Enhanced Vapor Recovery released in 2000 and 2002, indicated that almost 96 percent of the gasoline dispensing facilities had a throughput less than 2.4 million gallons per year. The remaining four percent, or approximately 450 facilities, had throughputs exceeding 2.4 million gallons per year. For these stations, the average gasoline throughput was 3.6 million gallons per year.

**Figure 1-6
Gasoline Dispensing Facility Health Risk
for 3,600,000 gal/yr throughput**



As shown in Figure 1-6, the risk levels for a gasoline dispensing facility with a throughput of 3.6 million gallons per year is about 10 in one million at a distance of 50 feet from the fenceline. However, as the throughput increases, the potential risk increases.

As mentioned above, air pollution levels in the immediate vicinity of large gasoline dispensing facilities may be higher than the surrounding area (although tailpipe emissions from motor vehicles dominates the health impacts). Very large gasoline dispensing facilities located at large wholesale and discount centers may dispense nine million gallons of gasoline per year or more. At nine million gallons, the potential risk could be around 25 in one million at 50 feet, dropping to about five in one million at 300 feet. Some facilities have throughputs as high as 19 million gallons.

Recommendation

- Avoid siting new sensitive land uses within 300 feet of a large gasoline dispensing facility (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

References

- *Gasoline Service Station Industry-wide Risk Assessment Guidelines*. California Air Pollution Control Officers Association (December 1997 and revised November 1, 2001)
- *Staff Report on Enhanced Vapor Recovery*. ARB (February 4, 2000)
- *The California Almanac of Emissions and Air Quality*. ARB (2004)
- *Staff Report on Enhanced Vapor Recovery Technology Review*. ARB (October 2002)

Other Facility Types that Emit Air Pollutants of Concern

In addition to source specific recommendations, Table 1-3 includes a list of other industrial sources that could pose a significant health risk to nearby sensitive individuals depending on a number of factors. These factors include the amount of pollutant emitted and its toxicity, the distance to nearby individuals, and the type of emission controls in place. Since these types of facilities are subject to air permits from local air districts, facility specific information should be obtained where there are questions about siting a sensitive land use close to an industrial facility.

Potential Sources of Odor and Dust Complaints

Odors and dust from commercial activities are the most common sources of air pollution complaints and concerns from the public. Land use planning and permitting processes should consider the potential impacts of odor and dust on surrounding land uses, and provide for adequate separation between odor and dust sources. As with other types of air pollution, a number of factors need to be considered when determining an adequate distance or mitigation to avoid odor or

Table 1-3 – Examples of Other Facility Types That Emit¹ Air Pollutants of Concern

<u>Categories</u>	<u>Facility Type</u>	<u>Air Pollutants of Concern</u>
Commercial	Autobody Shops Furniture Repair Film Processing Services Distribution Centers Printing Shops Diesel Engines	Metals, Solvents Solvents ² , Methylene Chloride Solvents, Perchloroethylene Diesel Particulate Matter Solvents Diesel Particulate Matter
Industrial	Construction Manufacturers Metal Platers, Welders, Metal Spray (flame spray) Operations Chemical Producers Furniture Manufacturers Shipbuilding and Repair Rock Quarries and Cement Manufacturers Hazardous Waste Incinerators Power Plants Research and Development Facilities	Particulate Matter, Asbestos Solvents, Metals Hexavalent Chromium, Nickel, Metals Solvents, Metals Solvents Hexavalent chromium and other metals, Solvents Particulate Matter, Asbestos Dioxin, Solvents, Metals Benzene, Formaldehyde, Particulate Matter Solvents, Metals, etc.
Public	Landfills Waste Water Treatment Plants Medical Waste Incinerators Recycling, Garbage Transfer Stations Municipal Incinerators	Benzene, Vinyl Chloride, Diesel Particulate Matter Hydrogen Sulfide Dioxin, Benzene, PAH, PCBs, 1,3-Butadiene Diesel Particulate Matter Dioxin, Benzene, PAH, PCBs, 1,3-Butadiene
Transportation	Truck Stops	Diesel Particulate Matter
Agricultural Operations	Farming Operations Livestock and Dairy Operations	Diesel Particulate Matter, VOCs, NOx, PM10, CO, SOx, Pesticides Ammonia, VOCs, PM10

¹Not all facilities will emit pollutants of concern due to process changes or chemical substitution. Consult the local air district regarding specific facilities.

²Some solvents may emit toxic air pollutants, but not all solvents are toxic air contaminants.

dust complaints in a specific situation. Local air districts should be consulted for advice when these siting situations arise.

Table 1-4 lists some of the most common sources of odor complaints received by local air districts. Complaints about odors are the responsibility of local air districts and are covered under state law. The types of facilities that can cause odor complaints are varied and can range from small commercial facilities to large industrial facilities, and may include waste disposal and recycling operations. Odors can cause health symptoms such as nausea and headache. Facilities with odors may also be sources of toxic air pollutants (See Table 1-3). Some common sources of odors emitted by facilities are sulfur compounds, organic solvents, and the decomposition/digestion of biological materials. Because of the subjective nature of an individual's sensitivity to a particular type of odor, there is no specific rule for assigning appropriate separations from odor sources. Under the right meteorological conditions, some odors may still be offensive several miles from the source.

Sources of dust are also common sources of air pollution-related complaints. Operations that can result in dust problems are rock crushing, gravel production, stone quarrying, and mining operations. A common source of complaints is the dust and noise associated with blasting that may be part of these operations. Besides the health impacts of dust as particulate matter, thick dust also impairs visibility, aesthetic values, and can soil homes and automobiles. Local air districts typically have rules for regulating dust sources in their jurisdictions, but dust sources can still be a concern. Therefore, separation of these facilities from residential and other new sensitive land uses should be considered.

In some areas of California, asbestos occurs naturally in stone deposits. Asbestos is a potent carcinogenic substance when inhaled. Asbestos-containing dust may be a public health concern in areas where asbestos-containing rock is mined, crushed, processed, or used. Situations where asbestos-containing gravel has been used in road paving materials are also a source of asbestos exposure to the general public. Planners are advised to consult with local air pollution agencies in areas where asbestos-containing gravel or stone products are produced or used.

2. Handbook Development

ARB and local air districts share responsibility for improving statewide air quality. As a result of California's air pollution control programs, air quality has improved and health risk has been reduced statewide. However, state and federal air quality standards are still exceeded in many areas of California and the statewide health risk posed by toxic air contaminants (air toxics) remains too high. Also, some communities experience higher pollution exposures than others - making localized impacts, as well regional or statewide impacts, an important consideration. It is for this reason that this Handbook has been produced - to promote better, more informed decision-making by local land use agencies that will improve air quality and public health in their communities.

Land use policies and practices, including planning, zoning, and siting activities, can play a critical role in air quality and public health at the local level. For instance, even with the best available control technology, some projects that are sited very close to homes, schools, and other public places can result in elevated air pollution exposures. The reverse is also true – siting a new school or home too close to an existing source of air pollution can pose a public health risk. The ARB recommendations in section 1 address this issue.

This Handbook is an informational document that we hope will strengthen the relationship between air quality and land use agencies. It highlights the need for land use agencies to address the potential for new projects to result in localized health risk or contribute to cumulative impacts where air pollution sources are concentrated.

Avoiding these incompatible land uses is a key to reducing localized air pollution exposures that can result in adverse health impacts, especially to sensitive individuals.

Individual siting decisions that result in incompatible land uses are often the result of locating “sensitive” land uses next to polluting sources. These decisions can be of even greater concern when existing air pollution exposures in a community are considered. In general terms, this is often referred to as the issue of “cumulative impacts.” ARB is working with local air districts to better define these situations and to make information about existing air pollution levels (e.g., from local businesses, motor vehicles, and other areawide sources) more readily available to land use agencies.

In December 2001, the ARB adopted “Policies and Actions for Environmental Justice” (Policies). These Policies were developed in coordination with a group of stakeholders, representing local government agencies, community interest

groups, environmental justice organizations, academia, and business (Environmental Justice Stakeholders Group).

The Policies included a commitment to work with land use planners, transportation agencies, and local air districts to develop ways to identify, consider, and reduce cumulative air pollution emissions, exposure, and health risks associated with land use planning and decision-making. Developed under the auspices of the ARB's Environmental Justice Stakeholders Group, this Handbook is a first step in meeting that commitment.

ARB has produced this Handbook to help achieve several objectives:

- Provide recommendations on situations to avoid when siting new residences, schools, day care centers, playgrounds, and medical-related facilities (sensitive sites or sensitive land uses);
- Identify approaches that land use agencies can use to prevent or reduce potential air pollution impacts associated with general plan policies, new land use development, siting, and permitting decisions;
- Improve and facilitate access to air quality data and evaluation tools for use in the land use decision-making process;
- Encourage stronger collaboration between land use agencies and local air districts to reduce community exposure to source-specific and cumulative air pollution impacts; and
- Emphasize community outreach approaches that promote active public involvement in the air quality/land use decision-making process.

This Handbook builds upon California's 2003 General Plan Guidelines. These Guidelines, developed by the Governor's Office of Planning and Research (OPR), explain the land use planning process and applicable legal requirements. This Handbook also builds upon a 1997 ARB report, "The Land Use-Air Quality Linkage" ("Linkage Report").⁹ The Linkage Report was an outgrowth of the California Clean Air Act which, among other things, called upon local air districts to focus particular attention on reducing emissions from sources that indirectly cause air pollution by attracting vehicle trips. Such indirect sources include, but are not limited to, shopping centers, schools and universities, employment centers, warehousing, airport hubs, medical offices, and sports arenas. The Linkage Report summarizes data as of 1997 on the relationships between land use, transportation, and air quality, and highlights strategies that can help to reduce the use of single occupancy automobile use. Such strategies

⁹ To access this report, please refer to ARB's website or click on:
<http://www.arb.ca.gov/ch/programs/link97.pdf>

complement ARB regulatory programs that continue to reduce motor vehicle emissions.

In this Handbook, we identify types of air quality-related information that we recommend land use agencies consider in the land use decision-making processes such as the development of regional, general, and community plans; zoning ordinances; environmental reviews; project siting; and permit issuance. The Handbook provides recommendations on the siting of new sensitive land uses based on current analyses. It also contains information on approaches and methodologies for evaluating new projects from an air pollution perspective.

The Handbook looks at air quality issues associated with emissions from industrial, commercial, and mobile sources of air pollution. Mobile sources continue to be the largest overall contributors to the state's air pollution problems, representing the greatest air pollution health risk to most Californians. Based on current health risk information for air toxics, the most serious pollutants on a statewide basis are diesel PM, benzene, and 1,3-butadiene, all of which are primarily emitted by motor vehicles. From a state perspective, ARB continues to pursue new strategies to further reduce motor vehicle-related emissions in order to meet air quality standards and reduce air toxics risk.

While mobile sources are the largest overall contributors to the state's air pollution problems, industrial and commercial sources can also pose a health risk, particularly to people near the source. For this reason, the issue of incompatible land uses is an important focus of this document.

Handbook Audience

Even though the primary users of the Handbook will likely be agencies responsible for air quality and land use planning, we hope the ideas and technical issues presented in this Handbook will also be useful for:

- public and community organizations and community residents;
- federal, state and regional agencies that fund, review, regulate, oversee, or otherwise influence environmental policies and programs affected by land use policies; and
- private developers.

3. Key Community Focused Issues Land Use Agencies Should Consider

Two key air quality issues that land use agencies should consider in their planning, zoning, and permitting processes are:

- 1) **Incompatible Land Uses.** Localized air pollution impacts from incompatible land use can occur when polluting sources, such as a heavily trafficked roadway, warehousing facilities, or industrial or commercial facilities, are located near a land use where sensitive individuals are found such as a school, hospital, or homes.
- 2) **Cumulative Impacts.** Cumulative air pollution impacts can occur from a concentration of multiple sources that individually comply with air pollution control requirements or fall below risk thresholds, but in the aggregate may pose a public health risk to exposed individuals. These sources can be heavy or light-industrial operations, commercial facilities such as autobody shops, large gas dispensing facilities, dry cleaners, and chrome platers, and freeways or other nearby busy transportation corridors.

Incompatible Land Uses

Land use policies and practices can worsen air pollution exposure and adversely affect public health by mixing incompatible land uses. Examples include locating new sensitive land uses, such as housing or schools, next to small metal plating facilities that use a highly toxic form of chromium, or very near large industrial facilities or freeways. Based on recent monitoring and health-based studies, we now know that air quality impacts from incompatible land uses can contribute to increased risk of illness, missed work and school, a lower quality of life, and higher costs for public health and pollution control.¹⁰

Avoiding incompatible land uses can be a challenge in the context of mixed-use industrial and residential zoning. For a variety of reasons, government agencies and housing advocates have encouraged the proximity of affordable housing to employment centers, shopping areas, and transportation corridors, partially as a means to reduce vehicle trips and their associated emissions. Generally speaking, typical distances in mixed-use communities between businesses and industries and other land uses such as homes and schools, should be adequate to avoid health risks. However, generalizations do not always hold as we addressed in section 1 of this Handbook.

In terms of siting air pollution sources, the proposed location of a project is a major factor in determining whether it will result in localized air quality impacts. Often, the problem can be avoided by providing an adequate distance or setback

¹⁰ For more information, the reader should refer to ARB's website on community health: <http://www.arb.ca.gov/ch/ch.htm>

between a source of emissions and nearby sensitive land uses. Sometimes, suggesting project design changes or mitigation measures in the project review phase can also reduce or avoid potential impacts. This underscores the importance of addressing potential incompatible land uses as early as possible in the project review process, ideally in the general plan itself.

Cumulative Air Pollution Impacts

The broad concept of cumulative air pollution impacts reflects the combination of regional air pollution levels and any localized impacts. Many factors contribute to air pollution levels experienced in any location. These include urban background air pollution, historic land use patterns, the prevalence of freeways and other transportation corridors, the concentration of industrial and commercial businesses, and local meteorology and terrain.

When considering the potential air quality impacts of polluting sources on individuals, project location and the concentration of emissions from air pollution sources need to be considered in the land use decision-making process. In section 4, the Handbook offers a series of questions that helps land use agencies determine if a project should undergo a more careful analysis. This holds true regardless of whether the project being sited is a polluting source or a sensitive land use project.

Large industrial areas are not the only land uses that may result in public health concerns in mixed-use communities. Cumulative air pollution impacts can also occur if land uses do not adequately provide setbacks or otherwise protect sensitive individuals from potential air pollution impacts associated with nearby light industrial sources. This can occur with activities such as truck idling and traffic congestion, or from indirect sources such as warehousing facilities that are located in a community or neighborhood.

In October 2004, Cal/EPA published its Environmental Justice Action Plan. In February 2005, the Cal/EPA Interagency Working Group approved a working definition of “cumulative impacts” for purposes of initially guiding the pilot projects that are being conducted pursuant to that plan. Cal/EPA is now in the process of developing a Cumulative Impacts Assessment Guidance document. Cal/EPA will revisit the working definition of “cumulative impacts” as the Agency develops that guidance. The following is the working definition:

“Cumulative impacts means exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable, and to the extent data are available.”

4. Mechanisms for Integrating Localized Air Quality Concerns Into Land Use Processes

Land use agencies should use each of their existing planning, zoning, and permitting authorities to address the potential health risk associated with new projects. Land use-specific mechanisms can go a long way toward addressing both localized and cumulative impacts from new air pollution sources that are not otherwise addressed by environmental regulations. Likewise, close collaboration and communication between land use agencies and local air districts in both the planning and project approval stages can further reduce these impacts. Local agency partnerships can also result in early identification of potential impacts from proposed activities that might otherwise escape environmental review. When this happens, pollution problems can be prevented or reduced before projects are approved, when it is less complex and expensive to mitigate.

The land use entitlement process requires a series of planning decisions. At the highest level, the General Plan sets the policies and direction for the jurisdiction, and includes a number of mandatory elements dealing with issues such as housing, circulation, and health hazards. Zoning is the primary tool for implementing land use policies. Specific or community plans created in conjunction with a specific project also perform many of the same functions as a zoning ordinance. Zoning can be modified by means of variances and conditional use permits. The latter are frequently used to insure compatibility between otherwise conflicting land uses. Finally, new development usually requires the approval of a parcel or tract map before grading and building permits can be issued. These parcel or tract maps must be consistent with the applicable General Plan, zoning and other standards.

Land use agencies can use their planning authority to separate industrial and residential land uses, or to require mitigation where separation is not feasible. By separating incompatible land uses, land use agencies can prevent or reduce both localized and cumulative air pollution impacts without denying what might otherwise be a desirable project.¹¹ For instance:

- a dry cleaner could open a storefront operation in a community with actual cleaning operations performed at a remote location away from residential areas;
- gas dispensing facilities with lower fuel throughput could be sited in mixed-use areas;
- enhanced building ventilation or filtering systems in schools or senior care centers can reduce ambient air from nearby busy arterials; or
- landscaping and regular watering can be used to reduce fugitive dust at a building construction site near a school yard.

¹¹ It should be noted that such actions should also be considered as part of the General Plan or Plan element process.

The following general and specific land use approaches can help to reduce potential adverse air pollution impacts that projects may have on public health.

General Plans

The primary purpose of planning, and the source of government authority to engage in planning, is to protect public health, safety, and welfare. In its most basic sense, a local government General Plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, forming the basis for most land use decisions. Therefore, the most effective mechanism for dealing with the central land use concept of compatibility and its relationship to cumulative air pollution impacts is the General Plan. Well before projects are proposed within a jurisdiction, the General Plan sets the stage for where projects can be sited, and their compatibility with comprehensive community goals, objectives, and policies.

In 2003, OPR revised its General Plan Guidelines, highlighting the importance of incorporating sustainable development and environmental justice policies in the planning process. The OPR General Plan Guidelines provides an effective and long-term approach to reduce cumulative air pollution impacts at the earliest planning stages. In light of these important additions to the Guidelines, land use agencies should consider updating their General Plans or Plan elements to address these revisions.

The General Plan and related Plan elements can be used to avoid incompatible land uses by incorporating air quality considerations into these documents. For instance, a General Plan safety element with an air quality component could be used to incorporate policies or objectives that are intended to protect the public from the potential for facility breakdowns that may result in a dangerous release of air toxics. Likewise, an air quality component to the transportation circulation element of the General Plan could include policies or standards to prevent or reduce local exposure to diesel exhaust from trucks and other vehicles. For instance, the transportation circulation element could encourage the construction of alternative routes away from residential areas for heavy-duty diesel trucks. By considering the relationship between air quality and transportation, the circulation element could also include air quality policies to prevent or reduce trips and travel, and thus vehicle emissions. Policies in the land use element of the General Plan could identify areas appropriate for future industrial, commercial, and residential uses. Such policies could also introduce design and distance parameters that reduce emissions, exposure, and risk from industrial and some commercial land uses (e.g., dry cleaners) that are in close proximity to residential areas or schools.

Land use agencies should also consider updating or creating an air quality element in the jurisdiction's General Plan. In the air quality element, local decision-makers could develop long-term, effective plans and policies to address

air quality issues, including cumulative impacts. The air quality element can also provide a general reference guide that informs local land use planners about regional and community level air quality, regulatory air pollution control requirements and guidelines, and references emissions and pollution source data bases and assessment and modeling tools. As is further described in Appendix C of the Handbook, new assessment tools that ARB is developing can be included into the air quality element by reference. For instance, ARB's statewide risk maps could be referenced in the air quality element as a resource that could be consulted by developers or land use agencies

Zoning

The purpose of "zoning" is to separate different land uses. Zoning ordinances establish development controls to ensure that private development takes place within a given area in a manner in which:

- All uses are compatible (e.g., an industrial plant is not permitted in a residential area);
- Common development standards are used (e.g., all homes in a given area are set back the same minimum distance from the street); and,
- Each development does not unreasonably impose a burden upon its neighbors (e.g., parking is required on site so as not to create neighborhood parking problems).

To do this, use districts called "zones" are established and standards are developed for these zones. The four basic zones are residential, commercial, industrial and institutional.

Land use agencies may wish to consider how zoning ordinances, particularly those for mixed-use areas, can be used to avoid exacerbating poor land use practices of the past or contributing to localized and cumulative air pollution impacts in the community.

Sometimes, especially in mixed-use zones, there is a potential for certain categories of existing businesses or industrial operations to result in cumulative air pollution impacts to new development projects. For example:

- An assisted living project is proposed for a mixed-use zone adjacent to an existing chrome plating facility, or several dry cleaners;
- Multiple industrial sources regulated by a local air district are located directly upwind of a new apartment complex;
- A new housing development is sited in a mixed-use zone that is downwind or adjacent to a distribution center that attracts diesel-fueled delivery trucks and TRUs; or
- A new housing development or sensitive land use is sited without adequate setbacks from an existing major transportation corridor or rail yard.

As part of the public process for making zoning changes, local land use agencies could work with community planning groups, local businesses, and community residents to determine how best to address existing incompatible land uses.

Land Use Permitting Processes

■ Questions to Consider When Reviewing New Projects

Very often, just knowing what questions to ask can yield critical information about the potential air pollution impacts of proposed projects – both from the perspective of a specific project as well as in the nature of existing air pollution sources in the same impact area. Available land use information can reveal the proximity of air pollution sources to sensitive individuals, the potential for incompatible land uses, and the location and nature of nearby air pollution sources. Air quality data, available from the ARB and local air districts, can provide information about the types and amounts of air pollution emitted in an area, regional air quality concentrations, and health risk estimates for specific sources.

General Plans and zoning maps are an excellent starting point in reviewing project proposals for their potential air pollution impacts. These documents contain information about existing or proposed land uses for a specific location as well as the surrounding area. Often, just looking at a map of the proposed location for a facility and its surrounding area will help to identify a potential adjacent incompatible land use.

The following pages are a “pull-out” list of questions to consider along with cross-references to pertinent information in the Handbook. These questions are intended to assist land use agencies in evaluating potential air quality-related concerns associated with new project proposals.

The first group of questions contains project-related queries designed to help identify the potential for localized project impacts, particularly associated with incompatible land uses. The second group of questions focuses on the issue of potential cumulative impacts by including questions about existing emissions and air quality in the community, and community feedback. Depending on the answers to these questions, a land use agency may decide a more detailed review of the proposal is warranted.

The California Department of Education has already developed a detailed process for school siting which is outlined in Appendix E. However, school districts may also find this section helpful when evaluating the most appropriate site for new schools in their area. At a minimum, using these questions may encourage school districts to engage throughout their siting process with land use agencies and local air districts. The combined expertise of these entities can be useful in devising relevant design standards and mitigation measures that can

reduce exposure to cumulative emissions, exposure, and health risk to students and school workers.

As indicated throughout the Handbook, we strongly encourage land use agencies to consult early and often with local air districts. Local air districts have the expertise, many of the analytical tools, and a working knowledge of the sources they regulate. It is also critical to fully involve the public and businesses that could be affected by the siting decision. The questions provided in the chart below do not imply any particular action should be taken by land use agencies. Rather the questions are intended to improve the assessment process and facilitate informed decision-making.

■ **Project-Related Questions**

This section includes project-related questions that, in conjunction with the questions in the next section, can be used to tailor the project evaluation. These questions are designed to help identify the potential for incompatible land uses from localized project impacts.

Questions to Consider When Reviewing New Projects

Project-Related Questions	Cross-Reference to Relevant Handbook Sections
<p>1. Is the proposed project:</p> <ul style="list-style-type: none"> ▲ A business or commercial license renewal ▲ A new or modified commercial project ▲ A new or modified industrial project ▲ A new or modified public facility project ▲ A new or modified transportation project ▲ A housing or other development in which sensitive individuals may live or play 	<p>See Appendix A for typical land use classifications and associated project categories that could emit air pollutants.</p>
<p>2. Does the proposed project:</p> <ul style="list-style-type: none"> ▲ Conform to the zoning designation? ▲ Require a variance to the zoning designation? ▲ Include plans to expand operations over the life of the business such that additional emissions may increase the pollution burden in the community (e.g., from additional truck operations, new industrial operations or process lines, increased hours of operation, build-out to the property line, etc.)? 	<p>See Appendix F for a general explanation of land use processes.</p> <p>In addition, Section 3 contains a discussion of how land use planning, zoning, and permitting practices can result in incompatible land uses or cumulative air pollution impacts.</p>
<p>3. Has the local air district provided comments or information to assist in the analysis?</p>	<p>See Section 5 and Appendix C for a description of air quality-related tools that the ARB and local air districts use to provide information on potential air pollution impacts.</p>
<p>4. Have public meetings been scheduled with the affected community to solicit their involvement in the decision-making process for the proposed project?</p>	<p>See Section 7 for a discussion of public participation, information and outreach tools.</p>
<p>5. If the proposed project will be subject to local air district regulations:</p> <ul style="list-style-type: none"> ▲ Has the project received a permit from the local air district? ▲ Would it comply with applicable local air district requirements? ▲ Is the local air district contemplating new regulations that would reduce emissions from the source over time? ▲ Will potential emissions from the project 	<p>See Appendix C for a description of local air district programs.</p>

Project-Related Questions	Cross-Reference to Relevant Handbook Sections
<p>trigger the local air district's new source review for criteria pollutants or air toxics emissions?</p> <ul style="list-style-type: none"> ▲ Is the local air district expected to ask the proposed project to perform a risk assessment? ▲ Is there sufficient new information or public concern to call for a more thorough environmental analysis of the proposed project? ▲ Are there plans to expand operations over time? ▲ Are there land-use based air quality significance thresholds or design standards that could be applied to this project in addition to applicable air district requirements? 	
<p>6. If the proposed project will release air pollution emissions, either directly or indirectly, but is not regulated by the local air district:</p> <ul style="list-style-type: none"> ▲ Is the local air district informed of the project? ▲ Does the local air district believe that there could be potential air pollution impacts associated with this project category because of the proximity of the project to sensitive individuals? ▲ If the project is one in which individuals live or play (e.g., a home, playground, convalescent home, etc.), does the local air district believe that the project's proximity to nearby sources could pose potential air pollution impacts? ▲ Are there indirect emissions that could be associated with the project (e.g., truck traffic or idling, transport refrigeration unit operations, stationary diesel engine operations, etc.) that will be in close proximity to sensitive individuals? ▲ Will the proposed project increase or serve as a magnet for diesel traffic? ▲ Are there land-use based air quality significance thresholds or design standards that could be applied to this project in addition to applicable air district requirements? ▲ Is there sufficient new information or public concern to call for a more thorough environmental analysis of the proposed project? ▲ Should the site approval process include identification and mitigation of potential 	<p>See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).</p>

Project-Related Questions	Cross-Reference to Relevant Handbook Sections
<p>direct or indirect emissions associated with the potential project?</p>	
<p>7. Does the local air district or land use agency have pertinent information on the source, such as:</p> <ul style="list-style-type: none"> ▲ Available permit and enforcement data, including for the owner or operator of the proposed source that may have other sources in the State. ▲ Proximity of the proposed project to sensitive individuals. ▲ Number of potentially exposed individuals from the proposed project. ▲ Potential for the proposed project to expose sensitive individuals to odor or other air pollution nuisances. ▲ Meteorology or the prevailing wind patterns between the proposed project and the nearest receptor, or between the proposed sensitive receptor project and sources that could pose a localized or cumulative air pollution impact. 	<p>See Appendix C for a description of local air district programs.</p> <p>See Appendix B for a listing of useful information that land use agencies should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts.</p> <p>Also, do not hesitate to contact your local air district regarding answers to any of these questions that might not be available at the land use agency.</p> <p>See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).</p>
<p>8. Based upon the project application, its location, and the nature of the source, could the proposed project:</p> <ul style="list-style-type: none"> ▲ Be a polluting source that is located in proximity to, or otherwise upwind, of a location where sensitive individuals live or play? ▲ Attract sensitive individuals and be located in proximity to or otherwise downwind, of a source or multiple sources of pollution, including polluting facilities or transportation-related sources that contribute emissions either directly or indirectly? ▲ Result in health risk to the surrounding community? 	<p>See Section 3 for a discussion of what is an incompatible land use and the potential cumulative air pollution impacts.</p> <p>See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).</p>
<p>9. If a CEQA categorical exemption is proposed, were the following questions considered:</p> <ul style="list-style-type: none"> ▲ Is the project site environmentally sensitive as defined by the project's location? (A project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.) ▲ Would the project and successive future projects of the same type in the approximate location potentially result in cumulative impacts? ▲ Are there "unusual circumstances" creating the possibility of significant effects? 	<p>See CEQA Guidelines section 15300, and Public Resources Code, section 21084.</p> <p>See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).</p> <p>See also Section 5 and Appendix C for a description of air quality-related tools that the ARB and local air districts use to provide information on potential air pollution impacts.</p>

■ **Questions Related to Cumulative Impact Assessment**

The following questions can be used to provide the decision-maker with a better understanding of the potential for cumulative air pollution impacts to an affected community. Answers to these questions will help to determine if new projects or activities warrant a more detailed review. It may also help to see potential environmental concerns from the perspective of the affected community. Additionally, responses can provide local decision-makers with information with which to assess the best policy options for addressing neighborhood-scale air pollution concerns.

The questions below can be used to identify whether existing tools and procedures are adequate to address land use-related air pollution issues. This process can also be used to pinpoint project characteristics that may have the greatest impact on community-level emissions, exposure, and risk. Such elements can include: the compliance record of existing sources including those owned or operated by the project proponent; the concentration of emissions from polluting sources within the approximate area of sensitive sites; transportation circulation in proximity to the proposed project; compatibility with the General Plan and General Plan elements; etc.

The local air district can provide useful assistance in the collection and evaluation of air quality-related information for some of the questions and should be consulted early in the process.

Questions Related to Cumulative Impact Assessment

Technical Questions	Cross-Reference to Relevant Handbook Sections
1. Is the community home to industrial facilities?	See Appendix A for typical land use classifications and associated project categories that could emit air pollutants.
2. Do one or more major freeways or high-traffic volume surface streets cut through the community?	See transportation circulation element of your general plan. See also Appendix B for useful information that land use agencies should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts. See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).
3. Is the area classified for mixed-use zoning?	See your general plan and zoning ordinances.
4. Is there an available list of air pollution sources in the community?	Contact your local air district.
5. Has a walk-through of the community been conducted to gather the following information:	See Appendix B for a listing of useful information that land use agencies

Technical Questions	Cross-Reference to Relevant Handbook Sections
<ul style="list-style-type: none"> ▲ Corroborate available information on land use activities in the area (e.g., businesses, housing developments, sensitive individuals, etc.)? ▲ Determine the proximity of existing and anticipated future projects to residential areas or sensitive individuals? ▲ Determine the concentration of emission sources (including anticipated future projects) to residential areas or sensitive individuals? 	<p>should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts. Also contact your local air district.</p>
<p>6. Has the local air district been contacted to obtain information on sources in the community?</p>	<p>See Section 7 for a discussion of public participation, information and outreach tools.</p>
<p>7. What categories of commercial establishments are currently located in the area and does the local air district have these sources on file as being regulated or permitted?</p>	<p>See Appendix A for typical land use classifications and associated project categories that could emit air pollutants. Also contact your local air district.</p>
<p>8. What categories of indirect sources such as distribution centers or warehouses are currently located in the area?</p>	<p>See Appendix A for typical land use classifications and associated project categories that emit air pollutants.</p>
<p>9. What air quality monitoring data are available?</p>	<p>Contact your local air district.</p>
<p>10. Have any risk assessments been performed on emission sources in the area?</p>	<p>Contact your local air district.</p>
<p>11. Does the land use agency have the capability of applying a GIS spatial mapping tool that can overlay zoning, sub-development information, and other neighborhood characteristics, with air pollution and transportation data?</p>	<p>See Appendix B for a listing of useful information that land use agencies should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts. Also contact your local air district for tools that can be used to supplement available land use agency tools.</p>
<p>12. Based on available information, is it possible to determine if the affected community or neighborhood experiences elevated health risk due to a concentration of air pollution sources in close proximity, and if not, can the necessary information be obtained?</p>	<p>Contact your local air district. Also see Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).</p>
<p>13. Does the community have a history of chronic complaints about air quality?</p>	<p>See Section 7 for a discussion of public participation, information and outreach tools. Also contact your local air district.</p>
<p>14. Is the affected community included in the public participation process for the agency's decision?</p>	<p>See Section 7 for a discussion of public participation, information and outreach tools.</p>
<p>15. Have community leaders or groups been contacted about any pre-existing or chronic community air quality concerns?</p>	<p>See Section 7 for a discussion of public participation, information and outreach tools. Also contact your local air district.</p>

■ **Mitigation Approaches**

In addition to considering the suitability of the project location, opportunities for mitigation of air pollution impacts should be considered. Sometimes, a land use agency may find that selection of a different project location to avoid a health risk is not feasible. When that happens, land use agencies should consider design improvements or other strategies that would reduce the risk. Such strategies could include performance or design standards, consultation with local air districts and other agencies on appropriate actions that these agencies should, or plan to, undertake, and consultation and outreach in the affected community. Potential mitigation measures should be feasible, cost-effective solutions within the available resources and authority of implementing agencies to enforce.¹²

■ **Conditional Use Permits and Performance Standards**

Some types of land uses are only allowed upon approval of a conditional use permit (also called a CUP or special use permit). A conditional use permit does not re-zone the land but specifies conditions under which a particular land use will be permitted. Such land uses could be those with potentially significant environmental impacts. Local zoning ordinances specify the uses for which a conditional use permit is required, the zones they may be allowed in, and public hearing procedures. The conditional use permit imposes special requirements to ensure that the use will not be detrimental to its surroundings.

In the context of land use planning, performance standards are requirements imposed on projects or project categories through conditional use permits to ensure compliance with general plan policies and local ordinances. These standards could apply to such project categories as distribution centers, very large gas dispensing facilities, autobody shops, dry cleaners, and metal platers. Land use agencies may wish to consider adding land use-based performance standards to zoning ordinances in existing mixed-use communities for certain air pollution project categories. Such standards would provide certainty and equitable treatment to all projects of a similar nature, and reserve the more resource intensive conditional or special use permits to projects that require a more detailed analysis. In developing project design or performance standards, land use agencies should consult with the local air district. Early and regular consultation can avoid duplication or inconsistency with local air district control requirements when considering the site-specific design and operation of a project.

¹² A land use agency has the authority to condition or deny a project based upon information collected and evaluated through the land use decision-making process. However, any denial would need to be based upon identifiable, generally applicable, articulated standards set forth in the local government's General Plan and zoning codes. One way of averting this is to conduct early and regular outreach to the community and the local air district so that community and environmental concerns can be addressed and accommodated into the project proposal.

Examples of land use-based air quality-specific performance standards include the following:

- Placing a process vent away from the direction of the local playground that is nearby or increasing the stack height so that emissions are dispersed to reduce the emissions impact on surrounding homes or schools.
- Setbacks between the project fence line and the population center.
- Limiting the hours of operation of a facility to avoid excess emissions exposure or foul odors to nearby individuals.
- An ordinance that requires fleet operators to use cleaner vehicles before project approval (if a new business), or when expanding the fleet (if an existing business); and
- Providing alternate routes for truck operations that discourage detours into residential neighborhoods.

Outreach to Other Agencies

When questions arise regarding the air quality impacts of projects, including potential cumulative impacts, land use agencies should consult the local air district. Land use agencies should also consider the following suggestions to avoid creating new incompatible land uses:

- Consult with the local air district to help determine if emissions from a particular project will adversely impact sensitive individuals in the area, if existing or future effective regulations or permit requirements will affect the proposed project or other sources in the vicinity of the proposed project, or if additional inspections should be required.
 - Check with ARB for new information and modeling tools that can help evaluate projects seeking to site within your jurisdiction.
 - Become familiar with ARB's Land Use-Air Quality Linkage Report to determine whether approaches and evaluation tools contained in the Report can be used to reduce transportation-related impacts on communities.
 - Contact and collaborate with other state agencies that play a role in the land use decision-making process, e.g., the State Department of Education, the California Energy Commission, and Caltrans. These agencies have information on mitigation measures and mapping tools that could be useful in addressing local problems.
- **Information Clearinghouse**
- Land use agencies can refer to the ARB statewide electronic information clearinghouse for information on what measures other jurisdictions are using to address comparable issues or sources.¹³

¹³ This information can be accessed from ARB's website by going to:
<http://www.arb.ca.gov/ch/clearinghouse.htm>

The next section addresses available air quality assessment tools that land use agencies can use to evaluate the potential for localized or cumulative impacts in their communities.

5. Available Tools to Evaluate Cumulative Air Pollution Emissions and Risk

Until recently, California has traditionally approached air pollution control from the perspective of assessing whether the pollution was regional, category-specific, or from new or existing sources. This methodology has been generally effective in reducing statewide and regional air pollution impacts and risk levels. However, such an incremental, category-by-category, source-by-source approach may not always address community health impacts from multiple sources - including mobile, industrial, and commercial facilities.

As a result of air toxics and children's health concerns over the past several years, ARB and local air districts have begun to develop new tools to evaluate and inform the public about cumulative air pollution impacts at the community level. One aspect of ARB's programs now underway is to consolidate and make accessible air toxics emissions and monitoring data by region, using modeling tools and other analytical techniques to take a preliminary look at emissions, exposure, and health risk in communities.

ARB has developed multiple tools to assist local air districts perform assessments of cumulative emissions, exposure, and risk on a neighborhood scale. These tools include:

- Regional risk maps that show trends in potential cancer risk from toxic air pollutants in southern and central California between 1990 and 2010. These maps are based on the U.S. EPA's ASPEN model. These maps provide an estimate of background levels of toxic air pollutant risk but are not detailed enough to assess individual neighborhoods or facilities.¹⁴
- The Community Health Air Pollution Information System (CHAPIS) is a user-friendly, Internet-based system for displaying information on emissions from sources of air pollution in an easy to use mapping format. CHAPIS contains information on air pollution emissions from selected large facilities and small businesses that emit criteria and toxic air pollutants. It also contains information on air pollution emissions from motor vehicles. When released in 2004, CHAPIS did not contain information on every source of air pollution or every air pollutant. However, ARB continues to work with local air districts to include all of the largest air pollution sources and those with the highest documented air pollution risk. Additional facilities will be added to CHAPIS as more data become available.¹⁵

¹⁴ For further information on these maps, please visit ARB's website at:

<http://www.arb.ca.gov/toxics/cti/hlthrisk/hlthrisk.htm>

¹⁵ For further information on CHAPIS, please click on:

<http://www.arb.ca.gov/ch/chapis1/chapis1.htm>

- The Hot Spots Analysis and Reporting Program (HARP) is a software database package that evaluates emissions from one or more facilities to determine the overall health risk posed by the facility(-ies) on the surrounding community. Proper use of HARP ensures that the risk assessment meets the latest risk assessment guidelines published by the State Office of Environmental Health Hazard Assessment (OEHHA). HARP is designed with air quality professionals in mind and is available from the ARB.
- The Urban Emissions Model (URBEMIS) is a computer program that can be used to estimate emissions associated with land development projects in California such as residential neighborhoods, shopping centers, office buildings, and construction projects. URBEMIS uses emission factors available from the ARB to estimate vehicle emissions associated with new land uses.

Local air districts, and others can use these tools to assess a new project, or plan revision. For example, these tools can be used to:

- Identify if there are multiple sources of air pollution in the community;
- Identify the major sources of air pollution in the area under consideration;
- Identify the background potential cancer risk from toxic air pollution in the area under consideration;
- Estimate the risk from a new facility and how it adds to the overall risk from other nearby facilities; and
- Provide information to decision-makers and key stakeholders on whether there may be significant issues related to cumulative emissions, exposure, and health risk due to a permitting or land use decision.

If an air agency wishes to perform a cumulative air pollution impact analysis using any of these tools, it should consult with the ARB and/or the local air district to obtain information or assistance on the data inputs and procedures necessary to operate the program. In addition, land use agencies could consult with local air districts to determine the availability of land use and air pollution data for entry into an electronic Geographical Information System (GIS) format. GIS is an easier mapping tool than the more sophisticated models described in Appendix C. GIS mapping makes it possible to superimpose land use with air pollution information so that the spatial relationship between air pollution sources, sensitive receptors, and air quality can be visually represented. Appendix C provides a general description of the impact assessment process and micro-scale, or community level modeling tools that are available to evaluate potential cumulative air pollution impacts. Modeling protocols will be accessible on ARB's website as they become available. The ARB will also provide land use agencies and local air districts with statewide regional modeling results and information regarding micro-scale modeling.

6. ARB Programs to Reduce Air Pollution in Communities

ARB's regulatory programs reduce air pollutant emissions through statewide strategies that improve public health in all California communities. ARB's overall program addresses motor vehicles, consumer products, air toxics, air-quality planning, research, education, enforcement, and air monitoring. Community health and environmental justice concerns are a consideration in all these programs. ARB's programs are statewide but recognize that extra efforts may be needed in some communities due to historical mixed land-use patterns, limited participation in public processes in the past, and a greater concentration of air pollution sources in some communities.

ARB's strategies are intended to result in better air quality and reduced health risk to residents throughout California. The ARB's priority is to prevent or reduce the public's exposure to air pollution, including from toxic air contaminants that pose the greatest risk, particularly to infants and children who are more vulnerable to air pollution.

In October 2003, ARB updated its statewide control strategy to reduce emissions from source categories within its regulatory authority. A primary focus of the strategy is to achieve federal and state air quality standards for ozone and particulate matter throughout California, and to reduce health risk from diesel PM. Along with local air districts, ARB will continue to address air toxics emissions from regulated sources (see Table 6-1 for a summary of ARB activities). As indicated earlier, ARB will also provide analytical tools and information to land use agencies and local air districts to help assess and mitigate cumulative air pollution impacts.

The ARB will continue to consider the adoption of or revisions to needed air toxics control measures as part of the state's ongoing air toxics assessment program.¹⁶

As part of its effort to reduce particulate matter and air toxics emissions from diesel PM, the ARB has developed a Diesel Risk Reduction Program¹⁷ that lays out several strategies in a three-pronged approach to reduce emissions and their associated risk:

- Stringent emission standards for all new diesel-fueled engines;
- Aggressive reductions from in-use engines; and
- Low sulfur fuel that will reduce PM and still provide the quality of diesel fuel needed to control diesel PM.

¹⁶ For continuing information and updates on state measures, the reader can refer to ARB's website at <http://www.arb.ca.gov/toxics/toxics.htm>.

¹⁷ For a comprehensive description of the program, please refer to ARB's website at <http://www.arb.ca.gov/diesel/dieselrrp.htm>.

Table 6-1
ARB ACTIONS TO ADDRESS
CUMULATIVE AIR POLLUTION IMPACTS IN COMMUNITIES

Information Collection

- Improve emission inventories, air monitoring data, and analysis tools that can help to identify areas with high cumulative air pollution impacts
- Conduct studies in coordination with OEHHA on the potential for cancer and non-cancer health effects from air pollutants emitted by specific source categories
- Establish web-based clearinghouse for local land use strategies

Emission Reduction Approaches (2004-2006)*

- Through a public process, consider development and/or amendment of regulations and related guidance to reduce emissions, exposure, and health risk at a statewide and local level for the following sources:
 - Diesel PM sources such as stationary diesel engines, transport refrigeration units, portable diesel engines, on-road public fleets, off-road public fleets, heavy-duty diesel truck idling, harbor craft vessels, waste haulers
 - Other air toxics sources, such as formaldehyde in composite wood products, hexavalent chromium for chrome plating and chromic acid anodizing, thermal spraying, and perchloroethylene dry cleaning
- Develop technical information for the following:
 - Distribution centers
 - Modeling tools such as HARP and CHAPIS
- Adopt rules and pollution prevention initiatives within legal authority to reduce emissions from mobile sources and fuels, and consumer products
- Develop and maintain Air Quality Handbook as a tool for use by land use agencies and local air districts to address cumulative air pollution impacts

Other Approaches

- Establish guidelines for use of statewide incentive funding for high priority mobile source emission reduction projects

*Because ARB will continue to review the need to adopt or revise statewide measures, the information contained in this chart will be updated on an ongoing basis.

A number of ARB's diesel risk reduction strategies have been adopted. These include measures to reduce emissions from refuse haulers, urban buses, transport refrigeration units, stationary and portable diesel engines, and idling trucks and school buses. These sources are all important from a community perspective.¹⁸

¹⁸ The reader can refer to ARB's website for information on its mobile source-related programs at: <http://www.arb.ca.gov/msprog/msprog.htm>, as well as regulations adopted and under consideration as part of the Diesel Risk Reduction Program at: <http://www.arb.ca.gov/diesel/dieselrrp.htm>

The ARB will continue to evaluate the health effects of air pollutants while implementing programs with local air districts to reduce air pollution in all California communities.

Local air districts also have ambitious programs to reduce criteria pollutants and air toxics from regulated sources in their region. Many of these programs also benefit air quality in local communities as well as in the broader region. For more information on what is being done in your area to reduce cumulative air pollution impacts through air pollution control programs, you should contact your local air district.¹⁹

¹⁹ Local air district contacts can be found on the inside cover to this Handbook.

7. Ways to Enhance Meaningful Public Participation

Community involvement is an important part of the land use process. The public is entitled to the best possible information about the air they breathe and what is being done to prevent or reduce unhealthy air pollution in their communities. In particular, information on how land use decisions can affect air pollution and public health should be made accessible to all communities, including low-income and minority communities.

Effective community participation consistently relies on a two-way flow of information – from public agencies to community members about opportunities, constraints, and impacts, and from community members back to public officials about needs, priorities, and preferences. The outreach process needed to build understanding and local neighborhood involvement requires data, methodologies, and formats tailored to the needs of the specific community. More importantly, it requires the strong collaboration of local government agencies that review and approve projects and land uses to improve the physical and environmental surroundings of the local community.

Many land use agencies, especially those in major metropolitan areas, are familiar with, and have a long-established public review process. Nevertheless, public outreach can often be improved. Active public involvement requires engaging the public in ways that do not require their previous interest in or knowledge of the land use or air pollution control requirements, and a commitment to taking action where appropriate to address the concerns that are raised.

■ Direct Community Outreach

In conjunction with local air districts, land use agencies should consider designing an outreach program for community groups, other stakeholders, and local government agency staffs that address the problem of cumulative air pollution impacts, and the public and government role in reducing them. Such a program could consider analytical tools that assist in the preparation and presentation of information in a way that supports sensible decision-making and public involvement. Table 7-1 contains some general outreach approaches that might be considered.

**Table 7-1
Public Participation Approaches**

- Staff and community leadership awareness training on environmental justice programs and community-based issues
- Surveys to identify the website information needs of interested community-based organizations and other stakeholders
- Information materials on local land use and air district authorities
- Community-based councils to facilitate and invite resident participation in the planning process
- Neighborhood CEQA scoping sessions that allows for community input prior to technical analysis
- Public information materials on siting issues are under review including materials written for the affected community, and in different media that widens accessibility
- Public meetings
- Identify other opportunities to include community-based organizations in the process

To improve outreach, local land use agencies should consider the following activities:

- Hold meetings in communities affected by agency programs, policies, and projects at times and in places that encourage public participation, such as evenings and weekends at centrally located community meeting rooms, libraries, and schools.
- Assess the need for and provide translation services at public meetings.
- Hold community meetings to update residents on the results of any special air monitoring programs conducted in their neighborhood.
- Hold community meetings to discuss and evaluate the various options to address cumulative impacts in their community.
- In coordination with local air districts, make staff available to attend meetings of community organizations and neighborhood groups to listen to and, where appropriate, act upon community concerns.
- Establish a specific contact person for environmental justice issues.
- Increase student and community awareness of local government land use activities and policies through outreach opportunities.
- Make air quality and land use information available to communities in an easily understood and useful format, including fact sheets, mailings, brochures, public service announcements, and web pages, in English and other languages.
- On the local government web-site, dedicate a page or section to what the land use program is doing regarding environmental justice and cumulative environmental impacts, and, as applicable, activities conducted with local air districts such as neighborhood air monitoring studies, pollution prevention, air pollution sources in neighborhoods, and risk reduction.

- Allow, encourage, and promote community access to land use activities, including public meetings, General Plan or Community Plan updates, zoning changes, special studies, CEQA reviews, variances, etc.
 - Distribute information in multiple languages, as needed, on how to contact the land use agency or local air district to obtain information and assistance regarding environmental justice programs, including how to participate in public processes.
 - Create and distribute a simple, easy-to-read, and understandable public participation handbook, which may be based on the “Public Participation Guidebook” developed by ARB.
- **Other Opportunities for Meaningful Public Outreach**
- Community-Based Planning Committees

Neighborhood-based or community planning advisory councils could be established to invite and facilitate direct resident participation into the planning process. With the right training and technical assistance, such councils can provide valuable input and a forum for the review of proposed amendments to plans, zone changes, land use permits, and suggestions as to how best to prevent or reduce cumulative air pollution impacts in their community.

- Regional Partnerships

Consider creating regional coalitions of key growth-related organizations from both the private and public sectors, with corporations, communities, other jurisdictions, and government agencies. Such partnerships could facilitate agreement on common goals and win-win solutions tailored specifically for the region. With this kind of dialogue, shared vision, and collaboration, barriers can be overcome and locally acceptable sustainable solutions implemented. Over the long term, such strategies will help to bring about clean air in communities as well as regionally.

**LAND USE CLASSIFICATIONS AND ASSOCIATED FACILITY CATEGORIES
THAT COULD EMIT AIR POLLUTANTS**

(1) Land Use Classifications – by Activity ⁱ	(2) Facility or Project Examples	(3) Key Pollutants ^{ii,iii}	(4) Air Pollution Permits ^{iv}
COMMERCIAL/ LIGHT INDUSTRIAL: SHOPPING, BUSINESS, AND COMMERCIAL			
▲ Primarily retail shops and stores, office, commercial activities, and light industrial or small business	Dry cleaners; drive-through restaurants; gas dispensing facilities; auto body shops; metal plating shops; photographic processing shops; textiles; apparel and furniture upholstery; leather and leather products; appliance repair shops; mechanical assembly cleaning; printing shops	VOCs, air toxics, including diesel PM, NOx, CO, SOx	Limited; Rules for applicable equipment
▲ Goods storage or handling activities, characterized by loading and unloading goods at warehouses, large storage structures, movement of goods, shipping, and trucking.	Warehousing; freight-forwarding centers; drop-off and loading areas; distribution centers	VOCs, air toxics, including diesel PM, NOx, CO, SOx	No ^v
LIGHT INDUSTRIAL: RESEARCH AND DEVELOPMENT			
▲ Medical waste at research hospitals and labs	Incineration; surgical and medical instrument manufacturers, pharmaceutical manufacturing, biotech research facilities	Air toxics, NOx, CO, SOx	Yes
▲ Electronics, electrical apparatus, components, and accessories	Computer manufacturer; integrated circuit board manufacturer; semiconductor production	Air toxics, VOCs	Yes
▲ College or university lab or research center	Medical waste incinerators; lab chemicals handling, storage and disposal	Air toxics, NOx, CO, SOx, PM10	Yes
▲ Research and development labs	Satellite manufacturer; fiber-optics manufacturer; defense contractors; space research and technology; new vehicle and fuel testing labs	Air toxics, VOCs	Yes
▲ Commercial testing labs	Consumer products; chemical handling, storage and disposal	Air toxics, VOCs	Yes

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(1) Land Use Classifications – by Activity ⁱ	(2) Facility or Project Examples	(3) Key Pollutants ^{ii,iii}	(4) Air Pollution Permits ^{iv}
INDUSTRIAL: NON-ENERGY-RELATED			
▲ Assembly plants, manufacturing facilities, industrial machinery	Adhesives; chemical; textiles; apparel and furniture upholstery; clay, glass, and stone products production; asphalt materials; cement manufacturers, wood products; paperboard containers and boxes; metal plating; metal and canned food product fabrication; auto manufacturing; food processing; printing and publishing; drug, vitamins, and pharmaceuticals; dyes; paints; pesticides; photographic chemicals; polish and wax; consumer products; metal and mineral smelters and foundries; fiberboard; floor tile and cover; wood and metal furniture and fixtures; leather and leather products; general industrial and metalworking machinery; musical instruments; office supplies; rubber products and plastics production; saw mills; solvent recycling; shingle and siding; surface coatings	VOCs, air toxics, including diesel PM, NOx, PM, CO, SOx	Yes
INDUSTRIAL: ENERGY AND UTILITIES			
▲ Water and sewer operations	Pumping stations; air vents; treatment	VOCs, air toxics, NOx, CO, SOx, PM10	Yes
▲ Power generation and distribution	Power plant boilers and heaters; portable diesel engines; gas turbine engines	NOx, diesel PM, NOx, CO, SOx, PM10, VOCs	Yes
▲ Refinery operations	Refinery boilers and heaters; coke cracking units; valves and flanges; flares	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	Yes
▲ Oil and gas extraction	Oil recovery systems; uncovered wells	NOx, diesel PM, VOCs, CO, SOx, PM10	Yes
▲ Gasoline storage, transmission, and marketing	Above and below ground storage tanks; floating roof tanks; tank farms; pipelines	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	Yes
▲ Solid and hazardous waste treatment, storage, and disposal activities.	Landfills; methane digester systems; process recycling facility for concrete and asphalt materials	VOCs, air toxics, NOx, CO, SOx, PM10	Yes
CONSTRUCTION (NON-TRANSPORTATION)			
	Building construction; demolition sites	PM (re-entrained road dust), asbestos, diesel PM, NOx, CO, SOx, PM10, VOCs	Limited; state and federal off-road equipment standards

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(1) Land Use Classifications – by Activity ⁱ	(2) Facility or Project Examples	(3) Key Pollutants ^{ii,iii}	(4) Air Pollution Permits ^{iv}
DEFENSE			
	Ordnance and explosives demolition; range and testing activities; chemical production; degreasing; surface coatings; vehicle refueling; vehicle and engine operations and maintenance	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	Limited; prescribed burning; equipment and solvent rules
TRANSPORTATION			
▲ Vehicular movement	Residential area circulation systems; parking and idling at parking structures; drive-through establishments; car washes; special events; schools; shopping malls, etc.	VOCs, NOx, PM (re-entrained road dust) air toxics e.g., benzene, diesel PM, formaldehyde, acetaldehyde, 1,3 butadiene, CO, SOx, PM10	No
▲ Road construction and surfacing	Street paving and repair; new highway construction and expansion	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	No
▲ Trains	Railroads; switch yards; maintenance yards		
▲ Marine and port activities	Recreational sailing; commercial marine operations; hotelling operations; loading and un-loading; servicing; shipping operations; port or marina expansion; truck idling	VOCs, NOx, CO, SOx, PM10, air toxics, including diesel PM	Limited; Applicable state and federal MV standards, and possible equipment rules
▲ Aircraft	Takeoff, landing, and taxiing; aircraft maintenance; ground support activities		
▲ Mass transit and school buses	Bus repair and maintenance		
NATURAL RESOURCES			
▲ Farming operations	Agricultural burning; diesel operated engines and heaters; small food processors; pesticide application; agricultural off-road equipment	Diesel PM, VOCs, NOx, PM10, CO, SOx, pesticides	Limited ^{vi} ; Agricultural burning requirements, applicable state and federal mobile source standards; pesticide rules
▲ Livestock and dairy operations	Dairies and feed lots	Ammonia, VOCs, PM10	Yes ^{vii}
▲ Logging	Off-road equipment e.g., diesel fueled chippers, brush hackers, etc.	Diesel PM, NOx, CO, SOx, PM10, VOCs	Limited; Applicable state/federal mobile source standards
▲ Mining operations	Quarrying or stone cutting; mining; drilling or dredging	PM10, CO, SOx, VOCs, NOx, and asbestos in some geographical areas	Applicable equipment rules and dust controls

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(1) Land Use Classifications – by Activity ⁱ	(2) Facility or Project Examples	(3) Key Pollutants ^{ii,iii}	(4) Air Pollution Permits ^{iv}
RESIDENTIAL			
Housing	Housing developments; retirement developments; affordable housing	Fireplace emissions (PM10, NOx, VOCs, CO, air toxics); Water heater combustion (NOx, VOCs, CO)	No ^{vii}
ACADEMIC AND INSTITUTIONAL			
▲ Schools, including school-related recreational activities	Schools; school yards; vocational training labs/classrooms such as auto repair/painting and aviation mechanics	Air toxics	Yes/No ^{viii}
▲ Medical waste	Incineration	Air toxics, NOx, CO, PM10	Yes
▲ Clinics, hospitals, convalescent homes		Air toxics	Yes

ⁱ These classifications were adapted from the American Planning Association's "Land Based Classification Standards." The Standards provide a consistent model for classifying land uses based on their characteristics. The model classifies land uses by refining traditional categories into multiple dimensions, such as activities, functions, building types, site development character, and ownership constraints. Each dimension has its own set of categories and subcategories. These multiple dimensions allow users to have precise control over land-use classifications. For more information, the reader should refer to the Association's website at <http://www.planning.org/LBCS/GeneralInfo/>.

ⁱⁱ This column includes key criteria pollutants and air toxic contaminants that are most typically associated with the identified source categories.

Additional information on specific air toxics that are attributed to facility categories can be found in ARB's Emission Inventory Criteria and Guidelines Report for the Air Toxics Hot Spots Program (May 15, 1997). This information can be viewed at ARB's web site at <http://www.arb.ca.gov/ab2588/final96/guide96.pdf>.

Criteria air pollutants are those air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Criteria pollutants include ozone (formed by the reaction of volatile organic compounds and nitrogen oxides in the presence of sunlight), particulate matter, nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead.

Volatile organic compounds (VOCs) combine with nitrogen oxides to form ozone, as well as particulate matter. VOC emissions result primarily from incomplete fuel combustion and the evaporation of chemical solvents and fuels. On-road mobile sources are the largest contributors to statewide VOC emissions. Stationary sources of VOC emissions include processes that use solvents (such as dry-cleaning, degreasing, and coating operations) and petroleum-related processes (such as petroleum refining, gasoline marketing and dispensing, and oil and gas extraction). Areawide VOC sources include consumer products, pesticides, aerosols and paints, asphalt paving and roofing, and other evaporative emissions.

Nitrogen oxides (NOx) are a group of gaseous compounds of nitrogen and oxygen, many of which contribute to the formation of ozone and particulate matter. Most NOx emissions are produced by the combustion of fuels. Mobile sources make up about 80 percent of the total statewide NOx emissions. Mobile sources include on-road vehicles and trucks, aircraft, trains, ships, recreational boats, industrial and construction equipment, farm

equipment, off-road recreational vehicles, and other equipment. Stationary sources of NO_x include both internal and external combustion processes in industries such as manufacturing, food processing, electric utilities, and petroleum refining. Areawide source, which include residential fuel combustion, waste burning, and fires, contribute only a small portion of the total statewide NO_x emissions, but depending on the community, may contribute to a cumulative air pollution impact.

Particulate matter (PM) refers to particles small enough to be breathed into the lungs (under 10 microns in size). It is not a single substance, but a mixture of a number of highly diverse types of particles and liquid droplets. It can be formed directly, primarily as dust from vehicle travel on paved and unpaved roads, agricultural operations, construction and demolition.

Carbon monoxide (CO) is a colorless and odorless gas that is directly emitted as a by-product of combustion. The highest concentrations are generally associated with cold stagnant weather conditions that occur during winter. CO problems tend to be localized.

An Air Toxic Contaminant (air toxic) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. Similar to criteria pollutants, air toxics are emitted from stationary, areawide, and mobile sources. They contribute to elevated regional and localized risks near industrial and commercial facilities and busy roadways. The ten compounds that pose the greatest statewide risk are: acetaldehyde; benzene; 1,3-butadiene; carbon tetrachloride; diesel particulate matter (diesel PM); formaldehyde; hexavalent chromium; methylene chloride; para-dichlorobenzene; and perchloroethylene. The risk from diesel PM is by far the largest, representing about 70 percent of the known statewide cancer risk from outdoor air toxics. The exhaust from diesel-fueled engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. Diesel PM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute about 26 percent of statewide diesel PM emissions, with an additional 72 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and other equipment. Stationary engines in shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations contribute about two percent of statewide emissions. However, when this number is disaggregated to a sub-regional scale such as neighborhoods, the risk factor can be far greater.

ⁱⁱⁱ The level of pollution emitted is a major determinant of the significance of the impact.

^{iv} Indicates whether facility activities listed in column 4 are generally subject to local air district permits to operate. This does not include regulated products such as solvents and degreasers that may be used by sources that may not require an operating permit per se, e.g., a gas station or dry cleaner.

^v Generally speaking, warehousing or distribution centers are not subject to local air district permits. However, depending on the district, motor vehicle fleet rules may apply to trucks or off-road vehicles operated and maintained by the facility operator. Additionally, emergency generators or internal combustion engines operated on the site may require an operating permit.

^{vi} Authorized by recent legislation SB700.

^{vii} Local air districts do not require permits for woodburning fireplaces inside private homes. However, some local air districts and land use agencies do have rules or ordinances that require new housing developments or home re-sales to install U.S. EPA –certified stoves. Some local air districts also ban residential woodburning during weather inversions that concentrate smoke in residential areas. Likewise, home water heaters are not subject to permits; however, new heaters could be subject to emission limits that are imposed by federal or local agency regulations.

^{viii} Technical training schools that conduct activities normally permitted by a local air district could be subject to an air permit.

**LAND USE-BASED REFERENCE TOOLS TO EVALUATE
NEW PROJECTS FOR POTENTIAL AIR POLLUTION IMPACTS**

Land use agencies generally have a variety of tools and approaches at hand, or accessible from local air districts that can be useful in performing an analysis of potential air pollution impacts associated with new projects. These tools and approaches include:

- Base map of the city or county planning area and terrain elevations.
- General Plan designations of land use (existing and proposed).
- Zoning maps.
- Land use maps that identify existing land uses, including the location of facilities that are permitted or otherwise regulated by the local air district. Land use agencies should consult with their local air district for information on regulated facilities.
- Demographic data, e.g., population location and density, distribution of population by income, distribution of population by ethnicity, and distribution of population by age. The use of population data is a normal part of the planning process. However, from an air quality perspective, socioeconomic data is useful to identify potential community health and environmental justice issues.
- Emissions, monitoring, and risk-based maps created by the ARB or local air districts that show air pollution-related health risk by community across the state.
- Location of public facilities that enhance community quality of life, including parks, community centers, and open space.
- Location of industrial and commercial facilities and other land uses that use hazardous materials, or emit air pollutants. These include chemical storage facilities, hazardous waste disposal sites, dry cleaners, large gas dispensing facilities, auto body shops, and metal plating and finishing shops.
- Location of sources or facility types that result in diesel on-road and off-road emissions, e.g., stationary diesel power generators, forklifts, cranes, construction equipment, on-road vehicle idling, and operation of transportation refrigeration units. Distribution centers, marine terminals and ports, rail yards, large industrial facilities, and facilities that handle bulk goods are all examples of complex facilities where these types of emission sources are frequently concentrated.¹ Very large facilities, such as ports, marine terminals, and airports, could be analyzed regardless of proximity to a receptor if they are within the modeling area.
- Location and zoning designations for existing and proposed schools, buildings, or outdoor areas where sensitive individuals may live or play.
- Location and density of existing and proposed residential development.
- Zoning requirements, property setbacks, traffic flow requirements, and idling restrictions for trucks, trains, yard hostlers², construction equipment, or school buses.
- Traffic counts (including diesel truck traffic counts), within a community to validate or augment existing regional motor vehicle trip and speed data.

¹ The ARB is currently evaluating the types of facilities that may act as complex point sources and developing methods to identify them.

² Yard hostler means a tractor less than 300 horsepower that is used to transfer semi-truck or tractor-trailer containers in and around storage, transfer, or distribution yards or areas and is often equipped with a hydraulic lifting fifth wheel for connection to trailer containers.

**ARB AND LOCAL AIR DISTRICT INFORMATION AND TOOLS
CONCERNING CUMULATIVE AIR POLLUTION IMPACTS**

It is the ARB's policy to support research and data collection activities toward the goal of reducing cumulative air pollution impacts. These efforts include updating and improving the air toxics emissions inventory, performing special air monitoring studies in specific communities, and conducting a more complete assessment of non-cancer health effects associated with air toxics and criteria pollutants.¹ This information is important because it helps us better understand links between air pollution and the health of sensitive individuals -- children, the elderly, and those with pre-existing serious health problems affected by air quality.

ARB is working with CAPCOA and OEHHA to improve air pollutant data and evaluation tools to determine when and where cumulative air pollution impacts may be a problem. The following provides additional information on this effort.

How are emissions assessed?

Detailed information about the sources of air pollution in an area is collected and maintained by local air districts and the ARB in what is called an emission inventory. Emission inventories contain information about the nature of the business, the location, type and amount of air pollution emitted, the air pollution-producing processes, the type of air pollution control equipment, operating hours, and seasonal variations in activity. Local districts collect emission inventory data for most stationary source categories.

Local air districts collect air pollution emission information directly from facilities and businesses that are required to obtain an air pollution operating permit. Local air districts use this information to compile an emission inventory for areas within their jurisdiction. The ARB compiles a statewide emission inventory based on the information collected by the ARB and local air districts. Local air districts provide most of the stationary source emission data, and ARB provides mobile source emissions as well as some areawide emission sources such as consumer products and paints. ARB is also developing map-based tools that will display information on air pollution sources.

Criteria pollutant data have been collected since the early 1970's, and toxic pollutant inventories began to be developed in the mid-1980's.

¹ A criteria pollutant is any air pollutant for which EPA has established a National Ambient Air Quality Standard or for which California has established a State Ambient Air Quality Standard, including: carbon monoxide, lead, nitrogen oxides, ozone, particulates and sulfur oxides. Criteria pollutants are measured in each of California's air basins to determine whether the area meets or does not meet specific federal or state air quality standards. Air toxics or air toxic contaminants are listed pollutants recognized by California or EPA as posing a potential risk to health.

How is the toxic emission inventory developed?

Emissions data for toxic air pollutants is a high priority for communities because of concerns about potential health effects. Most of ARB's air toxics data is collected through the toxic "Hot Spots" program. Local air districts collect emissions data from industrial and commercial facilities. Facilities that exceed health-based thresholds are required to report their air toxics emissions as part of the toxic "Hot Spots" program and update their emissions data every four years. Facilities are required to report their air toxics emissions data if there is an increase that would trigger the reporting threshold of the hotspots program. Air toxics emissions from motor vehicles and consumer products are estimated by the ARB. These estimates are generally regional in nature, reflecting traffic and population.

The ARB also maintains chemical speciation profiles that can be used to estimate toxics emissions when no toxic emissions data is available.

What additional toxic emissions information is needed?

In order to assess cumulative air pollution impacts, updated information from individual facilities is needed. Even for sources where emissions data are available, additional information such as the location of emissions release points is often needed to better model cumulative impacts. In terms of motor vehicles, emissions data are currently based on traffic models that only contain major roads and freeways. Local traffic data are needed so that traffic emissions can be more accurately assigned to specific streets and roads. Local information is also needed for off-road emission sources, such as ships, trains, and construction equipment. In addition, hourly maximum emissions data are needed for assessing acute air pollution impacts.

What work is underway?

ARB is working with CAPCOA to improve toxic emissions data, developing a community health air pollution information system to improve access to emission information, conducting neighborhood assessment studies to better understand toxic emission sources, and conducting surveys of sources of toxic pollutants.

How is air pollution monitored?

While emissions data identify how much air pollution is going into the air, the state's air quality monitoring network measures air pollutant levels in outdoor air. The statewide air monitoring network is primarily designed to measure regional exposure to air pollutants, and consists of more than 250 air monitoring sites.

The air toxics monitoring network consists of approximately 20 permanent sites. These sites are supplemented by special monitoring studies conducted by ARB and local air districts. These sites measure approximately sixty toxic air pollutants. Diesel PM, which is the major driver of urban air toxic risk, is not monitored directly. Ten of the

60 toxic pollutants, not including diesel, account for most of the remaining potential cancer risk in California urban areas.

What additional monitoring has been done?

Recently, additional monitoring has been done to look at air quality at the community level. ARB's community monitoring was conducted in six communities located throughout the state. Most sites were in low-income, minority communities located near major sources of air pollution, such as refineries or freeways. The monitoring took place for a year or more in each community, and included measurements of both criteria and toxic pollutants.

What is being learned from community monitoring?

In some cases, the ARB or local air districts have performed air quality monitoring or modeling studies covering a particular region of the state. When available, these studies can give information about regional air pollution exposures.

The preliminary results of ARB's community monitoring are providing insights into air pollution at the community level. Urban background levels are a major contributor to the overall risk from air toxics in urban areas, and this urban background tends to mask the differences between communities. When localized elevated air pollutant levels were measured, they were usually associated with local ground-level sources of toxic pollutants. The most common source of this type was busy streets and freeways. The impact these ground-level sources had on local air quality decreased rapidly with distance from the source. Pollutant levels usually returned to urban background levels within a few hundred meters of the source.

These results indicate that tools to assess cumulative impacts must be able to account for both localized, near-source impacts, as well as regional background air pollution. The tools that ARB is developing for this purpose are air quality models.

How can air quality modeling be used?

While air monitoring can directly measure cumulative exposure to air pollution, it is limited because all locations cannot be monitored. To address this, air quality modeling provides the capability to estimate exposure when air monitoring is not feasible. Air quality modeling can be refined to assess local exposure, identify locations of potential hot spots, and identify the relative contribution of emission sources to exposure at specific locations. The ARB has used this type of information to develop regional cumulative risk maps that estimate the cumulative cancer air pollution risk for most of California. While these maps only show one air pollution-related health risk, it does provide a useful starting point.

What is needed for community modeling?

Air quality models have been developed to assess near-source impacts, but they have very exacting data requirements. These near-source models estimate the impact of local sources, but do not routinely include the contribution from regional air pollution background. To estimate cumulative air pollution exposure at a neighborhood scale, a modeling approach needs to combine features of both micro-scale and regional models.

In addition, improved methods are needed to assess near-source impacts under light and variable wind conditions, when high local concentrations are more likely to occur. A method for modeling long-term exposure to air pollutants near freeways and other high traffic areas is also needed.

What modeling work has ARB developed?

A key component of ARB's Community Health Program is the Neighborhood Assessment Program (NAP). As described later in this section, the NAP studies are being conducted to better understand pollution impacts at the community level. Through two such studies conducted in Barrio Logan (San Diego) and Wilmington (Los Angeles), ARB is refining community-level modeling methodologies. Regional air toxics modeling is also being performed to better understand regional air pollution background levels.

In a parallel effort, ARB is developing modeling protocols for estimating cumulative emissions, exposure, and risk from air pollution. The protocols will cover modeling approaches and uncertainties, procedures for running the models, the development of statewide risk maps, and methods for estimating health risks. The protocols are subject to an extensive peer review process prior to release.

How are air pollution impacts on community health assessed?

On a statewide basis, ARB's toxic air contaminant program identifies and reduces public exposure to air toxics. The focus of the program has been on reducing potential cancer risk, because monitoring results show potential urban cancer risk levels are too high. ARB has also looked for potential non-cancer risks based on health reference levels provided by OEHHA. On a regional basis, the pollutants measured in ARB's toxic monitoring network are generally below the OEHHA non-cancer reference exposure levels.

As part of its community health program, the ARB is looking at potential cancer and non-cancer risk. This could include chronic or acute health effects. If the assessment work shows elevated exposures on a localized basis, ARB will work with OEHHA to assess the health impacts.

What tools has ARB developed to assess cumulative air pollution impacts?

ARB has developed the following tools and reports to assist land use agencies and local air districts assess and reduce cumulative emissions, exposure, and risk on a neighborhood scale.

Statewide Risk Maps

ARB has produced regional risk maps that show the statewide trends for Southern and Central California in estimated potential cancer risk from air toxics between 1990 and 2010.² These maps will supplement U.S. EPA's ASPEN model and are available on the ARB's Internet site. These maps are best used to obtain an estimate of the regional background air pollution health risk and are not detailed enough to estimate the exact risk at a specific location.

ARB also has maps that focus in more detail on smaller areas that fall within the Southern and Central California regions for these same modeled years. The finest visual resolution available in the maps on this web site is two by two kilometers. These maps are not detailed enough to assess individual neighborhoods or facilities.

Community Health Air Pollution Information System (CHAPIS)

CHAPIS is an Internet-based procedure for displaying information on emissions from sources of air pollution in an easy to use mapping format. CHAPIS uses Geographical Information System (GIS) software to deliver interactive maps over the Internet. CHAPIS relies on emission estimates reported to the ARB's emission inventory database - California Emissions Inventory Development and Reporting System, or CEIDARS.

Through CHAPIS, air district staff can quickly and easily identify pollutant sources and emissions within a specified area. CHAPIS contains information on air pollution emissions from selected large facilities and small businesses that emit criteria and toxic air pollutants. It also contains information on air pollution emissions from motor vehicle and areawide emissions. CHAPIS does not contain information on every source of air pollution or every air pollutant. It is a major long-term objective of CHAPIS to include all of the largest air pollution sources and those with the highest documented air pollution risk. CHAPIS will be updated on a periodic basis and additional facilities will be added to CHAPIS as more data becomes available.

CHAPIS is being developed in stages to assure data quality. The initial release of CHAPIS will include facilities emitting 10 or more tons per year of nitrogen oxides, sulfur dioxide, carbon monoxide, PM10, or reactive organic gases; air toxics from refineries and power plants of 50 megawatts or more; and facilities that conducted health risk

²ARB maintains state trends and local potential cancer risk maps that show statewide trends in potential inhalable cancer risk from air toxics between 1990 and 2010. This information can be viewed at ARB's web site at <http://www.arb.ca.gov/toxics/cti/hlthrisk/hlthrisk.htm>

assessments under the California Air Toxics “Hot Spots” Information and Assessment Program.³

CHAPIS can be used to identify the emission contributions from mobile, area, and point sources on that community.

“Hot Spots” Analysis and Reporting Program (HARP)

HARP⁴ is a software package available from the ARB and is designed with air quality professionals in mind. It models emissions and release data from one or more facilities to estimate the potential health risk posed by the selected facilities on the neighboring community. HARP uses the latest risk assessment guidelines published by OEHHA.

With HARP, a user can perform the following tasks:

- Create and manage facility databases;
- Perform air dispersion modeling;
- Conduct health risk analyses;
- Output data reports; and
- Output results to GIS mapping software.

HARP can model downwind concentrations of air toxics based on the calculated emissions dispersion at a single facility. HARP also has the capability of assessing the risk from multiple facilities, and for multiple locations of concern near those facilities. While HARP has the capability to assess multiple source impacts, there had been limited application of the multiple facility assessment function in the field at the time of HARP’s debut in 2003. HARP can also evaluate multi-pathway, non-inhalation health risk resulting from air pollution exposure, including skin and soil exposure, and ingestion of meat and vegetables contaminated with air toxics, and other toxics that have accumulated in a mother’s breast milk.

Neighborhood Assessment Program (NAP)

The NAP⁵ has been a key component of ARB’s Community Health Program. It includes the development of tools that can be used to perform assessments of cumulative air pollution impacts on a neighborhood scale. The NAP studies have been done to better understand how air pollution affects individuals at the neighborhood level. Thus far, ARB has conducted neighborhood scale assessments in Barrio Logan and Wilmington.

As part of these studies, ARB is collecting data and developing a modeling protocol that can be used to conduct cumulative air pollution impact assessments. Initially these

³ California Health & Safety Code section 44300, et seq.

⁴ More detailed information can be found on ARB’s website at:

<http://www.arb.ca.gov/toxics/harp/harp.htm>

⁵ For more information on the Program, please refer to: <http://www.arb.ca.gov/ch/programs/nap/nap.htm>

assessments will focus on cumulative inhalation cancer health risk and chronic non-cancer impacts. The major challenge is developing modeling methods that can combine both regional and localized air pollution impacts, and identifying the critical data necessary to support these models. The objective is to develop methods and tools from these studies that can ultimately be applied to other areas of the state. In addition, the ARB plans to use these methods to replace the ASPEN regional risk maps currently posted on the ARB Internet site.

Urban Emissions Model (URBEMIS)

URBEMIS⁶ is a computer program that can be used to estimate emissions associated with land development projects in California such as residential neighborhoods, shopping centers, office buildings, and construction projects. URBEMIS uses emission factors available from the ARB to estimate vehicle emissions associated with new land uses. URBEMIS estimates sulfur dioxide emissions from motor vehicles in addition to reactive organic gases, nitrogen oxides, carbon monoxide, and PM10.

Land-Use Air Quality Linkage Report⁷

This report summarizes data currently available on the relationships between land use, transportation and air quality. It also highlights strategies that can help to reduce the use of the private automobile. It also briefly summarizes two ARB-funded research projects. The first project analyzes the travel patterns of residents living in five higher density, mixed use neighborhoods in California, and compares them to travel in more auto-oriented areas. The second study correlates the relationship between travel behavior and community characteristics, such as density, mixed land uses, transit service, and accessibility for pedestrians.

⁶ For more information on this model, please refer to ARB's website at <http://www.arb.ca.gov/html/soft.htm>.

⁷To access this report, please refer to ARB's website or click on: <http://www.arb.ca.gov/ch/programs/link97.pdf>

LAND USE AND AIR QUALITY AGENCY ROLES IN THE LAND USE PROCESS

A wide variety of federal, state, and local government agencies are responsible for regulatory, planning, and siting decisions that can have an impact on air pollution. They include local land use agencies, regional councils of government, school districts, local air districts, ARB, the California Department of Transportation (Caltrans), and the Governor's Office of Planning and Research (OPR) to name a few. This Section will focus on the roles and responsibilities of local and state agencies. The role of school districts will be discussed in Appendix E.

Local Land Use Agencies

Under the State Constitution, land use agencies have the primary authority to plan and control land use.¹ Each of California's incorporated cities and counties are required to adopt a comprehensive, long-term General Plan.²

The General Plan's long-term goals are implemented through zoning ordinances. These are local laws adopted by counties and cities that describe for specific areas the kinds of development that will be allowed within their boundaries.

Land use agencies are also the lead for doing environmental assessments under CEQA for new projects that may pose a significant environmental impact, or for new or revised General Plans.

Local Agency Formation Commissions (LAFCOs)

Operating in each of California's 58 counties, LAFCOs are composed of local elected officials and public members who are responsible for coordinating changes in local governmental boundaries, conducting special studies that review ways to reorganize, simplify, and streamline governmental structures, and preparing a sphere of influence for each city and special district within each county. Each Commission's efforts are directed toward seeing that local government services are provided efficiently and economically while agricultural and open-space lands are protected. LAFCO decisions strive to balance the competing needs in California for efficient services, affordable housing, economic opportunity, and conservation of natural resources.

¹ The legal basis for planning and land use regulation is the "police power" of the city or county to protect the public's health, safety and welfare. The California Constitution gives cities and counties the power to make and enforce all local police, sanitary and other ordinances and regulations not in conflict with general laws. State law reference: California Constitution, Article XI §7.

²OPR General Plan Guidelines, 2003:

http://www.opr.ca.gov/planning/PDFs/General_Plan_Guidelines_2003.pdf

Councils of Government (COG)

COGs are organizations composed of local counties and cities that serve as a focus for the development of sound regional planning, including plans for transportation, growth management, hazardous waste management, and air quality. They can also function as the metropolitan planning organization for coordinating the region's transportation programs. COGs also prepare regional housing need allocations for updates of General Plan housing elements.

Local Air Districts

Under state law, air pollution control districts or air quality management districts (local air districts) are the local government agencies responsible for improving air quality and are generally the first point of contact for resolving local air pollution issues or complaints. There are 35 local air districts in California³ that have authority and primary responsibility for regional clean air planning. Local air districts regulate stationary sources of air pollutants within their jurisdiction including but not limited to industrial and commercial facilities, power plants, construction activities, outdoor burning, and other non-mobile sources of air pollution. Some local air districts also regulate public and private motor vehicle fleet operators such as public bus systems, private shuttle and taxi services, and commercial truck depots.

■ Regional Clean Air Plans

Local air districts are responsible for the development and adoption of clean air plans that protect the public from the harmful effects of air pollution. These plans incorporate strategies that are necessary to attain ambient air quality standards. Also included in these regional air plans are ARB and local district measures to reduce statewide emissions from mobile sources, consumer products, and industrial sources.

■ Facility-Specific Considerations

Permitting. In addition to the planning function, local air districts adopt and enforce regulations, issue permits, and evaluate the potential environmental impacts of projects.

Pollution is regulated through permits and technology-based rules that limit emissions from operating units within a facility or set standards that vehicle fleet operators must meet. Permits to construct and permits to operate contain very specific requirements and conditions that tell each regulated source what it must do to limit its air pollution in compliance with local air district rules, regulations, and state law. Prior to receiving a permit, new facilities must go through a New Source Review (NSR) process that establishes air pollution control requirements for the facility. Permit conditions are typically contained in the permit to operate and specify requirements that businesses must follow; these may include limits on the amount of pollution that can be emitted, the

³ Contact information for local air districts in California is listed in the front of this Handbook.

type of pollution control equipment that must be installed and maintained, and various record-keeping requirements.

Local air districts also notify the public about new permit applications for major new facilities, or major modifications to existing facilities that seek to locate within 1,000 feet of a school.

Local air districts can also regulate other types of sources to reduce emissions. These include regulations to reduce emissions from the following sources:

- hazardous materials in products used by industry such as paints, solvents, and degreasers;
- agricultural and residential burning;
- leaking gasoline nozzles at service stations;
- public fleet vehicles such as sanitation trucks and school buses; and
- fugitive or uncontrolled dust at construction sites.

However, while emissions from industrial and commercial sources are typically subject to the permit authority of the local air district, sensitive sites such as a day care center, convalescent home, or playground are not ordinarily subject to an air permit. Local air district permits address the air pollutant emissions of a project but not its location.

Under the state's air toxics program, local air districts regulate air toxic emissions by adopting ARB air toxic control measures, or more stringent district-specific requirements, and by requiring individual facilities to perform a health risk assessment if emissions at the source exceed district-specific health risk thresholds^{4, 5} (See the section on ARB programs for a more detailed summary of this program).

One approach by which local air districts regulate air toxics emissions is through the "Hot Spots" program.⁶ The risk assessments submitted by the facilities under this

⁴ Cal/EPA's Office of Environmental Health Hazard Assessment has published "A Guide to Health Risk Assessment" for lay people involved in environmental health issues, including policymakers, businesspeople, members of community groups, and others with an interest in the potential health effects of toxic chemicals. To access this information, please refer to <http://www.oehha.ca.gov/pdf/HRSGuide2001.pdf>

⁵ Section 44306 of the California Health & Safety Code defines a health risk assessment as a detailed comprehensive analysis that a polluting facility uses to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations, and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure.

⁶ AB-2588 (the Air Toxics "Hot Spots" Information and Assessment Act) requires local air districts to prioritize facilities by high, intermediate, and low priority categories to determine which must perform a health risk assessment. Each district is responsible for establishing the prioritization score threshold at which facilities are required to prepare a health risk assessment. In establishing priorities for each facility, local air districts must consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors that the district determines may indicate that the facility may pose a significant risk. All facilities within the highest category must prepare a health risk assessment. In addition, each district may require facilities in the intermediate and low priority categories to also submit a health risk assessment.

**Table D-1
Local Sources of Air Pollution, Responsible Agencies,
and Associated Regulatory Programs**

Source	Examples	Primary Agency	Applicable Regulations
Large Stationary	Refineries, power plants, chemical facilities, certain manufacturing plants	Local air districts	Operating permit rules Air Toxics "Hot Spots" Law (AB 2588) Local district rules Air Toxic Control Measures (ATCMs)* New Source Review rules Title V permit rules
Small Stationary	Dry cleaners, auto body shops, welders, chrome plating facilities, service stations, certain manufacturing plants	Local air districts	Operating permit conditions, Air Toxics "Hot Spots" Law (AB 2588) Local district rules ATCMs* New Source Review rules
Mobile (non-fleet)	Cars, trucks, buses	ARB	Emission standards Cleaner-burning fuels (e.g., unleaded gasoline, low-sulfur diesel) Inspection and repair programs (e.g., Smog Check)
Mobile Equipment	Construction equipment	ARB, U.S. EPA	ARB rules U.S. EPA rules
Mobile (fleet)	Truck depots, school buses, taxi services	Local air districts, ARB	Local air district rules ARB urban bus fleet rule
Areawide	Paints and consumer products such as hair spray and spray paint	Local air district, ARB	ARB rules Local air district rules

*ARB adopts ATCMs, but local air districts have the responsibility to implement and enforce these measures or more stringent ones.

program are reviewed by OEHHA and approved by the local air district. Risk assessments are available by contacting the local air district.

Enforcement. Local air districts also take enforcement action to ensure compliance with air quality requirements. They enforce air toxic control measures, agricultural and residential burning programs, gasoline vapor control regulations, laws that prohibit air pollution nuisances, visible emission limits, and many other requirements designed to

clean the air. Local districts use a variety of enforcement tools to ensure compliance. These include notices of violation, monetary penalties, and abatement orders. Under some circumstances, a permit may be revoked.

■ Environmental Review

As required by the California Environmental Quality Act (CEQA), local air districts also review and comment on proposed land use plans and development projects that can have a significant effect on the environment or public health.⁷

California Air Resources Board

The ARB is the air pollution control agency at the state level that is responsible for the preparation of air plans required by state and federal law. In this regard, it coordinates the activities of all local air districts to ensure all statutory requirements are met and to reduce air pollution emissions for sources under its jurisdiction.

Motor vehicles are the single largest emissions source category under ARB's jurisdiction as well as the largest overall emissions source statewide. ARB also regulates emissions from other mobile equipment and engines as well as emissions from consumer products such as hair sprays, perfumes, cleaners, and aerosol paints.

Air Toxics Program

Under state law, the ARB has a critical role to play in the identification, prioritization, and control of air toxic emissions. The ARB statewide comprehensive air toxics program was established in the early 1980's. The Toxic Air Contaminant Identification and Control Act of 1983 (AB 1807, Tanner 1983) created California's program to reduce exposure to air toxics.⁸ The Air Toxics "Hot Spots" Information and Assessment Act (Hot Spots program) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

Under AB 1807, the ARB is required to use certain criteria to prioritize the identification and control of air toxics. In selecting substances for review, the ARB must consider criteria relating to emissions, exposure, and health risk, as well as persistence in the atmosphere, and ambient concentrations in the community. AB 1807 also requires the ARB to use available information gathered from the Hot Spots program when prioritizing compounds.

The ARB identifies pollutants as toxic air contaminants and adopts statewide air toxic control measures (ATCMs). Once ARB adopts an ATCM, local air districts must

⁷ Section 4 of this Handbook contains more information on the CEQA process.

⁸ For a general background on California's air toxics program, the reader should refer to ARB's website at <http://www.arb.ca.gov/toxics/tac/appendxb.htm>.

implement the measure, or adopt and implement district-specific measures that are at least as stringent as the state standard. Taken in the aggregate, these ARB programs will continue to further reduce emissions, exposure, and health risk statewide.

With regard to the land use decision-making process, ARB, in conjunction with local air districts, plays an advisory role by providing technical information on land use-related air issues.

Other Agencies

Governor's Office of Planning and Research (OPR)

In addition to serving as the Governor's advisor on land use planning, research, and liaison with local government, OPR develops and implements the state's policy on land use planning and coordinates the state's environmental justice programs. OPR updated its General Plan Guidelines in 2003 to highlight the importance of sustainable development and environmental justice policies in the planning process. OPR also advises project proponents and government agencies on CEQA provisions and operates the State Clearinghouse for environmental and federal grant documents.

California Department of Housing and Community Development

The Department of Housing and Community Development (HCD) administers a variety of state laws, programs and policies to preserve and expand housing opportunities, including the development of affordable housing. All local jurisdictions must update their housing elements according to a staggered statutory schedule, and are subject to certification by HCD. In their housing elements, cities and counties are required to include a land inventory which identifies and zones sites for future residential development to accommodate a mix of housing types, and to remove barriers to the development of housing.

An objective of state housing element law is to increase the overall supply and affordability of housing. Other fundamental goals include conserving existing affordable housing, improving the condition of the existing housing stock, removing regulatory barriers to housing production, expanding equal housing opportunities, and addressing the special housing needs of the state's most vulnerable residents (frail elderly, disabled, large families with children, farmworkers, and the homeless).

Transportation Agencies

Transportation agencies can also influence mobile source-related emissions in the land use decision-making process. Local transportation agencies work with land use agencies to develop a transportation (circulation) element for the General Plan. These local government agencies then work with other transportation-related agencies, such as the Congestion Management Agency (CMA), Metropolitan Planning Organization

(MPO), Regional Transportation Planning Agency (RTPA), and Caltrans to develop long and short range transportation plans and projects.

Caltrans is the agency responsible for setting state transportation goals and for state transportation planning, design, construction, operations and maintenance activities. Caltrans is also responsible for delivering California's multibillion-dollar state Transportation Improvement Program, a list of transportation projects that are approved for funding by the California Transportation Commission in a 4-year cycle.

When safety hazards or traffic circulation problems are identified in the existing road system, or when land use changes are proposed such as a new residential subdivision, shopping mall or manufacturing center, Caltrans and/or the local transportation agency ensure the projects meet applicable state, regional, and local goals and objectives.

Caltrans also evaluates transportation-related projects for regional air quality impacts, from the perspective of travel-related emissions as well as road congestion and increases in road capacity (new lanes).

California Energy Commission (CEC)

The CEC is the state's CEQA lead agency for permitting large thermal power plants (50 megawatts or greater). The CEC works closely with local air districts and other federal, state and local agencies to ensure compliance with applicable laws, ordinances, regulations and standards in the permitting, construction, operation and closure of such plants. The CEC uses an open and public review process that provides communities with outreach and multiple opportunities to participate and be heard. In addition to its comprehensive environmental impact and engineering design assessment process, the CEC also conducts an environmental justice evaluation. This evaluation involves an initial demographic screening to determine if a qualifying minority or low-income population exists in the vicinity of the proposed project. If such a population is present, staff considers possible environmental justice impacts including from associated project emissions in its technical assessments.⁹

Department of Pesticides Regulation (DPR)

Pesticides are industrial chemicals produced specifically for their toxicity to a target pest. They must be released into the environment to do their job. Therefore, regulation of pesticides focuses on using toxicity and other information to ensure that when pesticides are used according to their label directions, potential for harm to people and the environment is minimized. DPR imposes strict controls on use, beginning before pesticide products can be sold in California, with an extensive scientific program to ensure they can be used safely. DPR and county enforcement staff tracks the use of pesticides to ensure that pesticides are used properly. DPR collects periodic

⁹ See California Energy Commission, "Environmental Performance Report," July 2001 at http://www.energy.ca.gov/reports/2001-11-20_700-01-001.PDF

measurements of any remaining amounts of pesticides in water, air, and on fresh produce. If unsafe levels are found, DPR requires changes in how pesticides are used, to reduce the possibility of harm. If this cannot be done - that is, if a pesticide cannot be used safely - use of the pesticide will be banned in California.¹⁰

Federal Agencies

Federal agencies have permit authority over activities on federal lands and certain resources, which have been the subject of congressional legislation, such as air, water quality, wildlife, and navigable waters. The U.S. Environmental Protection Agency generally oversees implementation of the federal Clean Air Act, and has broad authority for regulating certain activities such as mobile sources, air toxics sources, the disposal of toxic wastes, and the use of pesticides. The responsibility for implementing some federal regulatory programs such as those for air and water quality and toxics is delegated by management to specific state and local agencies. Although federal agencies are not subject to CEQA they must follow their own environmental process established under the National Environmental Policy Act (NEPA).

¹⁰ For more information, the reader is encouraged to visit the Department of Pesticide Regulation web site at www.cdpr.ca.gov/docs/empm/pubs/tacmenu.htm.

SPECIAL PROCESSES THAT APPLY TO SCHOOL SITING

The [California Education Code](#) and the [California Public Resources Code](#) place primary authority for siting public schools with the local school district, which is the 'lead agency' for purposes of CEQA. The California Education Code requires public school districts to notify the local planning agency about siting a new public school or expanding an existing school. The planning agency then reports back to the school district regarding a project's conformity with the adopted General Plan. However, school districts can overrule local zoning and land use designations for schools if they follow specified procedures. In addition, all school districts must evaluate new school sites using site selection standards established in Section 14010 of Title 5 of the California Code of Regulations. Districts seeking state funding for school site acquisition must also obtain site approval from the California Department of Education.

Before making a final decision on a school site acquisition, a school district must comply with CEQA and evaluate the proposed site acquisition/new school project for air emissions and health risks by preparing and certifying an environmental impact report or negative declaration. Both the California Education Code section 17213 and the California Public Resources Code section 21151.8 require school districts to consult with administering agencies and local air districts when preparing the environmental assessment. Such consultation is required to identify both permitted and non-permitted "facilities" that might significantly affect health at the new site. These facilities include, but are not limited to, freeways and other busy traffic corridors, large agricultural operations, and rail yards that are within one-quarter mile of the proposed school site, and that might emit hazardous air emissions, or handle hazardous or acutely hazardous materials, substances, or waste.

As part of the CEQA process and before approving a school site, the school district must make a finding that either it found none of the facilities or significant air pollution sources, or alternatively, if the school district finds that there are such facilities or sources, it must determine either that they pose no significant health risks, or that corrective actions by another governmental entity would be taken so that there would be no actual or potential endangerment to students or school workers.

In addition, if the proposed school site boundary is within 500 feet of the edge of the closest traffic lane of a freeway or traffic corridor that has specified minimum average daily traffic counts, the school district is required to determine through specified risk assessment and air dispersion modeling that neither short-term nor long term exposure poses significant health risks to pupils.

State law changes effective January 1, 2004 (SB352, Escutia 2003, amending Education Code section 17213 and Public Resources Code section 21151.8) also provides for cases in which the school district cannot make either of those two findings and cannot find a suitable alternative site. When this occurs, the school district must adopt a statement of over-riding considerations, as part of an environmental impact

report, that the project should be approved based on the ultimate balancing of the merits.

Some school districts use a standardized assessment process to determine the environmental impacts of a proposed school site. In the assessment process, school districts can use maps and other available information to evaluate risk, including a local air district's database of permitted source emissions. School districts can also perform field surveys and record searches to identify and calculate emissions from non-permitted sources within one-quarter mile radius of a proposed site. Traffic count data and vehicular emissions data can also be obtained from Caltrans for major roadways and freeways in proximity to the proposed site to model potential emissions impacts to students and school employees. This information is available from the local COG, Caltrans, or local cities and counties for non-state maintained roads.

GENERAL PROCESSES USED BY LAND USE AGENCIES TO ADDRESS AIR POLLUTION IMPACTS

There are several separate but related processes for addressing the air pollution impacts of land use projects. One takes place as part of the planning and zoning function. This consists of preparing and implementing goals and policies contained in county or city General Plans, community or area plans, and specific plans governing land uses such as residential, educational, commercial, industrial, and recreational activities. It also includes recommending locations for thoroughfares, parks and other public improvements.

Land use agencies also have a permitting function that includes performing environmental reviews and mitigation when projects may pose a significant environmental impact. They conduct inspections for zoning permits issued, enforce the zoning regulations and issue violations as necessary, issue zoning certificates of compliance, and check compliance when approving certificates of occupancy.

Planning

■ **General Plan¹**

The General Plan is a local government “blueprint” of existing and future anticipated land uses for long-term future development. It is composed of the goals, policies, and general elements upon which land use decisions are based. Because the General Plan is the foundation for all local planning and development, it is an important tool for implementing policies and programs beneficial to air quality. Local governments may choose to adopt a separate air quality element into their General Plan or to integrate air quality-beneficial objectives, policies, and strategies in other elements of the Plan, such as the land use, circulation, conservation, and community design elements.

More information on General Plan elements is contained in Appendix D.

■ **Community Plans**

Community or area plans are terms for plans that focus on a particular region or community within the overall general plan area. It refines the policies of the general plan as they apply to a smaller geographic area and is implemented by ordinances and other discretionary actions, such as zoning.

¹ In October 2003, OPR revised its General Plan Guidelines. An entire chapter is now devoted to a discussion of how sustainable development and environmental justice goals can be incorporated into the land use planning process. For further information, the reader is encouraged to obtain a copy of OPR’s General Plan Guidelines, or refer to their website at:
http://www.opr.ca.gov/planning/PDFs/General_Plan_Guidelines_2003.pdf

■ **Specific Plan**

A specific plan is a hybrid that can combine policies with development regulations or zoning requirements. It is often used to address the development requirements for a single project such as urban infill or a planned community. As a result, its emphasis is on concrete standards and development criteria.

■ **Zoning**

Zoning is the public regulation of the use of land. It involves the adoption of ordinances that divide a community into various districts or zones. For instance, zoning ordinances designate what projects and activities can be sited in particular locations. Each zone designates allowable uses of land within that zone, such as residential, commercial, or industrial. Zoning ordinances can address building development standards, e.g., minimum lot size, maximum building height, minimum building setback, parking, signage, density, and other allowable uses.

Land Use Permitting

In addition to the planning and zoning function, land use agencies issue building and business permits, and evaluate the potential environmental impacts of projects. To be approved, projects must be located in a designated zone and comply with applicable ordinances and zoning requirements.

Even if a project is sited properly in a designated zone, a land use agency may require a new source to mitigate potential localized environmental impacts to the surrounding community below what would be required by the local air district. In this case, the land use agency could condition the permit by limiting or prescribing allowable uses including operating hour restrictions, building standards and codes, property setbacks between the business property and the street or other structures, vehicle idling restrictions, or traffic diversion.

Land use agencies also evaluate the environmental impacts of proposed land use projects or activities. If a project or activity falls under CEQA, the land use agency requires an environmental review before issuing a permit to determine if there is the potential for a significant impact, and if so, to mitigate the impact or possibly deny the project.

■ **Land Use Permitting Process**

In California, the authority to regulate land use is delegated to city and county governments. The local land use planning agency is the local government administrative body that typically provides information and coordinates the review of development project applications. Conditional Use Permits (CUP) typically fall within a land use agency's discretionary authority and therefore are subject to CEQA. CUPs are

intended to provide an opportunity to review the location, design, and manner of development of land uses prior to project approval. A traditional purpose of the CUP is to enable a municipality to control certain uses that could have detrimental environmental effects on the community.

The process for permitting new discretionary projects is quite elaborate, but can be broken down into five fundamental components:

- Project application
- Environmental assessment
- Consultation
- Public comment
- Public hearing and decision

Project Application

The permit process begins when the land use agency receives a project application, with a detailed project description, and support documentation. During this phase, the agency reviews the submitted application for completeness. When the agency deems the application to be complete, the permit process moves into the environmental review phase.

Environmental Assessment

If the project is discretionary and the application is accepted as complete, the project proposal or activity must undergo an environmental clearance process under CEQA and the CEQA Guidelines adopted by the California Resources Agency.² The purpose of the CEQA process is to inform decision-makers and the public of the potential significant environmental impacts of a project or activity, to identify measures to minimize or eliminate those impacts to the point they are no longer significant, and to discuss alternatives that will accomplish the project goals and objectives in a less environmentally harmful manner.

What is a “Lead Agency”?

A lead agency is the public agency that has the principal responsibility for carrying out or approving a project that is subject to CEQA. In general, the land use agency is the preferred public agency serving as lead agency because it has jurisdiction over general land uses. The lead agency is responsible for determining the appropriate environmental document, as well as its preparation.

What is a “Responsible Agency”?

A responsible agency is a public agency with discretionary approval authority over a portion of a CEQA project (e.g., projects requiring a permit). As a responsible agency, the agency is available to the lead agency and project proponent for early consultation on a project to apprise them of applicable rules and regulations, potential adverse impacts, alternatives, and mitigation measures, and provide guidance as needed on applicable methodologies or other related issues.

What is a “Commenting Agency”?

A commenting agency is any public agency that comments on a CEQA document, but is neither a lead agency nor a responsible agency. For example, a local air district, as the agency with the responsibility for comprehensive air pollution control, could review and comment on an air quality analysis in a CEQA document for a proposed distribution center, even though the project was not subject to a permit or other pollution control requirements.

² Projects and activities that may have a significant adverse impact on the environment are evaluated under CEQA Guidelines set forth in title 14 of the California Code of Regulations, sections 15000 et seq.

To assist the lead agency in determining whether the project or activity may have a significant effect that would require the preparation of an EIR, the land use agency may consider criteria, or thresholds of significance, to assess the potential impacts of the project, including its air quality impacts. The land use agency must consider any credible evidence in addition to the thresholds, however, in determining whether the project or activity may have a significant effect that would trigger the preparation of an EIR.

The screening criteria to determine significance is based on a variety of factors, including local, state, and federal regulations, administrative practices of other public agencies, and commonly accepted professional standards. However, the final determination of significance for individual projects is the responsibility of the lead agency. In the case of land use projects, the lead agency would be the City Council or County Board of Supervisors.

A new land use plan or project can also trigger an environmental assessment under CEQA if, among other things, it will expose sensitive sites such as schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences to substantial pollutant concentrations.³

CEQA only applies to “discretionary projects.” Discretionary means the public agency must exercise judgment and deliberation when deciding to approve or disapprove a particular project or activity, and may append specific conditions to its approval. Examples of discretionary projects include the issuance of a CUP, re-zoning a property, or widening of a public road. Projects that are not subject to the exercise of agency discretion, and can therefore be approved administratively through the application of set standards are referred to as ministerial projects. CEQA does not apply to ministerial projects.⁴ Examples of typical ministerial projects include the issuance of most building permits or a business license.

Once a potential environmental impact associated with a project is identified through an environmental assessment, mitigation must be considered. A land use agency should incorporate mitigation measures that are suggested by the local air district as part of the project review process.

Consultation

Application materials are provided to various departments and agencies that may have an interest in the project (e.g., air pollution, building, police, fire, water agency, Fish and Game, etc.) for consultation and input.

³ Readers interested in learning more about CEQA should contact OPR or visit their website at <http://www.opr.ca.gov/>.

⁴ See California Public Resources Code section 21080(b)(1).

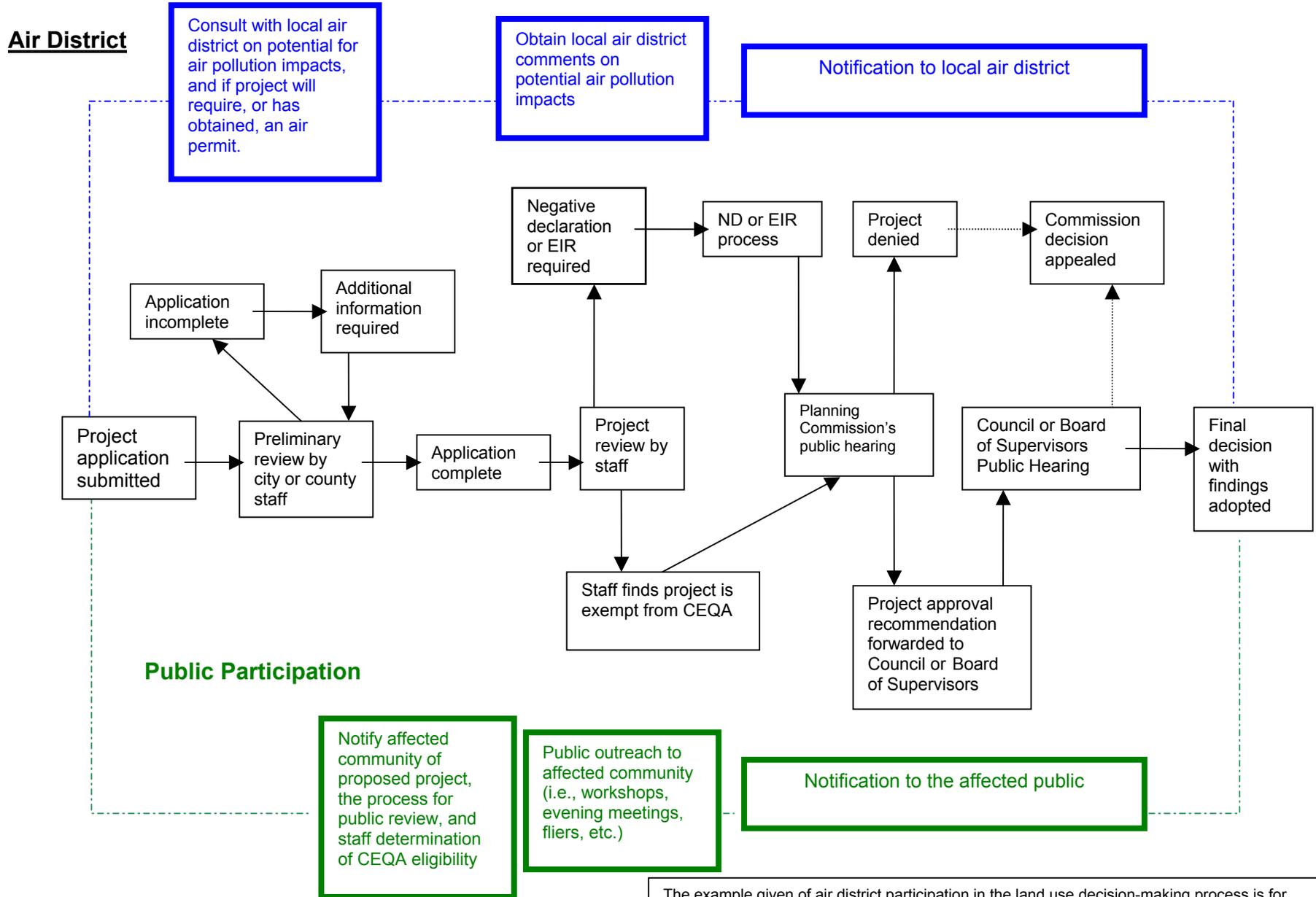
Public Comment

Following the environmental review process, the Planning Commission reviews application along with the staff's report on the project assessment and a public comment period is set and input is solicited.

Public Hearing and Decision

Permit rules vary depending on the particular permit authority in question, but the process generally involves comparing the proposed project with the land use agency standards or policies. The procedure usually leads to a public hearing, which is followed by a written decision by the agency or its designated officer. Typically, a project is approved, denied, or approved subject to specified conditions.

USE PERMIT (DISCRETIONARY ACTION) REVIEW PROCESS*



The example given of air district participation in the land use decision-making process is for illustrative purposes only. In reality, the land use siting process involves the ongoing participation of multiple affected agencies and stakeholders throughout the process.

GLOSSARY OF KEY AIR POLLUTION TERMS

Air Pollution Control Board or Air Quality Management Board: Serves as the governing board for local air districts. It consists of appointed or elected members from the public or private sector. It conducts public hearings to adopt local air pollution regulations.

Air Pollution Control Districts or Air Quality Management Districts (local air district): A county or regional agency with authority to regulate stationary and area sources of air pollution within a given county or region. Governed by a district air pollution control board.

Air Pollution Control Officer (APCO): Head of a local air pollution control or air quality management district.

Air Toxic Control Measures (ATCM): A control measure adopted by the ARB (Health and Safety Code section 39666 et seq.), which reduces emissions of toxic air contaminants.

Ambient Air Quality Standards: An air quality standard defines the maximum amount of a pollutant that can be present in the outdoor air during a specific time period without harming the public's health. Only U.S. EPA and the ARB may establish air quality standards. No other state has this authority. Air quality standards are a measure of clean air. More specifically, an air quality standard establishes the concentration at which a pollutant is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. Federal standards are referred to as National Ambient Air Quality Standards (NAAQS); state standards are referred to as California ambient air quality standards (CAAQS).

Area-wide Sources: Sources of air pollution that individually emit small amounts of pollution, but together add up to significant quantities of pollution. Examples include consumer products, fireplaces, road dust, and farming operations.

Attainment vs. Nonattainment Area: An attainment area is a geographic area that meets the National Ambient Air Quality Standards for the criteria pollutants and a non-attainment area is a geographic area that doesn't meet the NAAQS for criteria pollutants.

Attainment Plan: Attainment plans lay out measures and strategies to attain one or more air quality standards by a specified date.

California Clean Air Act (CCAA): A California law passed in 1988, which provides the basis for air quality planning and regulation independent of federal regulations. A major element of the Act is the requirement that local air districts in violation of the CAAQS

must prepare attainment plans which identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date.

California Environmental Quality Act (CEQA): A California law that sets forth a process for public agencies to make informed decisions on discretionary project approvals. The process helps decision-makers determine whether any potential, significant, adverse environmental impacts are associated with a proposed project and to identify alternatives and mitigation measures that will eliminate or reduce such adverse impacts.¹

California Health and Safety Code: A compilation of California laws, including state air pollution laws, enacted by the Legislature to protect the health and safety of people in California. Government agencies adopt regulations to implement specific provisions of the California Health and Safety Code.

Clean Air Act (CAA): The federal Clean Air Act was adopted by the United States Congress and sets forth standards, procedures, and requirements to be implemented by the U.S. Environmental Protection Agency (U.S. EPA) to protect air quality in the United States.

Councils of Government (COGs): There are 25 COGs in California made up of city and county elected officials. COGs are regional agencies concerned primarily with transportation planning and housing; they do not directly regulate land use.

Criteria Air Pollutant: An air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10 and PM2.5. The term "criteria air pollutants" derives from the requirement that the U.S. EPA and ARB must describe the characteristics and potential health and welfare effects of these pollutants. The U.S. EPA and ARB periodically review new scientific data and may propose revisions to the standards as a result.

District Hearing Board: Hears local air district permit appeals and issues variances and abatement orders. The local air district board appoints the members of the hearing board.

Emission Inventory: An estimate of the amount of pollutants emitted into the atmosphere from mobile, stationary, area-wide, and natural source categories over a specific period of time such as a day or a year.

Environmental Impact Report (EIR): The public document used by a governmental agency to analyze the significant environmental effects of a proposed project, to identify

¹ To track the submittal of CEQA documents to the State Clearinghouse within the Office of Planning and Research, the reader can refer to CEQAnet at <http://www.ceqanet.ca.gov>.

alternatives, and to disclose possible ways to reduce or avoid the possible negative environmental impacts.

Environmental Justice: California law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (California Government Code sec.65040.12(c)).

General Plans: A statement of policies developed by local governments, including text and diagrams setting forth objectives, principles, standards, and plan proposals for the future physical development of the city or county.

Hazardous Air Pollutants (HAPs): An air pollutant listed under section 112 (b) of the federal Clean Air Act as particularly hazardous to health. U.S. EPA identifies emission sources of hazardous air pollutants, and emission standards are set accordingly. In California, HAPs are referred to as toxic air contaminants.

Land Use Agency: Local government agency that performs functions associated with the review, approval, and enforcement of general plans and plan elements, zoning, and land use permitting. For purposes of this Handbook, a land use agency is typically a local planning department.

Mobile Source: Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes.

National Ambient Air Quality Standard (NAAQS): A limit on the level of an outdoor air pollutant established by the US EPA pursuant to the Clean Air Act. There are two types of NAAQS. Primary standards set limits to protect public health and secondary standards set limits to protect public welfare.

Negative Declaration (ND): When the lead agency (the agency responsible for preparing the EIR or ND) under CEQA, finds that there is no substantial evidence that a project may have a significant environmental effect, the agency will prepare a "negative declaration" instead of an EIR.

New Source Review (NSR): A federal Clean Air Act requirement that state implementation plans must include a permit review process, which applies to the construction and operation of new or modified stationary sources in nonattainment areas. Two major elements of NSR to reduce emissions are best available control technology requirements and emission offsets.

Office of Planning and Research (OPR): OPR is part of the Governor's office. OPR has a variety of functions related to local land-use planning and environmental programs. It provides General Plan Guidelines for city and county planners, and coordinates the state clearinghouse for Environmental Impact Reports.

Ordinance: A law adopted by a City Council or County Board of Supervisors. Ordinances usually amend, repeal or supplement the municipal code; provide zoning specifications; or appropriate money for specific purposes.

Overriding Considerations: A ruling made by the lead agency in the CEQA process when the lead agency finds the importance of the project to the community outweighs potential adverse environmental impacts.

Public Comment: An opportunity for the general public to comment on regulations and other proposals made by government agencies. You can submit written or oral comments at the public meeting or send your written comments to the agency.

Public Hearing: A public hearing is an opportunity to testify on a proposed action by a governing board at a public meeting. The public and the media are welcome to attend the hearing and listen to, or participate in, the proceedings.

Public Notice: A public notice identifies the person, business, or local government seeking approval of a specific course of action (such as a regulation). It describes the activity for which approval is being sought, and describes the location where the proposed activity or public meeting will take place.

Public Nuisance: A public nuisance, for the purposes of air pollution regulations, is defined as a discharge from any source whatsoever of such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. (Health and Safety Code section 41700).

Property Setback: In zoning parlance, a setback is the minimum amount of space required between a lot line and a building line.

Risk: For cancer health effects, risk is expressed as an estimate of the increased chances of getting cancer due to facility emissions over a 70-year lifetime. This increase in risk is expressed as chances in a million (e.g., 10 chances in a million).

Sensitive Individuals: Refers to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality).

Sensitive Sites or Sensitive Land Uses: Land uses where sensitive individuals are most likely to spend time, including schools and schoolyards, parks and playgrounds, day care centers, nursing homes, hospitals, and residential communities.

Setback: An area of land separating one parcel of land from another that acts to soften or mitigate the effects of one land use on the other.

State Implementation Plan (SIP): A plan prepared by state and local agencies and submitted to U.S. EPA describing how each area will attain and maintain national ambient air quality standards. SIPs include the technical information about emission inventories, air quality monitoring, control measures and strategies, and enforcement mechanisms. A SIP is composed of local air quality management plans and state air quality regulations.

Stationary Sources: Non-mobile sources such as power plants, refineries, and manufacturing facilities.

Toxic Air Contaminant (TAC): An air pollutant, identified in regulation by the ARB, which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code section 39650 et seq.) than pollutants subject to State Ambient Air Quality Standards. Health effects associated with TACs may occur at extremely low levels. It is often difficult to identify safe levels of exposure, which produce no adverse health effects.

Urban Background: The term is used in this Handbook to represent the ubiquitous, elevated, regional air pollution levels observed in large urban areas in California.

Zoning ordinances: City councils and county boards of supervisors adopts zoning ordinances that set forth land use classifications, divides the county or city into land use zones as delineated on the official zoning, maps, and set enforceable standards for future develop



California Important Farmland Finder Ca. Dept of Conservation

447 Bevins St, Lakeport, CA X

Show search results for 447 Be...

200m

-252,537.264 117,618.891 Meters

Legend

California Important Farmland: Most Recent

Most Recent

- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Grazing Land
- Farmland of Local Importance
- Farmland of Local Potential
- Other Land
- Confined Animal Agriculture
- Nonagricultural or Natural Vegetation
- Vacant or Disturbed Land
- Rural Residential Land
- Semi-agricultural and Rural Commercial Land
- Urban and Built-Up Land

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Important Farmland Categories

FMMP's study area is contiguous with modern soil surveys developed by the US Department of Agriculture (USDA). A classification system that combines technical soil ratings and current land use is the basis for the Important Farmland Maps of these lands. Most public land areas, such as National Forests and Bureau of Land Management holdings, are not mapped.

The minimum land use mapping unit is 10 acres unless specified. Smaller units of land are incorporated into the surrounding map classifications. In order to most accurately represent the NRCS digital soil survey, soil units of one acre or larger are depicted in Important Farmland Maps.

For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land constitute 'agricultural land' (Public Resources Code Section 21060.1). The remaining categories are used for reporting changes in land use as required for FMMP's biennial farmland conversion report.

Prime Farmland (P)

Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. More information on the [definition of Prime Farmland](#) the [soils qualifying for Prime Farmland](#) is also available.

Farmland of Statewide Importance (S)

Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Download information on the [soils qualifying for Farmland of Statewide Importance](#).

Unique Farmland (U)

Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

Farmland of Local Importance (L)

Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. In some counties, [Confined Animal Agriculture](#) (PDF) facilities are part of [Farmland of Local Importance](#) (PDF), but they are shown separately.

Grazing Land (G)

Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

Urban and Built-up Land (D)

Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Other Land (X)

Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

The [Rural Land Mapping Project](#) provides more detail on the distribution of various land uses within the Other Land category in nine FMMP counties, including all eight San Joaquin Valley counties. The project may be expanded to the entire FMMP survey area as funding becomes available. The Rural Land categories include:

- Rural Residential Land (R)
- Semi-Agricultural and Rural Commercial Land (sAC)
- Vacant or Disturbed Land (V)
- Confined Animal Agriculture (CI)
- Nonagricultural or Natural Vegetation (nv)
- Water (W) – Perennial water bodies with an extent of at least 40 acres.

OPTIONAL DESIGNATION

Land Committed to Nonagricultural Use

This category was developed in cooperation with local government planning departments and county boards of supervisors during the public workshop phase of the FMMP's development in 1982. Land Committed to Nonagricultural Use information is available both statistically and as an overlay to the important farmland information. Land Committed to Nonagricultural Use is defined as existing farmland, grazing land, and vacant areas which have a permanent commitment for development.

Important Farmland Categories Links

[Prime Farmland and Farmland of Statewide Importance](#)

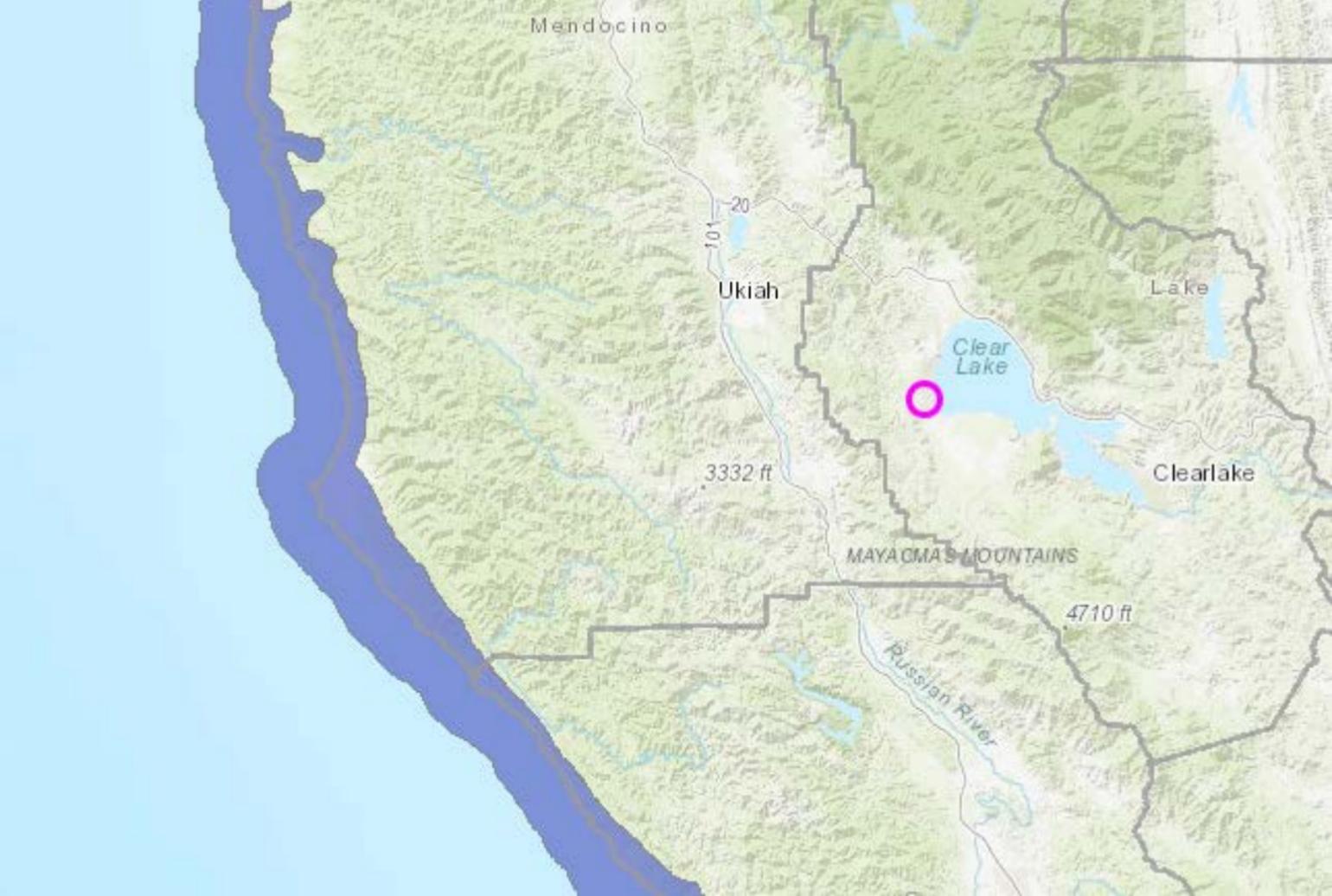
[California Prime and Statewide Soils](#)

[Rural Land Mapping Project](#)

FARMLAND MAPPING AND MONITORING PROGRAM MENU



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2019 Building Energy Efficiency Standards

Frequently Asked Questions

The effective date of the 2019 Building Energy Efficiency Standards is **January 1, 2020**

What are Building Energy Efficiency Standards?

Building energy efficiency standards are designed to reduce wasteful, uneconomic, inefficient or unnecessary consumption of energy, and enhance outdoor and indoor environmental quality. The standards are adopted into the California Code of Regulations (Title 24, Part 6). They apply to newly constructed buildings and additions and alterations to existing buildings.

“The buildings that Californians buy and live in will operate very efficiently while generating their own clean energy. They will cost less to operate, have healthy indoor air and provide a platform for ‘smart’ technologies that will propel the state even further down the road to a low emissions future.”

- Commissioner Andrew McAllister

Standards ensure that builders use the most energy efficient and energy conserving technologies and construction practices, while being cost effective for homeowners over the 30-year lifespan of a building.

The California Energy Commission is responsible for adopting, implementing and updating the standards every three years. Local city and county enforcement agencies have the authority to verify compliance with all applicable building codes including these standards.

How much energy will the 2019 standards save?

Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. This will reduce greenhouse gas emissions by 700,000 metric tons over three years, equivalent to taking 115,000 fossil fuel cars off the road. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades.

How much will the 2019 standards add to the cost of a new home?

On average, the 2019 standards will increase the cost of constructing a new home by about \$9,500 but will save \$19,000 in energy and maintenance costs over 30 years. Based on a 30-year mortgage, the Energy Commission estimates that the standards will add about \$40 per month for the average home, but save consumers \$80 per month on heating, cooling and lighting bills.

What is new to the 2019 standards?

The standards require solar photovoltaic systems for new homes.

For the first time, the standards establish requirements for newly constructed healthcare facilities.

On the residential side, the standards also encourage demand responsive technologies including battery storage and heat pump water heaters and improve the building's thermal envelope through high performance attics, walls and windows to improve comfort and energy savings. In nonresidential buildings, the standards update indoor and outdoor lighting making maximum use of LED technology.

For residential and nonresidential buildings, the standards enable the use of highly efficient air filters to trap hazardous particulates from both outdoor air and cooking and improve kitchen ventilation systems.

Do the 2019 residential standards get us to zero net energy?

Homes built in 2020 and beyond will be highly efficient and include photovoltaic generation to meet the home's expected annual electric needs. Because smarter buildings perform better and affect the grid less, the standards also include voluntary options to install technology that can shift the energy use of the house from peak periods to off-peak periods.

In 2008, California set energy-use reduction goals targeting zero-net-energy use in all new homes by 2020 and commercial buildings by 2030. The goal meant that new buildings would use a combination of energy efficiency and distributed renewable energy generation to meet all annual energy needs.

However, California's energy landscape has changed since then. Two important policies – the Renewable Portfolio Standards (RPS) and net energy metering rules (NEM) – affect the value of rooftop solar generation.

The RPS requires utilities to have 50 percent of their electrical resources come from renewables by 2030. As a result, electricity produced for the grid is already much cleaner than 10 years ago.

NEM rules limit residential rooftop solar generation to produce no more electricity than the home is expected to consume on an annual basis. If the home generates more, the surplus is compensated at much lower than the retail rate (which can be a difference of \$.10 a kilowatt-hour or more).

The Energy Commission's standards must be cost effective and bring value to the grid and environment.

Because the grid is cleaner and residential rooftop solar customer compensation for over generation is very limited, it is critical that rooftop solar generation does not substantially exceed the home's electricity use. It is ideal to generate the electricity and have it used onsite versus exporting it to the grid at a time it may not be needed. When the rooftop solar generation is entirely used to offset on-site electricity consumption, then the home has virtually no impact on the grid, reducing the home's climate change emissions.

Looking beyond the 2019 standards, the most important energy characteristic for a building will be that it produces and consumes energy at times that are appropriate and responds to the needs of the grid, which reduces the building's emissions.

Edmund G. Brown Jr.
Governor

Robert B. Weisenmiller, Ph.D.
Chair

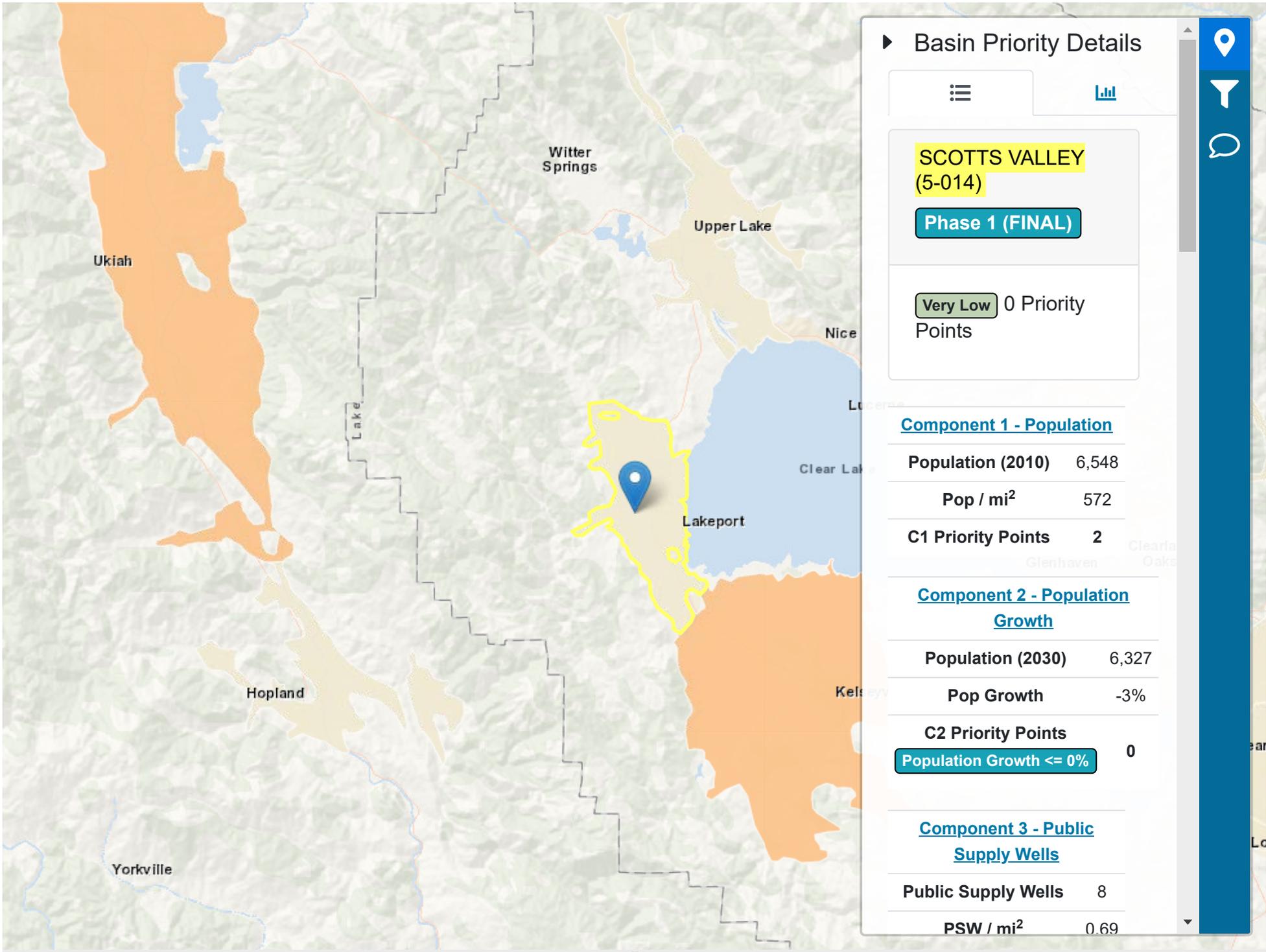
Drew Bohan
Executive Director

Commissioners
Karen Douglas, J.D.
David Hochschild
J. Andrew McAllister, Ph.D.
Janea A. Scott, J.D.



CALIFORNIA
ENERGY COMMISSION

energy.ca.gov | [facebook.com/CAEnergy](https://www.facebook.com/CAEnergy) | twitter.com/calenergy



Basin Priority Details



SCOTTS VALLEY
(5-014)

Phase 1 (FINAL)

Very Low 0 Priority Points

Component 1 - Population

Population (2010) 6,548

Pop / mi² 572

C1 Priority Points 2

Component 2 - Population Growth

Population (2030) 6,327

Pop Growth -3%

C2 Priority Points
Population Growth <= 0% 0

Component 3 - Public Supply Wells

Public Supply Wells 8

PSW / mi² 0.69





Search By Keyword ☰ 🔍

3 sites found

Aboveground Petroleum Storage ✕

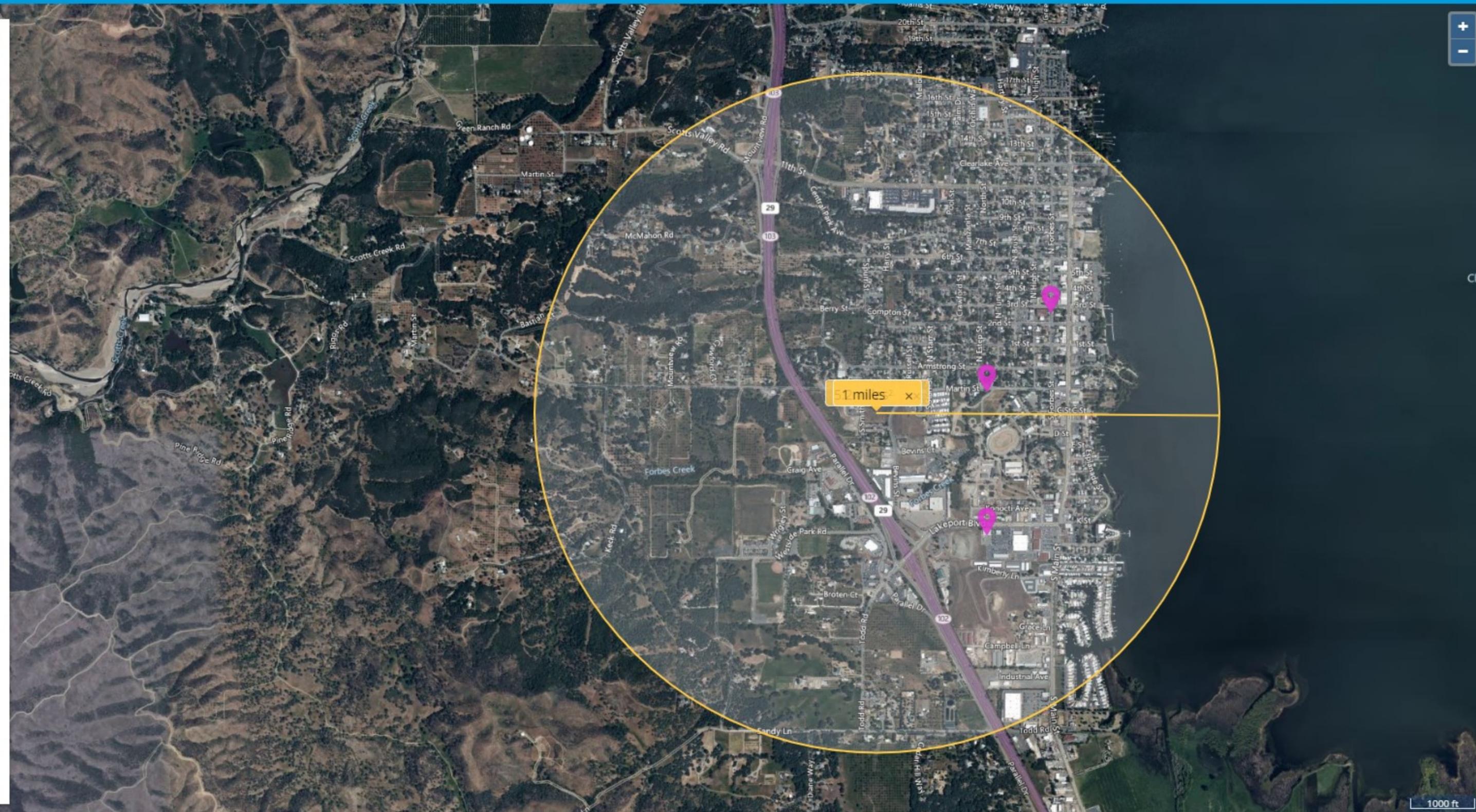
AT&T California - TD255
555 LAKEPORT BLVD
LAKEPORT CA 95453



City of Lakeport - Corporation Yard
591 MARTIN ST
LAKEPORT CA 95453



County of Lake - Buildings & Grounds
255 N FORBES ST
LAKEPORT CA 95453



1000 ft

CALGreen Construction Waste Management Requirements

Waste Diversion

CALGreen requires covered projects to recycle and/or salvage for reuse a minimum 65% of the nonhazardous construction and demolition waste or meet a local construction and demolition waste management ordinance, whichever is more stringent.

The code applies to various occupancies and types. Please see [this table](#) for general requirements for each type. For specifics on the code's scope, see Section 101.3. Also see Section 101.11 for a list of steps that can be used to determine which sections apply to each type of occupancy.

Methods of Compliance

- Enforcing agencies can require contractors to develop and maintain a waste management plan and document diversion and disposal. OR
- Utilize a waste management company that can provide verifiable documentation that it meets 65% waste diversion. OR
- Use a waste stream reduction alternative:
 - Non-residential new construction and residential high rise (4 stories or more) projects with a total disposal weight of ≤ 2 lbs/ft² meets the 65% waste diversion requirement.
 - Residential low rise (3 stories or less) with new construction disposal of ≤ 3.4 lbs/ft² meets the 65% waste diversion requirement.

Recycling by Occupants (Space for Recycling)

Newly constructed non-residential buildings, certain non-residential additions and multi-family housing with ≥ 5 units should provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at minimum) paper, corrugated cardboard, glass, plastics, organic waste and metals.

For more information on CALGreen's waste diversion requirements, refer to the [FAQ](#) page.

Know Your Waste Stream

Last updated: January 30, 2020

Local Government Library: <https://www.calrecycle.ca.gov/LGCentral/Library/>

Contact: Local Assistance & Market Development cdrecycling@calrecycle.ca.gov (916) 341-6199

The CalEnviroScreen 4.0 tool shows cumulative impacts in California communities by census tract.

How to use this map

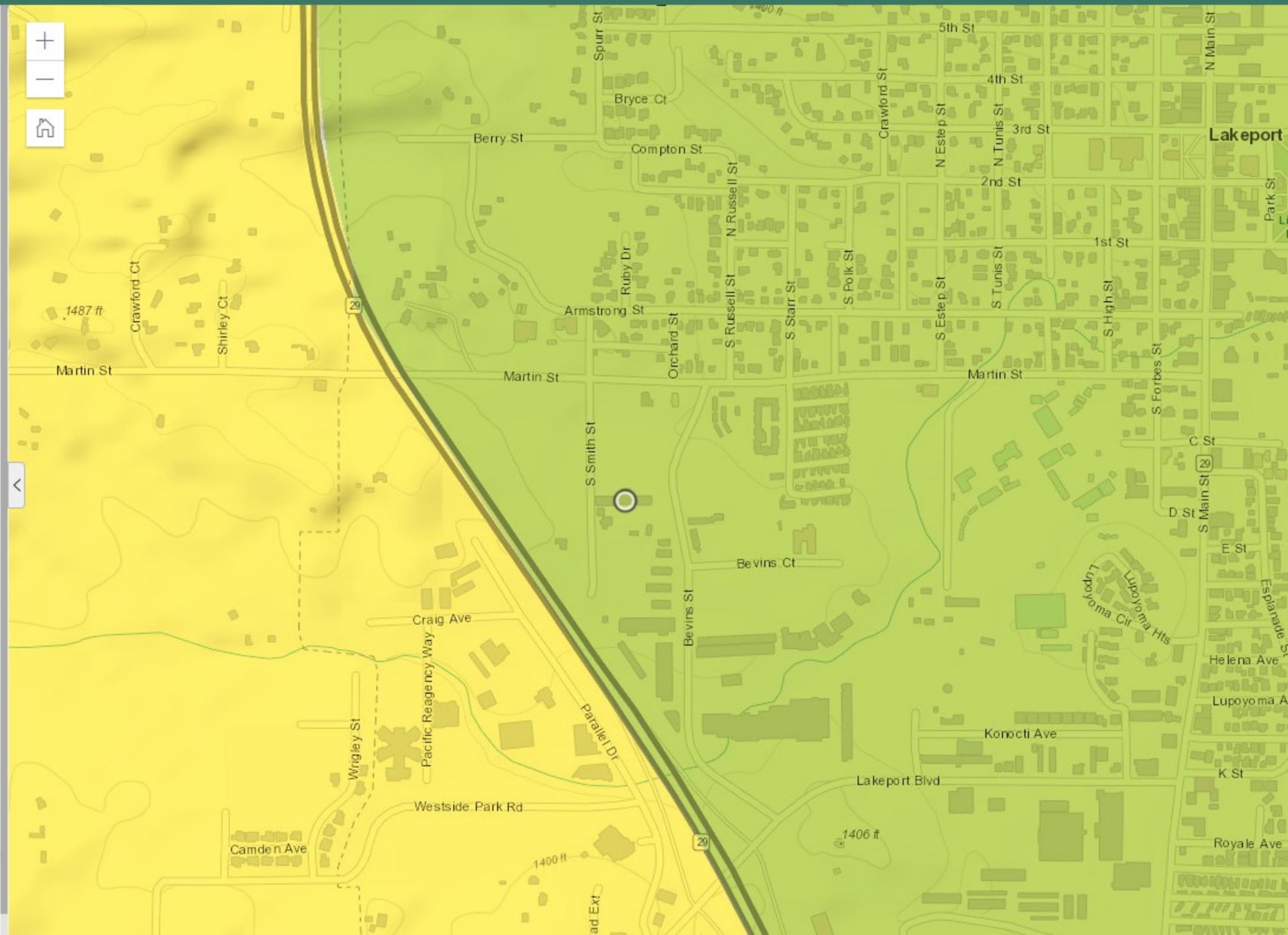
- Use your mouse or touchpad to pan around.
- Zoom in/out with a mouse wheel or the +/- icons.
- Search by location or census tract number with the **search icon**.
- Click on a census tract to view additional information in the pop-up window.
- Dock the pop-up window to the side of the screen by clicking the **dock icon**.
- Export a map view that includes the legend and popup using the **screenshot** widget.
- Learn more about CalEnviroScreen 4.0 and how this map was created [here](#)

Overall Percentile

CalEnviroScreen 4.0 Results

- >90 - 100 (Highest Scores)
- >80 - 90
- >70 - 80
- >60 - 70
- >50 - 60
- >40 - 50
- >30 - 40
- >20 - 30
- >10 - 20
- 0 - 10 (Lowest Scores)

CalEnviroScreen 4.0 High Pollution, Low Population



SWIS Facility/Site Activity Details

Eastlake Sanitary Landfill (17-AA-0001)

Summary	Details	Activities 1	Inspections 387	Enforcement Actions 10
Documents 166				

Activity

Solid Waste Landfill

Classification

Solid Waste Facility

Category

Disposal

Operational Status

Active

Regulatory Status

Permitted

Ceased Operation Date

12/31/2043

Closure Type

Estimate

Inspection Frequency

Monthly

Max. Permitted Throughput

200

Volume Unit Type

Tons per day

Remaining Capacity

2,859,962

Remaining Capacity Date

8/7/2001

Max. Permit Capacity

7,930,000

Capacity Unit Type

Cubic Yards



Total Acreage

74.60

Disposal Acreage

56.50

Permitted Elevation

1,860

Elevation Type

MSL

Permitted Depth

--

Depth Type

--

WDR Landfill Class

III

Waste Types

Mixed municipal

CalRecycle Contact: [Christine Karl](#) (916) 341-6405

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[2017](#) | 2017 Traffic Volumes : Route 22-33

2017 Traffic Volumes : Route 22-33

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 | [44-50](#) | [51-59](#) | [60-70](#) | [71-80](#) | [82-86](#) | [87-91](#) | [92-98](#) | [99](#) | [101](#)
 | [103-116](#) | [118-133](#) | [134-161](#) | [162-163](#) | [164-178](#) | [180-197](#) | [198-220](#)
 | [221-275](#) | [280-405](#) | [505-980](#)

Dist	Rte	Rte Suffix	CO	Post Mile Prefix	Post Mile Suffix	Description	Back Peak Hour
07	022		LA		0.000	LONG BEACH, JCT. RTE. 1	
07	022		LA		0.084	LONG BEACH, BELLFLOWER BOULEVARD	5400
07	022		LA		1.142	LONG BEACH, STUDEBAKER ROAD	6100
07	022		LA		1.467	LOS ANGELES/ORANGE COUNTY LINE	8700
12	022		ORA		0.000	LOS ANGELES/ORANGE COUNTY LINE	
12	022		ORA	R	0.660	JCT. RTE. 405	11200
12	022		ORA	R	2.653	WESTMINSTER, KNOTT AVE/GOLDEN WEST ST	16600
12	022		ORA	R	3.587	GARDEN GROVE, JCT. RTE. 39	12300
12	022		ORA	R	4.812	GARDEN GROVE, MAGNOLIA STREET	15900
12	022		ORA	R	5.817	GARDEN GROVE, BROOKHURST STREET	15200
12	022		ORA	R	6.811	GARDEN GROVE, EUCLID STREET	15600
12	022		ORA	R	7.829	GARDEN GROVE, HARBOR BOULEVARD	15900

12	022	ORA	R	8.822	GARDEN GROVE, GARDEN GROVE BOULEVARD	15900
12	022	ORA	R	9.729	ORANGE, MANCHESTER AVENUE/ CITY DRIVE	16300
12	022	ORA	R	10.478	SANTA ANA, JCT. RTES. 5 AND 57	17100
12	022	ORA	R	10.992	SANTA ANA, MAIN STREET	10900
12	022	ORA	R	11.825	ORANGE, GLASSELL STREET	10800
12	022	ORA	R	12.866	TUSTIN AVENUE	10500
12	022	ORA	R	13.164	JCT. RTE. 55	8700
07	023	LA		0.000	JCT. RTE. 1	
07	023	LA		4.791	SOUTH JUNCTION MULHOLLAND HIGHWAY	120
07	023	LA		6.711	NORTH JUNCTION MULHOLLAND HIGHWAY	140
07	023	LA		8.900	LOS ANGELES/VENTURA COUNTY LINE	270
07	023	VEN		0.000	LOS ANGELES/VENTURA COUNTY LINE	
07	023	VEN	T	1.490	THOUSAND OAKS, PORTRERO ROAD	270
07	023	VEN	R	2.258	THOUSAND OAKS, TRIUNFO CANYON ROAD	1300
07	023	VEN	R	2.880	THOUSAND OAKS, AGOURA ROAD	2250
07	023	VEN	R	3.339	THOUSAND OAKS, JCT. RTE. 101, VENTURA FREEWAY	3250
07	023	VEN	R	5.064	THOUSAND OAKS, JANSS ROAD	10000
07	023	VEN	R	6.028	THOUSAND OAKS, AVENIDA DE LOS ARBOLES	9900
07	023	VEN	R	7.165	THOUSAND OAKS, SUNSET HILLS BOULEVARD	9100
07	023	VEN	R	8.209	THOUSAND OAKS, OLSEN ROAD	8900
07	023	VEN	R	10.164	MOORPARK, TIERRA REJADA ROAD	7200

07	023	VEN	R	11.432	MOORPARK, JCT. RTE. 118	7000
07	023	VEN	R	13.373	MOORPARK, HIGH STREET	1200
07	023	VEN		14.260	MERIDIAN HILLS DRIVE	720
07	023	VEN		14.607	SPRING ROAD	410
07	023	VEN		15.540	HAPPY CAMP ROAD	1200
07	023	VEN		16.800	GRIMES CANYON ROAD	920
07	023	VEN		22.265	BARSDALE AVENUE	870
07	023	VEN		24.165	FILLMORE, JCT. RTE. 126, VENTURA STREET	1000
04	024	ALA	R	1.847	OAKLAND, JCT. RTES. 580 AND 980	
04	024	ALA	R	3.063	OAKLAND, TELEGRAPH/CLAREMONT AVENUES	11300
04	024	ALA	R	4.152	OAKLAND, BROADWAY/PATTON STREET	10900
04	024	ALA	R	5.117	OAKLAND, JCT. RTE. 13	11300
04	024	ALA	R	5.650	CALDECOTT LANE	13100
04	024	ALA	R	6.241	ALAMEDA/CONTRA COSTA COUNTY LINE	13800
04	024	CC	R	0.000	ALAMEDA/CONTRA COSTA COUNTY LINE	
04	024	CC	R	0.400	FISH RANCH ROAD	13800
04	024	CC		1.196	GATEWAY BOULEVARD	14100
04	024	CC	R	2.319	CAMINO PABLO	14300
04	024	CC	R	3.473	SAINT STEPHENS	14300
04	024	CC	R	4.397	LAFAYETTE, ACALANES ROAD	14400
04	024	CC	R	6.512	LAFAYETTE, OAK HILL ROAD/ FIRST STREET	14200
04	024	CC	R	7.656	LAFAYETTE, PLEASANT HILL ROAD	15500
04	024	CC		9.119	WALNUT CREEK, JCT. RTE. 680	15600
05	025	MON		0.000	JCT. RTE. 198	

05	025	MON		11.750	MONTEREY/SAN BENITO COUNTY LINE	40
05	025	SBT		0.000	MONTEREY/SAN BENITO COUNTY LINE	
05	025	SBT		7.300	BITTER WATER/KING CITY ROAD	90
05	025	SBT		21.470	JCT. RTE. 146 WEST	100
05	025	SBT		39.533	PAICINES, PANOCHÉ ROAD	150
05	025	SBT		49.014	VALLEY VIEW ROAD	310
05	025	SBT		52.194	BRIGGS RD E	1800
05	025	SBT		54.048	JCT. RTE. 156	1900
05	025	SBT		55.134	HUDNER LANE	2000
05	025	SBT		60.084	SAN BENITO/SANTA CLARA COUNTY LINE	2700
04	025	SCL		0.000	SAN BENITO/SANTA CLARA COUNTY LINE	
04	025	SCL		2.528	GILROY, JCT. RTE. 101	2400
04	025	SCL		2.560	JCT. RTE. 101, GILROY, SOUTH	2400
10	026	SJ		1.110	JCT. RTE. 99	
10	026	SJ		1.897	CARDINAL AVENUE	1300
10	026	SJ	R	4.217	ALPINE RD	920
10	026	SJ		6.850	JACKTONE ROAD	750
10	026	SJ		10.000	DUNCAN ROAD	840
10	026	SJ		10.700	MILL STREET	880
10	026	SJ		11.080	LINDEN, FLOOD ROAD/FRONT STREET	590
10	026	SJ		15.060	ESCALON/BELLOTA ROAD	660
10	026	SJ		20.506	SAN JOAQUIN/CALAVERAS COUNTY LINE	540
10	026	CAL		0.000	SAN JOAQUIN/CALAVERAS COUNTY LINE	
10	026	CAL		1.880	GREGORY MILTON ROAD	550
10	026	CAL	R	4.379	JENNY LIND ROAD	440

10	026	CAL	7.620	SILVER RAPIDS RD	700
10	026	CAL	8.530	LA CONTENTA COUNTRY CLUB ENTRANCE	850
10	026	CAL	9.859	HOGAN DAM ROAD	1150
10	026	CAL	10.435	VALLEY SPRINGS, JCT. RTE. 12	1050
10	026	CAL	14.280	PALOMA RD LT	170
10	026	CAL	18.069	MOKELUMNE HILL, JCT. RTE. 49	170
10	026	CAL	26.797	RIDGE ROAD	130
10	026	CAL	32.650	GLENCO, ASSOCIATED OFFICE ROAD	160
10	026	CAL R	33.564	RAILROAD FLAT ROAD	80
10	026	CAL	34.770	WINTON ROAD	210
10	026	CAL	34.885	MAIN STREET	200
10	026	CAL	38.325	CALAVERAS/AMADOR COUNTY LINE	180
10	026	AMA	0.000	CALAVERAS/AMADOR COUNTY LINE	
10	026	AMA	4.644	JCT. RTE. 88	250
07	027	LA	0.000	JCT. RTE. 1	
07	027	LA	4.310	OLD TOPANGA CANYON ROAD	2000
07	027	LA	11.060	LOS ANGELES, MULHOLLAND DRIVE	1550
07	027	LA	12.276	LOS ANGELES, VENTURA BOULEVARD	2900
07	027	LA	12.430	LOS ANGELES, JCT. RTE. 101	5300
07	027	LA	14.050	LOS ANGELES, VANOWEN STREET	3000
07	027	LA	14.550	LOS ANGELES, SHERMAN WAY	3400
07	027	LA	15.830	LOS ANGELES, ROSCOE BOULEVARD	2900
07	027	LA	18.629	LOS ANGELES, DEVONSHIRE STREET	3850
07	027	LA	20.062	LOS ANGELES, JCT. RTE. 118	4500

03	028	PLA		0.085	TAHOE CITY, JCT. RTE. 89	
03	028	PLA		0.512	GROVE STREET	1450
03	028	PLA		0.830	TAHOE STATE PARK	1400
03	028	PLA		1.845	LAKE FOREST DRIVE	1150
03	028	PLA		4.250	LARDIN WAY	870
03	028	PLA		5.810	CARNELIAN BAY ROAD	800
03	028	PLA		7.190	GRANITE ROAD	1150
03	028	PLA		8.320	NATIONAL AVENUE	1400
03	028	PLA		9.340	KINGS BEACH, JCT. RTE. 267 NORTH	1600
03	028	PLA		9.880	COON STREET	2200
03	028	PLA		11.000	CAL-NEVA DRIVE	1550
03	028	PLA		11.028	NEVADA STATE LINE	1200
04	029	SOL		0.000	VALLEJO, JCT. RTE. 80	
04	029	SOL		1.010	VALLEJO, LEMON STREET	1400
04	029	SOL		2.066	VALLEJO, MAINE STREET	2400
04	029	SOL		2.820	VALLEJO, TENNESSEE STREET	1900
04	029	SOL		4.732	LEWIS BROWN DR/JCT. RTE. 37	3600
04	029	SOL		5.850	VALLEJO, MINI DRIVE	3600
04	029	SOL		5.955	SOLANO/NAPA COUNTY LINE	3600
04	029	NAP		0.000	SOLANO/NAPA COUNTY LINE	
04	029	NAP		0.690	AMERICAN CANYON ROAD	3600
04	029	NAP	R	2.767	GREEN ISLAND ROAD	3200
04	029	NAP		3.610	KELLY ROAD SOUTH	3200
04	029	NAP		4.706	JCT. RTE. 12 EAST	3800
04	029	NAP	R	6.196	JCT. RTE. 221 NORTH	6400
04	029	NAP	R	8.657	JCT. RTE. 121 SOUTH	4100
04	029	NAP	R	9.100	IMOLA AVENUE	4700
04	029	NAP	R	10.389	NAPA, JCT. RTE. 121 NORTH	4700

04	029	NAP	11.548	FIRST STREET	5700
04	029	NAP	12.039	NAPA, LINCOLN AVENUE	6400
04	029	NAP	13.058	JCT. TRANCAS/REDWOOD ROAD	5700
04	029	NAP	15.581	OAK KNOLL AVENUE	4200
04	029	NAP	19.031	CALIFORNIA DRIVE	4200
04	029	NAP	22.520	OAKVILLE GRADE ROAD	3700
04	029	NAP	24.595	RUTHERFORD, JCT. RTE. 128 EAST	2800
04	029	NAP	26.570	ZINFANDEL LANE	2700
04	029	NAP	28.750	ST. HELENA, ADAMS STREET	2500
04	029	NAP	29.250	ST. HELENA, PRATT AVENUE	2300
04	029	NAP	30.660	LODI LANE	2000
04	029	NAP	33.470	LARKMEAD LANE	1800
04	029	NAP	36.893	CALISTOGA, JCT. RTE. 128 NORTHWEST	1600
04	029	NAP	37.902	CALISTOGA, SILVERADO TRAIL	1400
04	029	NAP	39.500	TUBBS LANE	1300
04	029	NAP	48.582	NAPA/LAKE COUNTY LINE	1000
01	029	LAK	0.000	NAPA/LAKE COUNTY LINE	
01	029	LAK	4.150	RANCHERIA ROAD	870
01	029	LAK	4.540	DRY CREEK CUTOFF	870
01	029	LAK	5.811	MIDDLETOWN, JCT. RTE. 175	820
01	029	LAK	6.360	MIDDLETOWN, BUTTS CANYON ROAD	880
01	029	LAK	11.124	HIDDEN VALLEY/SPRUCE ROAD	870
01	029	LAK	11.930	SPRUCE GROVE ROAD	960
01	029	LAK	20.310	JCT. RTE. 53 NORTH	940
01	029	LAK	21.650	SEIGLER CANYON ROAD	1150
01	029	LAK	22.190	POINT LAKEVIEW DRIVE	1050
01	029	LAK	27.890	JCT. RTE. 281	930

01	029	LAK		31.050	JCT. RTE. 175	1000
01	029	LAK		32.350	BOTTLE ROCK ROAD	1000
01	029	LAK	R	34.580	MAIN STREET	1200
01	029	LAK	R	34.747	KELSEYVILLE, LIVE OAK DRIVE	1200
01	029	LAK	R	35.320	KELSEYVILLE, BELL HILL ROAD	1200
01	029	LAK	R	36.289	RENFRO DRIVE	1200
01	029	LAK	R	37.669	ARGONAUT ROAD	1300
01	029	LAK	R	38.592	HIGHLAND SPRINGS ROAD	1300
01	029	LAK	R	40.140	JCT. RTE. 175	1500
01	029	LAK	R	41.423	LAKEPORT, LAKEPORT BOULEVARD	1300
01	029	LAK	R	42.677	11TH STREET	1350
01	029	LAK	R	45.145	PARK WAY	2200
01	029	LAK	R	47.849	LUCERNE	980
01	029	LAK		52.539	JCT. RTE. 20, UPPER LAKE	1000
03	032	GLE	L	0.000	JCT. RTE. 5	
03	032	GLE	R	0.523	WALKER & 6TH	840
03	032	GLE		1.300	ORLAND, COUNTY ROAD M	820
03	032	GLE		3.000	COUNTY ROAD P	830
03	032	GLE		9.626	JCT. RTE. 45 SOUTH	930
03	032	GLE		10.910	GLENN/BUTTE COUNTY LINE	1350
03	032	BUT		0.000	GLENN/BUTTE COUNTY LINE	
03	032	BUT		4.180	MERIDIAN ROAD	1350
03	032	BUT		5.022	MUIR AVENUE	1350
03	032	BUT		6.238	EAST/NORTH LINDO AVE	1400
03	032	BUT		6.457	WEST LINDO AVENUE	1600
03	032	BUT		7.110	WEST EIGHTH AVENUE	1750
03	032	BUT		7.790	WEST SACRAMENTO AVENUE	2150

03	032	BUT	R	8.367		CHICO, WEST FIRST STREET	1850
03	032	BUT	R	8.655		CHICO, WEST FIFTH STREET	2250
03	032	BUT	R	8.869	R	CHICO, ON NINTH ST/WALNUT ST, BEG RIGHT ALIGN	
03	032	BUT	R	9.006	R	CHICO, ON NINTH STREET AT ORANGE STREET	990
03	032	BUT	R	9.133	R	CHICO, ON NINTH STREET AT IVY STREET	1050
03	032	BUT	R	9.461	R	CHICO, ON NINTH STREET AT BROADWAY	1150
03	032	BUT		9.081	R	CHICO, ON 9TH ST AT MAIN ST	1350
03	032	BUT		9.410	R	CHICO, ON NINTH STREET AT PINE STREET	1600
03	032	BUT		9.460	R	CHICO, ON NINTH STREET AT CYPRESS STREET	2100
03	032	BUT		10.187	R	CHICO, JCT. RTE. 99	1650
03	032	BUT		10.280	R	CHICO, ON NINTH STREET AT FIR STREET	1800
03	032	BUT		10.735	R	CHICO, 1/2 MILE EAST OF FIR ST, END RIGHT ALIGN	810
03	032	BUT	R	8.905	L	CHICO, ON EIGHTH ST/WALNUT ST, BEGIN LEFT ALIGN	
03	032	BUT	R	9.038	L	CHICO, ON EIGHTH STREET AT ORANGE STREET	1150
03	032	BUT	R	9.171	L	CHICO, ON EIGHTH STREET AT IVY STREET	1350
03	032	BUT	R	9.504	L	CHICO, ON EIGHTH STREET AT BROADWAY	1300
03	032	BUT	R	9.571	L	CHICO, ON 8TH ST AT MAIN ST	1400
03	032	BUT		9.400	L	CHICO, ON EIGHTH STREET AT PINE STREET	1400
03	032	BUT		9.460	L	CHICO, ON EIGHTH STREET AT CYPRESS STREET	1700

03	032	BUT		10.187	L	CHICO, ON EIGHTH STREET AT JCT. RTE. 99	1650
03	032	BUT		10.280	L	CHICO, ON EIGHTH STREET AT FIR STREET	1150
03	032	BUT		10.735	L	CHICO, 1/2 MILE E OF FIR ST, END LEFT ALIGN	790
03	032	BUT		11.010		CHICO, FOREST AVENUE	2400
03	032	BUT		11.270		CHICO, EL MONTE AVENUE	1650
03	032	BUT		11.704		BRUCE ROAD	1450
03	032	BUT		15.211		CHICO, HUMBOLT ROAD	560
03	032	BUT	R	23.866		FOREST RANCH, NOPEL AVENUE	320
03	032	BUT	R	36.926		LOMO, HUMBOLT ROAD	160
03	032	BUT		37.749		BUTTE/TEHAMA COUNTY LINE	120
02	032	TEH		0.000		BUTTE/TEHAMA COUNTY LINE	
02	032	TEH	R	24.876		JCT. RTE. 36	230
07	033	VEN		0.000		VENTURA, JCT. RTE. 101	
07	033	VEN		1.565		VENTURA, STANLEY AVENUE	3750
07	033	VEN		2.648		SHELL ROAD	2800
07	033	VEN	R	4.487		CANADA LARGA ROAD	2600
07	033	VEN	R	5.635		CASITAS VISTA ROAD	2450
07	033	VEN		8.001		CREEK ROAD	2100
07	033	VEN		9.040		SANTA ANA BOULEVARD	2050
07	033	VEN		10.650		WOODLAND ROAD	1900
07	033	VEN		11.200		WEST JCT. RTE. 150, BALDWIN ROAD; ROUTE BREAK AHEAD	1900
07	033	VEN		11.961		EL ROBLAR DRIVE	1300
07	033	VEN		12.800		FAIRVIEW ROAD/LA LUNA AVENUE	400
07	033	VEN		13.350		LOS PADRES NATIONAL FOREST BOUNDARY	250
07	033	VEN		15.441		MATILIJA HOT SPRINGS ROAD	250

07	033	VEN		17.631	WHEELER HOT SPRINGS	150
07	033	VEN		25.791	ROSE VALLEY ROAD	120
07	033	VEN		30.219	SESPE GORGE MAINTENANCE STATION	90
07	033	VEN		48.500	LOCKWOOD VALLEY ROAD	70
07	033	VEN		57.508	VENTURA/SANTA BARBARA COUNTY LINE	70
05	033	SB		0.000	VENTURA/SANTA BARBARA COUNTY LINE	
05	033	SB		8.184	SANTA BARBARA/SAN LUIS OBISPO COUNTY LINE	290
05	033	SLO		0.000	SANTA BARBARA/SAN LUIS OBISPO COUNTY LINE	
05	033	SLO		2.802	JCT. RTE. 166 WEST	110
05	033	SLO		4.951	SAN LUIS OBISPO/KERN COUNTY LINE	490
06	033	KER		0.000	SAN LUIS OBISPO/KERN COUNTY LINE	
06	033	KER	R	11.555	MARICOPA, JCT. RTE. 166 EAST	550
06	033	KER		12.910	COUNTY ROAD P263	420
06	033	KER		17.889	TAFT, JCT. RTE. 119 EAST	610
06	033	KER		18.330	TAFT, FIRST STREET	570
06	033	KER		18.790	TAFT, SIXTH STREET	970
06	033	KER		19.129	LINCOLN/10TH STREET	1200
06	033	KER		23.410	MIDWAY ROAD	330
06	033	KER		33.454	JCT. RTE. 58 WEST	470
06	033	KER		34.285	JCT. RTE. 58 EAST	470
06	033	KER		41.080	LOKERN ROAD (COUNTY ROAD P208)	380
06	033	KER		44.085	LOST HILLS ROAD (COUNTY ROAD P213)	570
06	033	KER	R	60.168	JCT. RTE. 46	210
06	033	KER		72.720	DEVILS DEN ROAD (BARKER ROAD)	250

06	033	KER		73.743	KERN/KINGS COUNTY LINE	240
06	033	KIN		0.000	KERN/KINGS COUNTY LINE	
06	033	KIN		7.800	REEF CITY, JCT. RTE. 41	370
06	033	KIN		16.400	SOUTH END, AVENAL	680
06	033	KIN		16.440	AVENAL, 7TH AVENUE	680
06	033	KIN		17.140	JCT. RTE. 269	360
06	033	KIN		18.994	KINGS/FRESNO COUNTY LINE	300
06	033	FRE		0.000	KINGS/FRESNO COUNTY LINE	
06	033	FRE		8.020	ALPINE/LOST HILLS ROAD	300
06	033	FRE		14.750	MERCED AVENUE	860
06	033	FRE		15.370	COALINGA, FIFTH STREET	1200
06	033	FRE		15.707	COALINGA, JCT. RTE. 198 WEST	430
06	033	FRE		16.780	COALINGA, PHELPS AVENUE	930
06	033	FRE	R	18.588	GALE AVENUE	460
06	033	FRE		24.316	JCT. RTE. 198 EAST	390
06	033	FRE	R	27.019	DERRICK AVENUE	250
06	033	FRE	R	29.000	JCT. RTE. 145 NORTHEAST, SOUTH JCT. RTE. 5	230
06	033	FRE	R	39.853	NORTH JCT. RTE. 5	230
06	033	FRE		53.400	ADAMS AVENUE	290
06	033	FRE		59.430	CALIFORNIA AVENUE	290
06	033	FRE		61.450	MENDOTA, BELMONT AVENUE	350
06	033	FRE		62.247	MENDOTA, JCT. RTE. 180 EAST	710
06	033	FRE	R	62.506	BASS AVENUE	1150
06	033	FRE		69.920	FIREBAUGH, 15TH STREET	1200
06	033	FRE		70.193	FIREBAUGH, 12TH STREET	1150

06	033	FRE		70.557	FIREBAUGH, 8TH STREET	950
06	033	FRE		72.837	DOUGLAS AVENUE	300
06	033	FRE	R	79.905	BRANNON AVENUE	270
10	033	MER	L	1.232	FRESNO/MERCED COUNTY LINE	300
10	033	MER	R	0.000	FRESNO/MERCED COUNTY LINE	
10	033	MER	R	1.170	DOS PALOS, BLOSSOM STREET	710
10	033	MER		1.888	CARMELLIA AVENUE	620
10	033	MER	R	5.635	EAST JCT. RTE. 152	980
10	033	MER	R	13.238	WEST JCT. RTE 152	680
10	033	MER	R	15.600	VERA CRUZ DRIVE	1050
10	033	MER	R	16.258	CENTINELLA, HENRY MILLER ROAD	950
10	033	MER	R	16.643	JCT. RTE. 5	1200
10	033	MER		17.270	MC CABE ROAD	470
10	033	MER		27.111	NORTH JCT. RTE. 140 EAST	710
10	033	MER		30.302	MERCED/STANISLAUS COUNTY LINE	590
10	033	STA		0.000	MERCED/STANISLAUS COUNTY LINE	
10	033	STA		0.680	NEWMAN, MERCED STREET	780
10	033	STA		0.950	NEWMAN, DRISKELL ROAD/KERN STREET	710
10	033	STA		2.060	STUHR ROAD	780
10	033	STA		4.820	J.T. CROW RD RT	470
10	033	STA		6.838	CROWS LANDING, CROWS LANDING/FINK ROAD	560
10	033	STA		7.040	CROWS LANDING, 4TH STREET	390
10	033	STA		12.571	PATTERSON, SPERRY ROAD	610
10	033	STA		13.100	SALADO AVENUE/EL CIRCULO	810

10	033	STA	13.180	LAS PALMAS AVENUE	90
10	033	STA	13.260	DEL PUERTO AVENUE/EL CIRCULO	540
10	033	STA	14.520	WARD AVENUE	540
10	033	STA	16.430	BALDWIN RD-LT	450
10	033	STA	19.550	WESTLEY, GRAYSON/HOWARD ROAD	400
10	033	STA	19.920	WESTLEY, E STREET	270
10	033	STA	27.086	STANISLAUS/SAN JOAQUIN COUNTY LINE	610
10	033	SJ	0.000	STANISLAUS/SAN JOAQUIN COUNTY LINE	
10	033	SJ	0.818	VERNALIS, JCT. RTE. 132	240
10	033	SJ	3.510	NEW JERUSALEM, DURHAM FERRY ROAD	290
10	033	SJ	4.826	JCT. RTE. 5	800

Traffic Volumes: Annual Average Daily Traffic (AADT), for all vehicles on CA State Highways.



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City of Lakeport
MUNICIPAL SEWER DISTRICT

225 Park Street
Lakeport, CA 95453
707.263.5615
cityoflakeport.com



Sewer System Management Plan



Prepared By:
City of Lakeport
Utilities Department
Sewer Division

Revision 1—March 2018

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Formatting Notes:

MS Word Versions of this document: Most appendices can be accessed by double-clicking the embedded .PDF files.

.PDF and Hard Copy Versions: Double-clicking embedded .PDF files is disabled and associated appendices are included/attached.

List of Acronyms

AB	Assembly Bill (California)
BAT	Best Available Technology
BMP	Best Management Practice
CALEPA	California Environmental Protection Agency
CCR	California Code of Regulations
CCTV	Closed-Circuit Television
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
City	City of Lakeport
CLMSD	City of Lakeport Municipal Sewer District; managed by the Public Works Department, Utilities Division
CM	Corrective Maintenance
CMMS	Computerized Maintenance Management System
CDFG	California Department of Fish and Game
CWA	Clean Water Act (federal)
CWEA	California Water Environment Association
CVCWA	Central Valley Clean Water Association
CVRWQCB	Central Valley Regional Water Quality Control Board
ERP	Emergency Response Plan
FOG	Fats, Oils, and Grease
FSE	Food Service Establishments
GIS	Geographical Information System
GPS	Global Positioning System
GW	Groundwater Induced Infiltration
GWDR	General Waste Discharge Requirements and/or Waste Discharge Requirements (WDR)
HMBP	Hazardous Materials Business Plan
HMIRSP	Hazardous Materials Incident Response Plan
I/I	Inflow / Infiltration
ICS	Incident Command System
IERP	Integrated Emergency Response Plan
LACOSAN	Lake County Sanitation District, A.K.A. Special Districts
LMC	Lakeport Municipal Code
LRO	Legally Responsible Official
MGD	Million Gallons per Day

MRP	Monitoring and Reporting Program
NPDES	National Pollution Discharge Elimination System
NRC	National Research Council
O&M	Operation and Maintenance
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
Order	SWRCB General Order No. 2006-0003-DWQ, adopted May 2, 2006
Pd	Predictive Maintenance
PM	Preventative Maintenance
PMP	Preventative Maintenance Program
POTW _s	Publicly Owned Treatment Works
R&R	Rehabilitation and Replacement
RWQCB	Regional Water Quality Control Board
SB	Senate Bill (state)
SCADA	Supervisory Control and Data Acquisition
SDS	Safety Data Sheets
SOP	Standard Operating Procedure <u>or</u> Standard Maintenance Procedure
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
USEPA	United States Environmental Protection Agency (Federal)
WDP	Waste Discharge Permit
WDR	Waste Discharge Requirements and/or General Waste Discharge Requirements (GWDR)
WWTP	Wastewater Treatment Plant

List of Terms

Authorized Representative – The person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or a duly authorized representative of that person. For CLMSD, this person either would be the Director or the Compliance Officer.

Blockage – Something that partially or fully blocks the wastewater from flowing through a sewer pipeline. The blockage can be caused by debris in the sewer, grease buildup, root intrusion, or a partial or full collapse of the pipeline. If not caught in time, the blockage may cause an overflow. This is also called a stoppage.

California Association of Sanitation Agencies (CASA) - CASA is a non-profit, statewide trade association representing public agencies that provide wastewater collection, treatment, disposal, and/or water reclamation services to about 90 percent of the sewered population in California. Website: <http://www.casaweb.org/>

California Water Environment Association (CWEA) – CWEA is an association of 8,000-plus professionals in the wastewater industry. CWEA is committed to keeping California's water clean. CWEA trains and certifies wastewater professionals, disseminates technical information, and promotes sound policies to benefit society through protection and enhancement of the water environment. CWEA offers services at the state level and locally through 17 geographical local sections. Through their on-line bookstore, CWEA offers technical references for sewer system operation and maintenance. Website: <http://www.cwea.org/>

Central Valley Regional Water Quality Control Board – Also known as Regional Water Quality Control Board or RWQCB. This is the primary wastewater regulator for CLMSD and the agency that issues agency-specific WDRs. The mission of this state regulatory agency is to: preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. Website: <http://www.waterboards.ca.gov/centralvalley/>

Capital Improvement Plan – Identifies and prioritizes system deficiencies and implements short-term and long-term rehabilitation actions to address each deficiency. The CIP is budgeted in operations and in reserves for long-term projects. It is directly related to depreciation expense, which includes fixed assets (e.g. treatment plant, pump stations, and other appurtenances) equipment, vehicles, and technology (e.g. SCADA replacement, computer refresh, monitoring programs, communication enhancements, etc.).

Enrollee – The legal public entity that owns a sanitary sewer system, as defined by the GWDR, which has submitted a complete and approved application for coverage under the GWDR. This is also called a sewer system agency or wastewater collection system agency. CLMSD is the legal owner of the wastewater collection system for the City.

Fats, Oils and Grease (FOG) - Fats, oils, and grease that are discharged into the sanitary sewer collection system by Food Service Establishments (FSE), homes, apartments and other sources. FOG is a major cause of blockages leading to increased maintenance and sometimes SSOs. Due to CLMSD's proximity to Clear Lake, mitigating FOG is a paramount concern.

FOG Control Program – To be implemented at the Enrollee's discretion. May include public education program; plan and schedule for the disposal of FOG; legal authority to prohibit FOG related discharges; requirement to install grease removal devices; authority to inspect grease producing facilities; identification of sanitary sewer system sections subject to FOG blockages and the establishment of a cleaning schedule for each section; development and implementation of source control measures for all sources of FOG. The CLMSD has a robust FOG Control Program and diligently works with local businesses and residents to ensure awareness and action of FOG issues and BMPs. FOG regulations are set forth in [Section 13.20.600](#) et. seq. of the [Lakeport Municipal Code](#).

Geographical Information System (GIS) – A database linked with mapping, which includes various layers of information used by government officials. Examples of information found on a GIS can include a sewer map; sewer features such as pipe location, diameter, material, condition, last date cleaned or repaired. CLMSD's GIS also contains base information such as streets and parcels. It is updated and maintained by staff with detailed and specific knowledge of the collection and treatment system.

Governing Board – This is the governing board of the sewer entity developing the SSMP. The City Council also acts as the Board of Directors for CLMSD.

GWDR – General Waste Discharge Requirements – A GWDR is an authorization to discharge waste with certain conditions, which can be issued on an individual basis or to a group of dischargers. The Statewide General WDR for Sanitary Sewer Systems was adopted by the SWCRB and will be implemented by the Regional Water Boards and SWRCB.

Groundwater Induced Infiltration (GWI) – Infiltration attributed to groundwater entering the sewer system.

Infiltration – The seepage of groundwater into a sewer system, including service connections. Seepage frequently occurs through defective or cracked pipes, pipe joints, connections or manhole walls and joints.

Inflow – Water discharged into a sewer system and service connections from such sources as, but not limited to, roof leaders, cellars, yard and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, around manhole covers or through holes in the covers, cross connections from storm and combined sewer system, catch basins, storm waters, surface runoff, street wash waters or drainage. Inflow differs from infiltration in that it is a direct discharge into the sewer rather than a leak into the sewer itself.

Lateral – The portion of sewer that connects a home or business with the main line in the street. Sometimes sewer system agencies own or maintain a portion of the lateral.

Upper Lateral: Portion of lateral from building to property line (or easement line), usually privately owned and maintained.

Lower Lateral: Portion of lateral from property line (or easement line) to sewer mainline in the street or easement. This portion of the lateral is sometimes privately owned and maintained and sometimes publicly owned and maintained.

Monitoring and Reporting Program - The Monitoring and Reporting Program established in the WDR that establishes monitoring, record keeping, reporting and public notification requirements for the GWDR.

Ordinance - City of Lakeport (CLMSD) Sewer Use Ordinance No.872 (2008), adopted by the Board of Directors to establish basic use provisions for the wastewater collection and treatment system. Codified in [Chapter 13.20](#) of the [Lakeport Municipal Code](#).

Overflow Emergency Response Plan – Identifies measures to protect public health and the environment. A plan must include the following: notification procedure, appropriate response plan, regulatory notification procedures, employee training plan, procedures to address emergency operations, a program that ensures all reasonable steps are taken to contain and prevent discharges.

Private Lateral – That portion of the Lateral that is owned and maintained by the private property owner that it serves. In the CLMSD, the private lateral typically ends at the sewer cleanout at the public right-of-way.

Preventative Maintenance (PM) – Regularly scheduled servicing of machinery, infrastructure or other equipment using appropriate tools, tests, and lubricants. This type of maintenance can prolong the useful life of equipment, infrastructure, and machinery and increase its efficiency by detecting and correcting problems before they cause a breakdown of the equipment, or failure of the infrastructure.

R-Value – Is the amount of rainfall that reaches the collection system via infiltration and inflow. This value is typically expressed as a percentage of total rainfall volume that reaches the collection system.

Rainfall Dependent Infiltration and Inflow – Infiltration and Inflow that is attributed directly to rainfall.

Regional Water Board – Is a short name for any of the nine regional boards including the San Francisco Bay Area Regional Water Quality Control Board and the Central Valley Regional Water Quality Control Board.

Sanitary Sewer Overflow (SSO) – The Statewide GWDR defines an SSO as any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system, including overflows or releases that reach waters of the United States, overflows or releases that *do not* reach water of the United States, and backups into buildings and/or private property caused by conditions within the publicly owned portion of the sewer system.

Sanitary Sewer Overflow Categories

- *Category 1* – Sanitary sewer system failure with **ANY** discharge that reaches surface water or drainage channel (dry or wet) or to storm drain system and is not fully captured and returned to sewer.
- *Category 2* – Sanitary sewer system failure with **1,000 gallons or greater** that **do not** reach surface water, a drainage channel, or the storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
- *Category 3* -- All other discharges of sewage resulting from a failure of the sanitary sewer system.

Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately-owned lateral

Spill at the wastewater treatment plant – An SSO or other type of wastewater spill that occurs at the treatment plant. It has unique reporting requirements similar to a Category 1 SSO.

Sanitary Sewer Systems – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant head works used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities are considered to be part of the sanitary sewer system and discharges into these temporary storage facilities are not to be considered SSOs.

Satellite Collection System – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary. LACOSAN, or Special Districts, serves as such a system to the north and south of CLMSD. The District and LACOSAN have a mutual aid agreement in place, whereby flows can be sent from CLMSD to LACOSAN in the north and received by CLMSD in the south.

Sewer System Management Plan (SSMP) – A series of written site-specific programs that address how a collection system owner/operator conducts their daily business as is outlined in the WDR. Each SSMP is unique for an individual discharger. The plan includes provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. The SSMP must also contain a spill response plan. Certification is offered by technically qualified and experienced persons and provides a useful cost-effective means for ensuring that SSMPs are developed and implemented appropriately. For CLMSD, this individual is the Compliance Officer.

Stakeholder - A person or organization that has a vested interest in the development and outcome of the SWRCB Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems as well as any other applicable Orders issued by the SWRCB.

State Water Resources Control Board – This is the State agency that developed and passed the GWDR for collection systems and the agency that maintains the SSO reporting web site (CIWQS).

System Evaluation and Capacity Assurance Plan – A required component of an agency’s SSMP and is an important part of any agency’s overall Capital Improvement Plan that provides hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event.

Wastewater Collection System – A.K.A. Sanitary Sewer System, see above.

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Introduction

This introductory section provides background information on the purpose and organization of this Sewer System Management Plan (SSMP) and provides a brief overview of the District's service area and sewer system.

Sewer System Management Plan Requirement Background

The State Water Resource Control Board (SWRCB) adopted [Water Quality Order No. 2006-0003-DWQ](#) at its meeting on May 2, 2006, which required all public wastewater collection system agencies in California with sewer systems greater than one mile in length to be regulated under General Waste Discharge Requirements (GWDR). The Order also requires such public collections system agencies to prepare an SSMP and report Sanitary Sewer Overflows (SSOs) using an electronic reporting system.

An SSMP is a document that describes the activities in which a wastewater agency engages to manage its collection system effectively. This includes the following:

1. Maintaining or improving the condition of the collection system infrastructure in order to provide reliable service in the future;
2. Cost-effectively minimizing inflow/infiltration (I/I) and providing adequate sewer capacity to accommodate design storm flows; and
3. Minimizing the number and impact of sanitary sewer overflows (SSOs) that occur.

In 2013 the State Water Resources Control Board issued [Order No. WQ 2013-0058-EXEC](#) which amended the monitoring and reporting program for statewide general waste discharge requirements for sanitary sewer systems. Major components are included in the Order's Attachment A, including the establishment of a third category for SSO events and other amendments related to reporting and record keeping requirements.

Completion deadlines for SSMPs are determined by population served by each respective agency. The City's most recent SSMP was adopted in 2010 and a thoroughly updated SSMP will be completed in 2018.

Document Organization

This SSMP is intended to meet the requirements of both the Central Valley Regional Water Quality Control Board (RWQCB) and the Statewide GWDR. Included in this plan are eleven elements, each of which shall make up individual sections, and are as follows:

1. Goals
2. Organization
3. Legal Authority
4. Operation and Maintenance Program

5. Design and Performance Standards
6. Overflow Emergency Response Plan
7. Fats, Oils and Grease Control Program
8. Capacity Management (System Evaluation and Capacity Assurance Plan)
9. Monitoring, Measurement, and Program Modifications
10. SSMP Audits
11. Communication Plan

Each elemental section is divided into sub-sections, which shall include:

1. Description of the SWRCB requirement for that element;
2. Identification of associated documents, figures and supporting materials; and
3. Discussion of the element, which may be sub-divided further depending on length and/or complexity.

District Service Area and Sewer System

The City of Lakeport Municipal Sewer District (CLMSD or District) serves the City of Lakeport which operates under a council-manager form of municipal government. The District is governed by a board of directors, whose members also serve as the City Council. The boundaries of the District are similar to those of the City with the addition of a few unincorporated areas to the south and west.

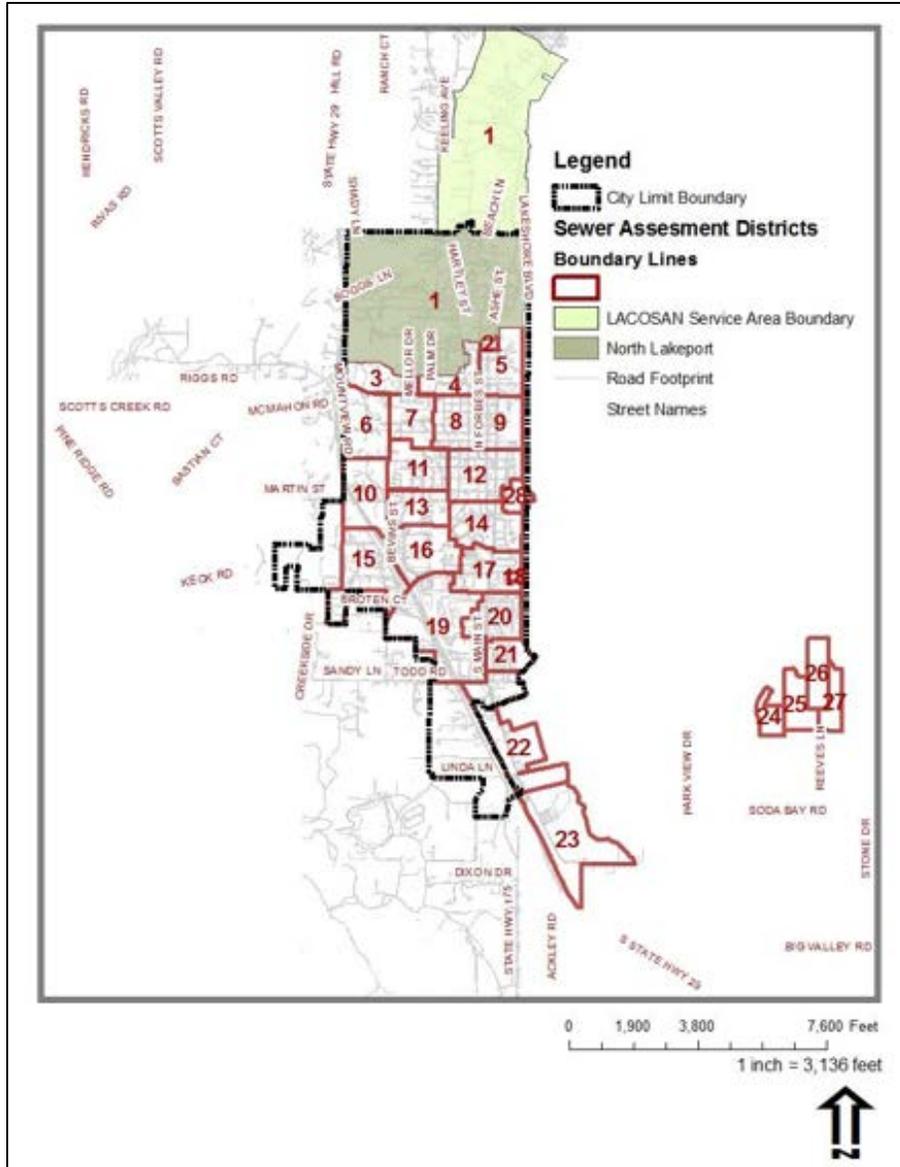


Figure 0.1. City and District Boundaries

[\(Larger copy available in Appendix 0.A\)](#)

Lakeport is located on the western shore of Clear Lake in Lake County. It was incorporated in 1888 and currently includes approximately 2.7 square miles of area. The sewer system involves approximately 2,200 connections, serving over 5,000 customers, which accounts for approximately eight percent of the entire population of Lake County. The District operates and maintains eight sewer lift stations, a secondary treatment and disposal facility, and a collection system to each private property line. The total length of the collection system maintained by the District is approximately 33 miles. The oldest main lines in service are estimated to have been installed 70 years ago. GIS mapping of the system and related SSOs has helped identify

several areas in need of rehabilitation; otherwise, the sewer collection system performs efficiently and adequately.

Currently, land use in Lakeport is approximately 76 percent commercial/residential, five percent industrial and 19 percent open space/governmental/agriculture. Marketing efforts promote Lakeport's appeal as a vacation and recreation destination. In recent years City leaders have emphasized various economic development strategies in an effort to make the City the focal point of economic and community activity for the County and the region. The City continues to work to attract new retail, hotel, industrial, educational, recreational, and food service establishments to the community.

The District seeks to implement programs and activities that will become an example of effective wastewater management for other similarly sized communities. As part of this effort, the City continues to rely on the 2008 Master Sewer Plan which evaluated the District's sewer capacity and made recommendations to effectively accommodate future growth in the short and long term, while mitigating impacts to the environment. The District acknowledges there is a need to update the Master Sewer Plan. An updated plan is expected to be completed prior to 2020.

Purpose of this SSMP

The purpose of this updated SSMP is to describe current activities CLMSD uses, as well as prescribe, develop, and implement plans the District shall engage, to manage its municipal sanitary sewer system, further eliminating preventable SSOs, minimizing SSOs that do occur, and protecting both public and environmental health.

SSMP Work Plan and Schedule

The work plan and schedule for the development of this updated SSMP (Revision 1) is set forth in Table 0.1 below.

**Table 0.1
CLMSD Sewer System Management Plan Update Schedule**

<u>Required Elements</u>	<u>Considerations</u>	<u>Due Date</u>
Plan and Schedule	<ul style="list-style-type: none"> Design and assign development of SSMP to staff Determine deadlines 	Completed winter 2016
Goals	<ul style="list-style-type: none"> Minimize sanitary sewer overflows (SSOs). Prevent public and environmental health hazards. Minimize inconveniences by responsibly handling interruptions in service. Protect the large investment in the District’s collection system by maintaining adequate capacities and extending useful life. Prevent unnecessary damage to public and private property. Use funds available for sewer operations in the most efficient manner. Convey wastewater to treatment facilities with a minimum of inflow and infiltration (I/I). Perform all operations in a safe manner to avoid personal injury. Sewer System Master Plan update (current document adopted in 2008). 	Ongoing
Organization	<ul style="list-style-type: none"> Identify agency staff responsible for the SSMP and update all contacts as needed Identify chain of communication for responding to and reporting SSOs 	Updated February 2017
Emergency Response Plan	<ul style="list-style-type: none"> Review and update SSO notification procedures and update contact information of responsible individuals Update procedures to investigate, report and notify stakeholders about SSOs Identify and describe procedures to prevent overflows from reaching surface waters, and to minimize or correct any adverse impact from SSOs 	Updated November 2017
Legal Authority	<ul style="list-style-type: none"> Control I/I from the collection system and laterals Require proper design and construction of sewers and connections Require proper sewer installation, testing and inspection Ability to impose source control requirements 	No changes to existing Ordinances as part of this update.
O&M Plan	<ul style="list-style-type: none"> Maintain up-to-date maps using GIS system Continue to fund GIS operations and train appropriate personnel on use of software and data collection tools Review and describe preventative maintenance activities Provide staff training on a regular basis, encourage continuing education and professional development 	Ongoing

<p align="center">Table 0.1 CLMSD Sewer System Management Plan Update Schedule</p>		
FOG Plan	<ul style="list-style-type: none"> • Develop Fats, Oils, and Grease Program • Create and disseminate informational materials to local businesses and residents • Ensure compliance with sewer use ordinance, installation and maintenance of grease traps 	FOG program and related Ordinance adopted in 2008. Ongoing effort.
Design and Performance Standards	<ul style="list-style-type: none"> • Identify minimum design and construction standards and specifications • Identify procedures and standards for inspecting and testing 	No changes as part of this update.
System Capacity Plan	<ul style="list-style-type: none"> • Review and describe 2008 Master Sewer Plan • Review and describe CIP and timeline for completion of major rehab projects • Describe City's I&I mitigation program and recent accomplishments 	Ongoing. An updated Master Sewer Plan is expected to be completed prior to 2020.
Monitoring and Program Modifications	<ul style="list-style-type: none"> • Measure the effectiveness of each SSMP element • Monitor each SSMP element and make updates as necessary 	Ongoing
Program Audits	<ul style="list-style-type: none"> • Conduct biennial audit of SSMP and performance of its implementation • Revise SSMP as needed 	Biennial audit due in 2020 assuming SSMP update is adopted in 2018.
Communications Program	<ul style="list-style-type: none"> • Review and describe current methods of communication with public, Board of Directors, stakeholders, and community at large • Revise methods, if necessary • Continuously pursue more efficient and effective methods of communication 	November 2017
Final SSMP and Certification	<ul style="list-style-type: none"> • Present final draft SSMP for two-week public review and comment • Review, consider and recommend changes or comments, incorporate those which are appropriate • Certify updated SSMP document as complete with RWQCB via CIWQS • Present final, certified document to CLMSD Board of Directors for approval and adoption 	Public review period not required for this update. CLMSD Board review: April 3, 2018 SSMP Certification via CIWQS: April 2018

Table 0.1. SSMP Schedule

Element 1: Goals

This SSMP element identifies goals the District has set for the management, operation and maintenance of the wastewater collection system and will discuss the role of the SSMP in supporting these goals. These goals provide direction for District staff to implement improvements in the management of the District's wastewater collection systems. This section fulfills the Goals requirement of the SWRCB SSMP (Element 1).

1.1 SWRCB Requirements for Goals Element

The summarized requirements for the Goals element of the SSMP are as follows:

The Enrollee must develop goals to properly manage, operate, and maintain all parts of its sanitary sewer system in order to reduce and prevent SSOs, as well as to mitigate any SSOs that occur.

1.2 Attachments

There are no associated documents or supporting materials associated with this element.

1.3 Element Discussion

Safe, responsive, and reliable sewer service is an integral component to the purpose of the District. Its mission is to provide these things, while maintaining high quality customer service, protecting the environment, and supporting economic development within the City through maintenance of, and improvement to, the community infrastructure. The mission statement of the District reflects this sentiment:

"The [District] is dedicated to fostering a safe and picturesque environment that enhances the quality of life for our community; it is our responsibility to promote the health and safety of City residents and visitors. We are committed to being responsive to the needs of the community, exercising innovation in sustaining and growing a vibrant place in which to live, work, and do business."

In support of this mission, the District has developed the following goals for the operation and maintenance of its wastewater collection system. Throughout this SSMP document, responsibilities, procedures and guidelines for maintenance, operation and training activities will be outlined.

- Minimize sanitary sewer overflows (SSOs).
- Prevent public and environmental health hazards.
- Minimize inconveniences by responsibly handling interruptions in service.

- Protect the large investment in the District's collection system by maintaining adequate capacities and extending useful life.
- Prevent unnecessary damage to public and private property.
- Use funds available for sewer operations in the most efficient manner.
- Convey wastewater to treatment facilities with a minimum of inflow and infiltration (I/I).
- Perform all operations in a safe manner to avoid personal injury.
- Ongoing implementation of the Sewer System Master Plan.

This SSMP describes the District's existing operations and maintenance practices and will provide additional protocols for the management of the District's sewer system. This SSMP will contribute to the development of policies and procedures, which will address issues of customer service, water quality and environmental protection, long-term wastewater collection and treatment service, long-term infrastructure investment, long-term financial stability, and workforce planning and development, which will center on the continued development of the District's employee training program.

Customer service is a primary function of the District. Those whom the District serves include retail businesses, restaurants and other food service establishments, professional offices and service facilities, government agencies, and residential housing. Relationships with its customers will be strengthened as the District improves upon the level of service it offers.

Interaction with the public is imperative. Among other objectives to be achieved, staff will provide information to the public on the proper disposal of fats, oils and grease; engage in a marketing campaign to introduce and inform food service establishments to the City's sewer use and pretreatment ordinance, including the requirement to install and operate grease interceptors; review and/or redesign procedures to make working with the City more effective and responsive; continue implementing the sewer lateral certificate program to reduce I/I issues originating on private property; and make staff and City resources more readily available to the public, fostering a more personable experience for its customers.

The overall goal of this updated SSMP is to adopt, create and build upon best management practices for the District's collection system which will result in minimizing the frequency and impacts of SSOs. By providing guidance for appropriate maintenance, capacity management, emergency response, monitoring and reporting, staff will be better equipped to meet current federal and state regulations. The District has placed renewed emphasis on its compliance efforts and has assigned highly qualified staff to develop and manage response and reporting programs. Raising awareness of the effects of SSOs and ancillary environmental impacts that result from the operation of its sewer system is an important District goal.

Element 2: Organization

This section of the SSMP identifies District staff responsible for implementing this SSMP, responding to SSO events, and meeting SSO reporting requirements. This section also includes the designation of the Authorized Representative to meet SWRCB requirements for completing and certifying spill reports. This section fulfills the Organization requirement of the SWRCB SSMP (Element 2).

2.1 SWRCB Requirements for Organization Element

The summarized requirements for the Organization element of the SSMP are as follows:

The Enrollee's SSMP must identify:

1. The name of the agency's responsible or authorized representative;
2. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program, include lines of authority as shown in an organization chart or similar document with a narrative explanation; and
3. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies, if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

2.2 Documents, Figures and Supporting Materials

Associated documents for Element 2 are included in figures, presented herein, and as appendices, attached hereto (click on the hyperlinks to open the documents). They include the following:

1. Staff Directory ([Appendix 2.A](#))
2. SSO Overflow Response Plan (Utilities Division Policy U-11) ([Appendix 6.C](#))
3. District Organization Chart ([Figure 2.A](#))
4. Contact List ([Figure 2.B.](#))
5. SSO Reporting and Response Chain of Communication ([Figure 2.C.](#))

2.3 Organization Discussion

This section presents the organizational structure for the District and discusses the roles of the wastewater collection system staff, the authorized representative to the SWRCB, and key staff responsibilities for implementing and maintaining the SSMP.

The District is a public wastewater operations and service entity governed by a Board of Directors, which also acts as the City Council. It is managed by the Public Works Department, Sewer Division, under the direction of the Public Works Director, also referred to as the District or CLMSD Director. The Sewer Division is divided into three subdivisions: Administration, Compliance, and Operations.

Figure 2.A. represents the organizational structure of the District, which is comprised of the following representatives, whose responsibilities include, but are not limited to, those noted in their descriptions:

- **Board of Directors:** responsible for establishing policy, adopting ordinance, setting usage fees and penalties for infractions;
- **City Manager:** manages the general fiscal and administrative functions of the City and oversees the management of various departments within the City of Lakeport, of which CLMSD is a part;
- **CLMSD Director:** enforces policy, manages staff, allocates resources, authorizes third-party contractor services, and provides general direction for District operations;
- **City Engineer:** tasked with preparing wastewater collection system planning documents, manages capital improvement delivery systems; documents new and rehabilitated assets;
- **Compliance Officer:** primary roles and responsibilities include sewer code enforcement, SSO monitoring and reporting, and coordinating the development and implementation of the SSMP, which incorporates FOG and I/I programs;
- **Utilities Superintendent:** manages field staff and is first administrative responder to SSO incidents;
- **Building Official:** monitors, evaluates, and approves new sewer connections to the District system, ensuring they meet all applicable standards and requirements; and
- **Wastewater Facilities Supervisor:** first responder to sewer issues, delegates tasks and responsibilities to fields crews, which conduct preventive and corrective maintenance activities.



Figure 2.A. CLMSD Org Chart

The District’s authorized representative in all wastewater collection system matters is the CLMSD Director. The Director has designated the City’s Utilities Superintendent and Compliance Officer authority to certify electronic spill reports submitted to the State Water Resources Control Board. The Compliance Officer is responsible for organizing, implementing and maintaining all elements of this SSMP.

Current contact information for the positions described above is presented below in Figure 2.B.

CLMSD Contact List Updated 6/1/17		
<u>Position/Title</u>	<u>Name</u>	<u>Telephone Number</u>
City Manager	Margaret Silveira	(707) 263-5615 x104

CLMSD Contact List Updated 6/1/17		
CLMSD Director	Douglas Grider	(707) 263-3578 x401
City Engineer	Paul Curren	(707) 263-5615 x407
Compliance Officer	Andrew Britton	(707) 263-3578 x403
Utilities Superintendent	Paul Harris	(707) 263-3578 x402
Building Official	Tom Carlton	(707) 263-5615 x202
Wastewater Facilities Supervisor	Carlos Pradomerze	(707) 263-3578 x702
Construction Supervisor	Jim Kennedy	(707) 263-3578 x601

Figure 2.B. CLMSD Contact List

The Compliance Officer is authorized to submit SSO reports to all appropriate government agencies (i.e., Central Valley Regional Water Quality Control Board, Lake County Environmental Health Department, Lake County Air Quality Management District and the State Office of Emergency Services). The Chain of Communication is presented below as Figure 2.C. It is to be used in conjunction with the District’s SSO Reporting Requirements Reference Guide ([Appendix 2.B](#)) and its SSO Emergency Response Plan (Utilities Department Policy No. U-11/ [Appendix 6.C](#)).

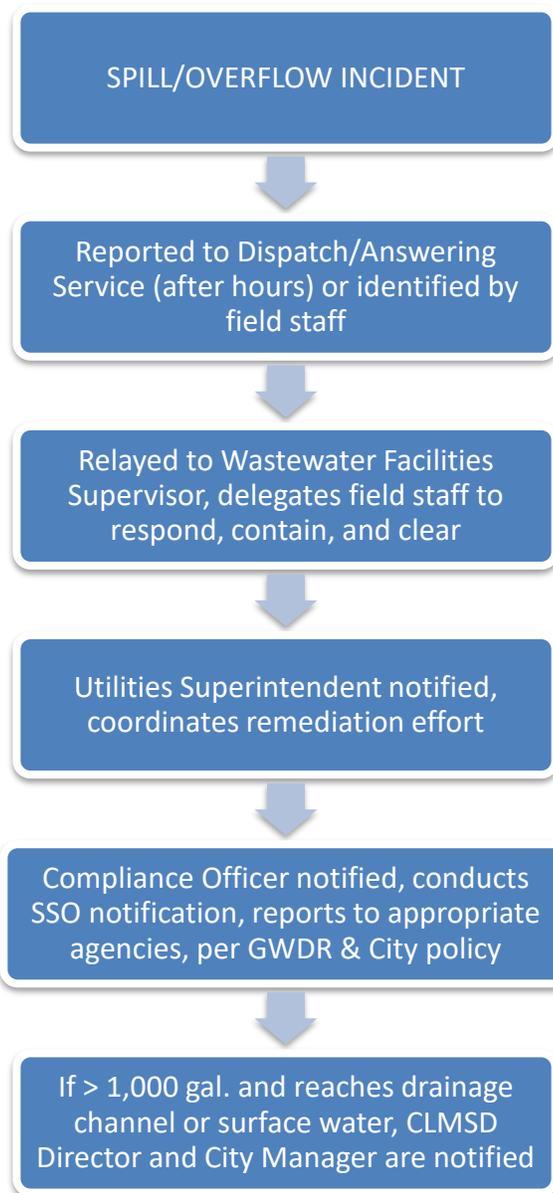


Figure 2.C. Chain of Communication

Element 3: Legal Authority

This section of the SSMP identifies the authority by which the CLMSD effectively operates the public sewer system, ensures new sewer infrastructure is properly constructed, solves operation and maintenance problems, interacts with the public and developers, and reduces sewer system overflows. This section fulfills the Legal Authority requirement of the SWRCB SSMP (Element 3).

3.1 SWRCB Requirements for Legal Authority Element

The summarized requirements for the Legal Authority element of the SSMP are as follows:

The Enrollee's SSMP must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

1. Prevent illicit discharges into its sanitary sewer system, including I/I from satellite waste water collection systems and laterals, storm water, unauthorized debris, etc.
2. Require proper design and construction of sewer connections
3. Ensure access for maintenance, inspection, and repairs to publicly owned portions of laterals
4. Limit the discharge of FOG and other debris that may cause blockages
5. Enforce violations of its sewer ordinance.

3.2 Documents, Figures and Supporting Materials

Associated documents for Element 3 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. Lakeport Municipal Code Ch. 13.20, Sewer Use and Pretreatment regulations ([Appendix 3.A](#))
2. Fines for Violation of the FOG Program, Resolution No. 2315 (2008) ([Appendix 3.B](#))
3. Mutual Aid Agreement with LACOSAN ([Appendix 3.D](#))
4. Utilities Department Policies U-3, U-4 and U-6 ([Appendix 3.C](#))

3.3 Legal Authority Discussion

This section presents the legal authority by which CLMSD complies with SWQCB regulations.

Lakeport Municipal Code Chapter 13.20 Sewer Use and Pretreatment (Ordinance No. 872 [2008])

Pursuant to Lakeport Municipal Code (LMC) [Chapter 13.20](#), any residence or facility within the boundaries of CLMSD must connect to the municipal sanitary sewer system with limited exceptions.

The LMC defines, in specific detail, the authority and mechanisms granted to CLMSD to ensure discharge to the wastewater collection and treatment system is not harmful to the environment or destructive to existing or future infrastructure. It outlines specific discharge regulations, pretreatment standards, and prescribed enforcement actions (per violation), as well as establishes the Fats, Oils, and Grease (FOG) and Sewer Lateral Certificate Programs, which include provisions requiring grease traps and interceptors to be installed and maintained by all Users who produce and/or discharge FOG.

CLMSD is granted permit authority in the LMC to regulate discharge to the sanitary sewer system. However, such authority has not been exercised and is reserved for industrial Users primarily, categorized by class levels I-IV. The majority of current Users are categorized as domestic in nature, meaning the wastewater discharge disposed into the public sewer system is from ordinary living processes of human beings, without special treatment.

The Ordinance requires all identified sources of inflow and infiltration (I & I) be corrected upon discovery. The City actively investigates such sources and continuously works to identify and track new sources. CLMSD's I & I Program is proactive in detection; however, significant fiscal limitations prevent correction of all known I & I locations. The 2008 Master Sewer Plan comprehensively identified known I & I sources and the rehabilitation measures needed to correct the issues surrounding them. That information and newly discovered I & I sources are tracked and stored in the City's GIS mapping program.

Rights of Entry

LMC Section [13.20.340](#) provides the legal right for CLMSD personnel to inspect connections, appurtenances, and other components of the municipal sanitary sewer collection system on private property if illicit discharges are known or suspected.

LMC Section 13.20.340 Rights of Entry

Persons or occupants of premises where wastewater is generated or discharged, or where hazardous substances or hazardous wastes are present, shall allow the CLMSD or its representative ready access to all parts of the premises for the purposes of inspection, sampling, photographing, analysis, records examination, records copying or performance of any of their duties. The CLMSD, or its authorized representative, accompanied by such other representatives of other public agencies as may be appropriate, shall have the right to set up on the User's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations.

Users must allow access to their property during regular business hours with appropriate notice.

The Compliance Officer is responsible for ensuring these regulations are enforced and that the public is aware of them.

Enforcement Mechanisms

The enforcement mechanisms available to CLMSD for violations of the Ordinance include:

1. Informal administrative action (e.g., Notices of Violation and written warnings)
2. Administrative orders, compliance schedules, and other reports
3. Fines and fees
4. Penalties for non-compliance
5. Assessment of charges for damage to CLMSD facilities and/or operations
6. Suspension or termination of services
7. Civil action
8. Criminal action

Fines related to the general provisions of the Sewer Use regulations can range from \$300 to \$1,000 per day per violation, depending on the infraction. The applicability and severity of such fines is at the discretion of the Utilities Director or designee. Resolution No. 2315 (2008) ([Appendix 3.B](#)) prescribes specific fines and fees for violations or noncompliance with the provisions of LMC Chapter 13.20.

Construction and Design Standards

Through resolution, and referenced by the Lakeport Municipal Code, the City has adopted the California Plumbing Code (California Code of Regulations, Title 24, Part 5). Additionally, the City has adopted sewer infrastructure construction and design standards as discussed in Element 5.

Interagency Agreements

CLMSD maintains a mutual aid agreement with Lake County Sanitation District (LACOSAN), whereby wastewater flows in the northern portion of the district can be directed to the County's collection system. Likewise, wastewater flows from County areas south of the CLMSD collection area are accepted by CLMSD. A copy of the agreement is attached as [Appendix 3.D](#).

Element 4: Operations and Maintenance Program

This section of the SSMP identifies the authority by which the CLMSD effectively operates the public sewer system, ensures new sewers are properly constructed, solves operation and maintenance problems, interacts with the public, and reduces sewer system overflows. This section fulfills the Operations and Maintenance requirement of the SWRCB SSMP (Element 4).

4.1 SWRCB Requirements for Operations and Maintenance Element

The summarized requirements for the Operations and Maintenance element of the SSMP are as follows:

The Enrollee's SSMP must include those elements listed below that are appropriate and applicable to the system:

1. Maintenance of up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities;
2. A description of routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas;
3. A rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitative actions to address each deficiency;
4. A training program to provide regular instruction on sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
5. Provide equipment and replacement part inventories, including identification of critical replacement parts.

4.2 Documents, Figures and Supporting Materials

Associated documents for Element 4 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. Collection System Map ([Appendix 4.A](#))
2. 2008 Master Sewer Plan ([Appendix 4.B](#))
3. Equipment Inventory List ([Appendix 4.C](#))
4. Maintenance Cleaning Schedule, including main lines and lift stations ([Appendix 4.D](#))

5. Rehabilitation Schedule ([Table 4.1](#))

4.3 Operations and Maintenance Discussion

This section presents an overview of CLMSD’s operations and maintenance program.

CLMSD Collection System Maps

GIS data can also include visual information, including video, pictures, field staff notes, etc. All geographical information is presented to scale, which gives CLMSD staff greater ability to identify and address issues quickly as they arise. The GIS maps also detail the existing storm water collection system, including all known inflows and outfalls.

GIS data is typically updated on a semi-annual basis. In addition to system condition information (i.e., type and location of sewer system components), information is captured related to inflow and infiltration (I&I); the location, volume, type, and destination of sewer overflows (SSOs); as well as other system issues that affect the ability of the collection system to function optimally.

GIS maps are printed, assembled into “map books” and distributed to staff for use in the field. Physical maps are updated as needed by field staff and updates are incorporated into the GIS.

Preventive Operations and Maintenance

The CLMSD collection and treatment system spans approximately 135,400 feet of collector sewer mains and 13,500 feet of interceptor sewers. One treatment plant services the entire system, including routed wastewater flows from the LACOSAN system in south Lakeport.

CLMSD is managed by the Utilities Department of the City of Lakeport. Utilities staff in the Sewer Division are responsible for management, operations and maintenance. Maintenance activities include inspection, cleaning, repair, and the monitoring of the gravity sewer lines, force mains, and lift stations.

The Sewer Division has maintenance and cleaning programs to keep the sanitary sewer system operating efficiently and to minimize the number of main line stoppages and calls for service. Sewer cleaning using hydraulic or mechanical methods is performed on a routine basis to remove accumulated debris in the pipe such as sand, silt, grease, roots, and rocks.

The Sewer Division also conducts sewer line inspections with trained staff using modern CCTV equipment. The inspection data is used to prioritize preventive maintenance or repair work.

Inspections of the sanitary sewer system are a routine and essential duty for the Sewer Division. Regular inspections can help troubleshoot and minimize SSOs and problems related to grease, roots and other debris. Connections to the system and unwanted sources of inflow are identified through sewer inspections. As part of the sewer cleaning process, crews inspect and

report on any problems or deficiencies within the sanitary sewer system. Inspection activities include:

Visual Inspections

Visual inspections are performed on the sewer system manholes at a higher frequency than CCTV inspection because of the relative ease of performance. This type of inspection can provide a good indication as to the condition and proper functioning of the collection system and generally includes:

A. Manhole Inspection

- Frame and cover
- Grade adjustments
- Flow surcharging
- Manhole bottom channels
- Structural integrity/manhole degradation
- I/I into manhole
- Other miscellaneous problems

B. Sewer Inspection

- Debris in line
- Grease in line
- Blockage or obstruction in line
- Excessive flow (relative to upstream flows)
- Any miscellaneous problems

Any of the above items would result in further study including a CCTV inspection, sewer repair, or manhole repair. Field staff are required to document anything they deem to be a sewer system problem or potential problem and submit the information to a supervisor for review.

C. CCTV Inspection

- Requested by Compliance Officer or management because of a suspected problem
- In connection with I/I investigation work
- Routine check on the effectiveness of sewer cleaning

The Sewer Division has maintenance programs designed to minimize the number of service line stoppages, lift station failures and calls for service. There are two full-time employees dedicated to maintenance of services lines, minor manhole repairs, and neighborhood lift stations. These employees perform the following duties:

- Routine maintenance and inspection of main lines and lift stations. See [Appendix 4.D.](#) for the Maintenance Cleaning Schedule and Form.
- Manhole repair and coating
- Traffic control setup on an as-needed basis
- Confined space entry on a very limited and as-needed basis
- Installing cleanouts (in public right-of-way)

The Utilities Department construction crew performs routine and emergency repairs on the CLMSD's sewer infrastructure. Repair work includes:

- Sanitary sewer replacements
- Spot repairs, lateral, and service tap replacements
- Manhole repairs and manhole replacements.

Inflow and infiltration (I & I) is a significant problem for the collection system. In an effort to reduce the I&I load on the system, the City has performed several rehabilitation projects throughout its history:

- A sewer system evaluation survey of the Lakeport sewer system was performed in 1976. From this study, several areas of the City's collection system were identified for rehabilitation work.
- In 1979 the City performed an extensive rehabilitation program made up of sewer reconstruction, sewer video inspection, and grout sealing of sewer joints.
- From 1991 to 1992 the City performed an I & I analysis of the entire sewer system. This analysis involved smoke testing of the collections system to determine sources of inflow, manhole inspections, and wet weather flow monitoring. From this comprehensive analysis, several areas within the collection system were identified as having moderate to severe I&I.
- Using the 1991 and 1992 I&I study discussed above, the City performed a major collection system rehabilitation project in 1993 and 1994. This project involved video inspecting, testing, and grout sealing approximately 38,000 feet of main line sewer, and replacing 8,200 feet of 6-inch to 10-inch main sewer as well as 3,100 feet of 3-and 4-inch lateral sewers within the right-of-way areas. In addition, the City also expanded the C Street pump station with upgrades to the pumps, control equipment, and the control building.

- Implemented in 2003, the City maintains an ongoing I&I reduction program and staff dedicated to reducing or eliminating I&I within the collection system. The City's I&I efforts have included:
 - Aerial mapping of the city including GIS mapping of the collection system.
 - Inventory of all sewer utilities (i.e., manholes, sewer sizes, etc.).
 - GIS utility atlas provided to field crews for constant update.
 - Completion of City Sewer Spillage Geodatabase.
 - Purchase of flow meters for sewage lift stations, 2004
 - Installation of 44 sewer manhole covers, 2005
 - Routine internal close circuit television (CCTV) inspection of all gravity sewer main lines and some laterals using City owned CCTV equipment.
 - Systematic smoke testing to identify open clean outs, leaking manholes, and damaged sewers in areas prone to high I&I and flooding.
 - Identification, documentation, repairs, and enforcement of damaged and illicit connections to the gravity sewer system.
 - Scheduling of maintenance, restoration, and replacement of damaged sewers and laterals.
 - Physical assessment, photographing, and cataloging of all sewer manholes within the Lakeport collection system.
 - Rehabilitation of over 50 deteriorating manholes and lids from 2004 to 2006. Purchase and installation of leak proof manhole covers on a significant number of manholes throughout the system.
 - Complete replacement of the Ashe Street Pump Station in 2009. Project included construction of a building to house equipment and replacement/upgrade of related pumps, machinery, etc. Equipment raised above 100-year Clear Lake flood elevation.
 - 2015: Replacement of 50 feet of aged 6-inch sewer main on Clear Lake Avenue
 - 2015: Replacement of 1,500 feet of aged 8-inch sewer main on North Main Street with 15-inch main. Main size increased for system efficiency.
 - 2016: Replacement of Clear Lake Avenue pump station with new station elevated above 100-year Clear Lake flood elevation. Replacement facility also provides easier access for maintenance.
 - 2016: Replacement of 350 feet of aged 6-inch sewer main on First Street.
 - 2016: New SCADA equipment capable of analyzing sewer flows and determining system volumes and pumping trends.

- 2017: Compliance order issued to Will-O-Point Mobile Home Park to make significant repairs to their on-site sewer system. Significant I&I was discovered when adjoining Clear Lake flooded and inundated the mobile home park.
- 2018: Planned resumption of active smoke testing program to identify sources of I&I. Coordination of subsequent repairs or modifications to eliminate I&I sources.

Rehabilitation Plan

In addition to normal repair work by Sewer Division field staff, the Utilities Department is committed to rehabilitation of the CLMSD system where needed. However, funding limitations and budgetary decisions have made the implementation of a capital improvement plan challenging. The 2008 Master Sewer Plan (Appendix 4.B) outlines and describes those projects in the most need of completion. Those projects are summarized in Table 4.1 below. This table has been updated as part of the 2018 SSMP update to include revised anticipated completion dates and, in some cases, actual completion dates. It is a 20-year plan.

Table 4.1. Rehabilitation Schedule

Item No.	Project Name	Description	Schedule			Complete
			By 2013	By 2018	By 2028	
1	Main Street Sewer Replacement	12" Sewer replacement, 6th Street to Clear Lake Ave				Yes 2015
2	Chlorination Gas System Replacement	Hypochlorite System installation at treatment plant			X	
3	Inspection and Cleaning of Chlorine Contact Pipe	Inspect/restore chlorine contact pipe capacity at treatment plant		X		
4	Modify Recycle Pump Station No. 1	Modify pump station for time-of-use operation at treatment plant	X			Yes
5	Linda Lane Lift Station Odor Control	Install larger blower	X			
6	Lift Station Radio Telemetry and SCADA Improvements	Install radio telemetry in 5 lift stations, update SCADA				Yes 2016
7	I&I Reduction Program - Initial Target Areas	Initial target areas are indicated in Master Plan		X		
8	Lakeshore Blvd and N. High Street Parallel Sewer	8" parallel sewer		X		
9	Clearlake Ave Lift Station Replacement	Replacement				Yes 2016
10	Repair Aeration Basins and Remove Sludge	Both aeration basins will be drained, the sludge will be allowed to dry, and the bottom will be scraped				Yes 2016
11	Main Street Parallel Sewer	15" parallel sewer installation		X		
12	N. High Street Sewer Replacement	8" replacement sewer		X		
13	Martin Street Parallel Sewer	8" parallel sewer		X		
14	I&I Reduction Program - High I&I Areas	as indicated in the Master Plan			X	
15	10th Street Parallel Sewer	8" parallel sewer			X	
16	Installation of 20" Chlorine Contact Pipe	Will increase PWWF chlorine contact time at treatment plant			X	
17	Martin Street Lift Station Capacity Improvements	Increase effectiveness at pump station			X	
18	Russell Street Sewer Replacement	8" replacement sewer			X	

Table 4.1. Rehabilitation Schedule

Training Program

CLMSD has established the following training and certification requirements, pursuant to the California Code of Regulations (CCR):

All sewer collection system personnel, except operator trainees (OIT), are required to hold a minimum Grade I (G1) wastewater operator certification. The CLMSD wastewater treatment facility is a Grade II facility and requires a chief operator with at least a G2 wastewater operator certification. Certified personnel are required to maintain their certifications without interruption and meet all continuing education requirements.

The Sewer Division holds regular staff training on SSO response and mitigation, backhoe operation, sewer cleaning equipment, hazardous material awareness, first aid, confined space entry and other workplace safety issues.

As a small city with limited staff, Public Works Department employees from other divisions sometimes assist with SSO responses. As such, SSO response and mitigation training is not limited to Sewer Division staff.

The City's training program includes:

- Adoption of an Injury and Illness Prevention Program that includes formal workplace safety policies which are reviewed and updated as required
- Subscription to workplace safety tracking service that provides reminders of mandated training; keeps records of completed training; and provides a variety of workplace safety training materials
- Regularly scheduled Public Works Department workplace safety training meetings. Wastewater Division employees participate and are also subject to other job-specific training requirements
- SSO response training including spill volume estimation exercises, clean up practices and reporting procedures
- Presentation of safe practice reminders at all training meetings and tailgate sessions
- Maintaining compliance with CalOSHA safety regulations
- Review of Safety Data Sheets (SDS) prior to use of new chemicals
- Employee certifications, renewals and continuing education
- Receipt and renewal of job-specific certifications for DMV (Class B license) and CPR/First Aid
- Annual review Confined Space Policy and compliance with related training requirements
- Emergency response procedures

Equipment and Replacement Parts Inventory

A summary list of major tools and equipment that are used by operation staff to maintain the

CLMSD collection system is found in [Appendix 4.C](#). Equipment such as portable pumps and generators are kept on hand to insure proper response to collection system emergencies. Along with the pumps and generators, other equipment includes vacuum trucks, a router/snake, back hoes, dump trucks, bobtails, sewer line cameras and video equipment, disinfectant, gas detectors, confined space equipment and various types of personal protective equipment (PPE). These preparatory measures are maintained to guarantee that in the event of a collection system failure, the District will experience minimal service interruptions and that any SSOs will be minimized and effectively mitigated.

Smaller tools, equipment and PPE supplies are kept inside the sewer van and service vehicles and are easily accessible to field personnel. Larger tools and equipment, such as the emergency generators, are housed inside the City's Corporation Yard.

The Utilities Department also uses an electronic database system ([Cartegraph](#)) for asset tracking, including parts and equipment.

Element 5: Design and Performance Provisions

This section of the SSMP identifies the design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations, and other appurtenances, and for the rehabilitation and repair of existing sanitary sewer systems. This section fulfills the Design and Performance requirement of the SWRCB SSMP (Element 5).

5.1 SWRCB Requirements for Design and Performance Element

The summarized requirements for the Design and Performance Provisions element of the SSMP are as follows:

1. The Enrollee must identify design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations, and other appurtenances, and for the rehabilitation and repair of existing sanitary sewer systems; and
2. The Enrollee must identify the procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.2 Documents, Figures and Supporting Materials

Associated documents for Element 5 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. Adopted Sewer System Design and Construction Standards ([Appendix 5](#)).

5.3 Design and Performance Discussion

This section presents an overview of CLMSD's Design and Performance Provisions.

The California Uniform Plumbing Code (California Code of Regulations, Title 24, Part 5) contains minimum standards to be adhered to for any sewer construction project. CLMSD and the City of Lakeport have adopted additional design and construction standards for sewer system improvements which provide additional detail and requirements. The sewer system design and construction standards are found in [Appendix 5](#) herein. These additional standards are also posted on the [City's website](#).

The purpose of the adopted design standards is to provide direction in the application of new construction, replacement, rehabilitation, and other improvements, which may be dedicated to the public and accepted by the City for maintenance or operation, and to provide for coordinated development of those facilities to be used by, and for the protection of, the public.

Whereas these standards are intended to apply to all new construction, rehabilitation, and other improvements, CLMSD shall interpret and apply them as it deems appropriate.

All connections and modifications to the sanitary sewer must be reviewed and approved by CLMSD as a condition of the requisite building permit. Additional requirements are set forth in the City of Lakeport Municipal Code. The pertinent section is listed below (with hyperlink to the City's [online Municipal Code](#)).

- [LMC Section 13.20.190 Connection Requirements](#)

The City's Municipal Code also includes minimum standards that set forth when private sewer laterals will be repaired, replaced, or relined for the purpose of obtaining a sewer lateral certificate of compliance. CLMSD requires the cleaning, inspection, and testing of private sewer laterals connected to public sewers and serving residential, multifamily residential, commercial or industrial use properties upon the occurrence of stipulated property events.

- See [LMC Section 13.20.320 F.](#) for the list of events triggering the need for a sewer lateral certificate of compliance.

Inspections and testing of private sewer laterals are typically the responsibility of the owner. CLMSD may conduct CCTV inspections of private sewer laterals, if needed and deemed necessary by the immediate field supervisor, Utilities Superintendent, or Compliance Officer. The primary method of inspection and testing of sewer mains and pipes in the public right-of-way is by smoke injection. Cleanouts in the public right-of-way typically are inspected visually and by CCTV, if further investigation is required. CLMSD may employ dye testing to confirm results from a visual inspection. Field crews will rarely implement hydrostatic pressure testing of any sewer component, private or otherwise.

All improvements within the City rights-of-way shall be installed in accordance with the City's [adopted improvement plans and specifications](#) and at the discretion of the City Engineer. The City Engineer is responsible for maintaining the standards and specifications and for ensuring they are complied with by City construction crews and private, third-party contractors.

Element 6: Overflow Emergency Response Plan

This section of the SSMP outlines the requirements and procedures related to sanitary sewer overflows (SSO). This section fulfills the Overflow Emergency Response Plan requirement of the SWRCB SSMP (Element 6).

6.1 SWRCB Requirements for Legal Authority Element

The summarized requirements for the Overflow Emergency Response Plan element of the SSMP are as follows:

Each enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. The plan must include the following:

1. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
2. A program to ensure an appropriate response to all overflows;
3. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach waters of the state, in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other state law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
4. Procedures to ensure that appropriate staff and contractor personnel are aware of, and follow, the Emergency Response Plan and are appropriately trained;
5. Procedures to address emergency operations, such as traffic and crowd control, and other necessary response activities;
6. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to the waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

6.2 Documents, Figures and Supporting Materials

Associated documents for Element 6 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. SSO Investigation and Reporting Forms to RWQCB ([Appendix 6.A](#))
2. SSO Emergency Response Plan (Utilities Division Policy U-11) ([Appendix 6.C](#))
3. Hazardous Materials Incident Response Plan ([Appendix 6.B](#))
4. CLMSD Notification Procedures ([Figure 6.A](#))
5. SSO Regulatory Reporting Requirements Reference Guide ([Appendix 2.B](#))

6.3 Overflow Emergency Response Plan Discussion

This section presents an overview of CLMSD's Overflow Emergency Response Plan.

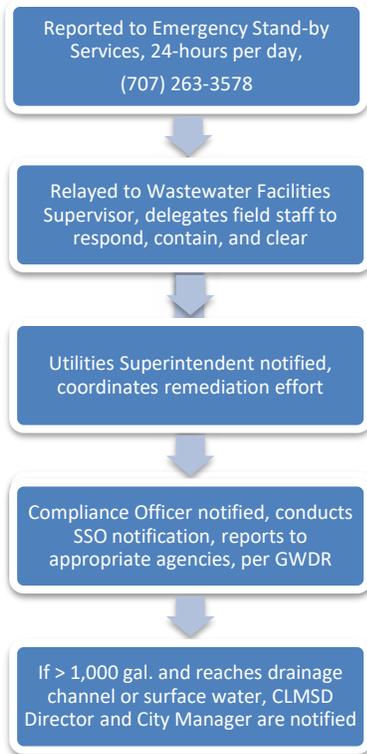
Notification Procedures

CLMSD staff responds immediately to any report of an SSO or other sewer system malfunction. Incident reports may come from any source (e.g., a local resident, business owner, police officer or fire official, etc.) but are typically received by telephone. The City has established a 24-hour telephone number (listed below in [Figure 6.A](#)) for the public to call in the event of a sewer issue.

Upon receipt of an incident report, the Wastewater Facilities Supervisor contacts staff and delegates the containment, correction, and cleanup efforts and notifies the Utilities Superintendent. The Wastewater Facilities Supervisor conducts an initial evaluation of the incident and briefs the Utilities Superintendent upon his arrival to the scene. The Utilities Superintendent provides additional direction to the Wastewater Facilities Supervisor and informs the Compliance Officer by phone or text message.

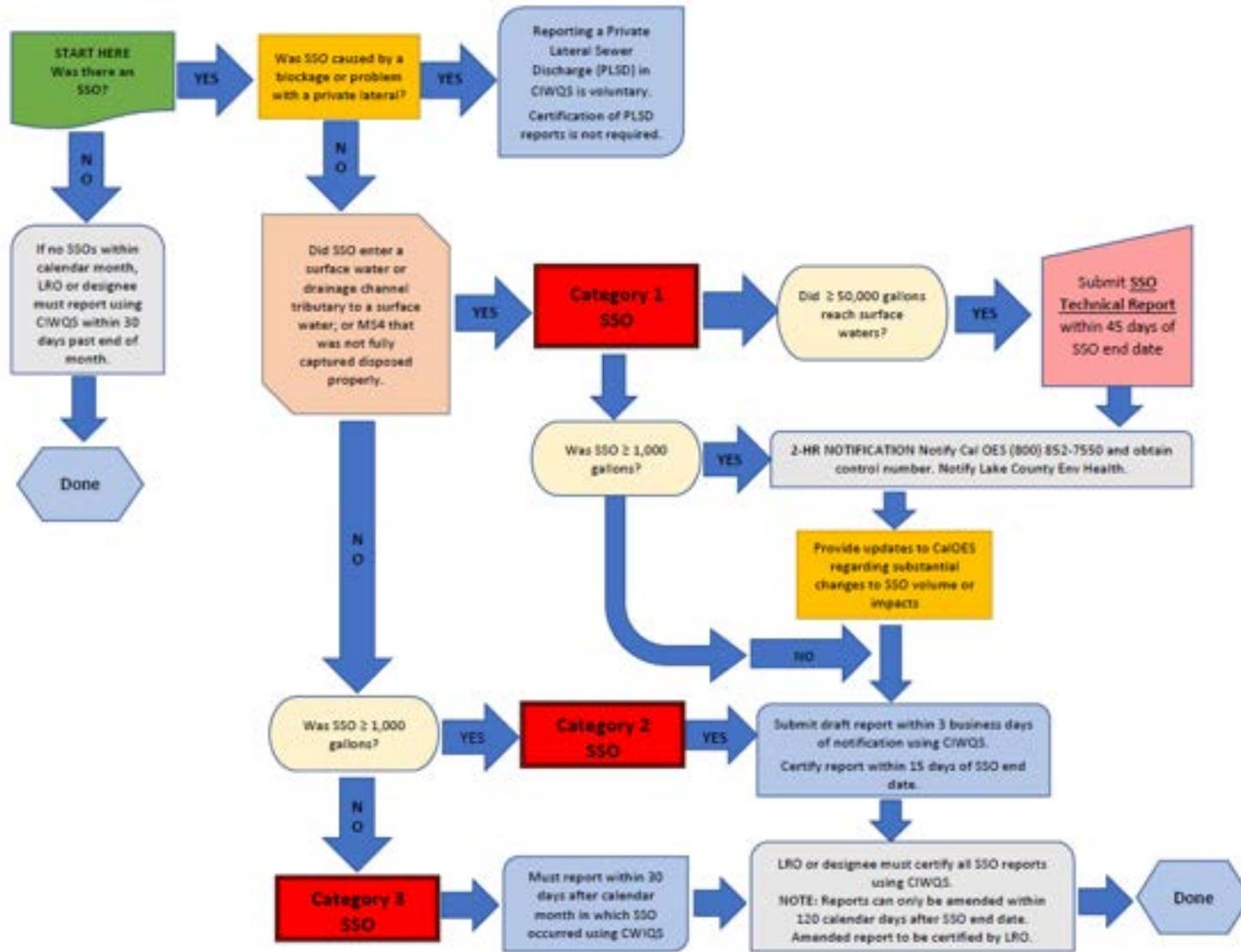
The Compliance Officer is responsible for reporting all sewer overflows to emergency and regulatory agencies. [Figure 6.B](#), below, is a flow chart detailing CLMSD's external SSO reporting procedures.

Figure 6.A. CLMSD Notification Procedures



Position/Name	Phone Number (707) area code, unless otherwise noted
Wastewater Facilities Supervisor- Carlos Pradomerze	(W) 263-3578 x702, (C) 245-6754
Utilities Superintendent – Paul Harris	(W) 263-3578, x 402 (C) 533-9168
Compliance Officer – Andrew Britton	(W) 263-3578, x 403 (C) 349-4763
CLMSD Director Douglas Grider	(W) 263-3578, x 401 (C) 245-0468
City Manager – Margaret Silveira	(W) 263-5615, x 104 (C) (209) 505-0858

Figure 6.B. CLMSD External Reporting Flow Chart



Operational Policies and Procedures

The attached policy and procedure ([Appendix 6.C](#)) is CLMSD's written document outlining proper reporting protocols following an SSO. It serves as the District's SSO Emergency Response Plan (SSOERP). Staff are trained and aware of this policy and its procedures. It is kept in a policy binder and available in all wastewater service vehicles.

The District uses a variety of forms to investigate, document and report SSOs. These are an appendix to the SSOERP and are presented in [Appendix 6.A](#).

Emergency Procedures

CLMSD has recently adopted a policy that sets forth the district's SSO Emergency Response Plan (OERP). The primary purpose of the OERP is to outline the district's SSO response activities, with the objective of minimizing impact of SSOs to the public and the environment. In achieving this goal, the OERP serves as a guideline for our personnel in cleaning and mitigating the effects of sanitary sewer spills, as well as in following proper sampling and reporting procedures.

The policy and the OERP are attached as [Appendix 6.C](#). The OERP includes protocols related to first responder assessment; overflow correction, containment and cleanup; traffic and pedestrian control; water quality monitoring and sampling; and spill volume estimation methods. The policy/plan is kept in a policy binder and in all wastewater service vehicles.

CLMSD also maintains a Hazardous Materials Incident Response Plan (attached as [Appendix 6.B](#)), which dictates protocol during an emergency involving a chemical spill or uncontrolled release. This plan is applicable to incidents involving a sewer overflow deemed as a major emergency threatening public health, which may require emergency action and public notification. Staff are trained on this plan annually and, pursuant to state law, it is updated as necessary with copies distributed to Lake County Environmental Health Department and the Lakeport Fire District. Components of the plan involve evacuation and public notification of an emergency. First responders, charged with management, mitigation, and remediation of the emergency situation, include the Lakeport Police Department, Lake County Sheriff's Department, Lake County OES, and the Lakeport Fire District. CLMSD staff are trained and required to not engage in any emergency activity other than notification and evacuation.

Copies of the plan are located at our water and wastewater facilities: the surface water treatment plant, the groundwater storage facility, the corporation yard (sewer office), and the wastewater treatment plant. The plan is also available electronically.

Additionally, the City maintains a general Emergency Operations Plan. The City Manager is responsible to implement the EOP and manage the overall operation of the City during a major emergency, as well as ensure the plan is updated regularly and that staff receives adequate emergency operations training.

Training and Awareness

The City's Utilities Division has established and implemented the following SSO response training:

Sewer Division employees, and Public Works/Utilities employees in general, are required to complete SSO response procedures training. Training is based on the City's adopted policies, including spill volume estimation methods and reporting procedures. Spill response activities are reviewed during weekly staff scheduling meetings.

Contractors are provided with the Hazardous Materials Incident Response Plan and are made aware of the policies and procedures related to the wastewater collection and treatment system. They are required to train all their employees on these policies and procedures prior to performing work on the City's wastewater collection and conveyance system. The City has established visitor protocols at our water and sewer treatment plants as part of our chlorine safety program.

Reasonable Assurances

CLMSD maintains an identification and mitigation program of sewer blockages and other known problems in the collection system. This program is an important activity that helps to ensure SSOs do not recur in the same locations, in mitigating the effects of SSOs when they do occur, and identifying and correcting problems before they impact public health and/or the environment. This program is discussed in greater detail in Element 7.

CLMSD maintains appropriate vehicles (such as vacuum trucks), equipment (such as waddles, sandbags, etc.), tools (such as disinfectant, water testing kits, warning signs and notices, etc.), and personnel to manage SSOs quickly and efficiently with the overall goal of limiting their impact on Clear Lake and other local surface waters.

The City's GIS system contains the locations of all storm drains, creeks, and other drainage channels that flow to Clear Lake, as well as the location of every manhole, sewer cleanout, lateral, and main line in the City. This information can be compared to determine where potential problems can most directly affect Clear Lake or other surface waters. The identification and mitigation program relies on this analysis when determining future schedules and needs.

City staff also maintains a GIS database and map illustrating SSO locations, cause and estimated spill volume. The SSO incident map is attached as [Appendix 7. D](#).

Element 7: Fats, Oils, and Grease Program

This section of the SSMP describes the District's efforts to control and mitigate fats, oils, and grease in the sanitary sewer system. This section fulfills the Fats, Oils, and Grease Control Program (FOG) requirement of the SWRCB SSMP (Element 7).

7.1 SWRCB Requirements for the Fats, Oils, and Grease Element

The summarized requirements for the FOG element of the SSMP are as follows:

The Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification as to why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following, as appropriate:

1. An implementation plan and schedule for a public education and outreach program that promotes proper disposal of FOG;
2. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within the sanitary sewer system service area;
3. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
4. Requirements to install grease removal devices (such as traps and interceptors), design standards for the removal of devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
5. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
6. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
7. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (6) above.

7.2 Documents, Figures and Supporting Materials

Associated documents for Element 7 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. FOG Informational/Educational Documents ([Appendix 7.A](#))

2. Grease Trap/Interceptor Inspection Policy ([Appendix 7.B](#))
3. FOG Program Variance Policy ([Appendix 7.C](#))
4. FOG GIS Map ([Appendix 7.D](#))
5. Sewer System Maintenance Cleaning Schedule ([Appendix 4.D](#))
6. Resolution Establishing Fines and Penalties for Violation of FOG Program ([Appendix 3.B](#))
7. LMC Chapter 13.20, Sewer Use and Pretreatment ([Appendix 3.A](#))

7.3 FOG Control Program Discussion

This section presents an overview of CLMSD's FOG Control Program. The Utilities Superintendent and Compliance Officer manage the program and ensure compliance and enforcement of the associated regulations.

Public Education and Outreach Plan

CLMSD has devised and implemented a public education and outreach plan promoting its FOG program. Information and educational materials ([Appendix 7.A](#)) were developed describing the program and offering suggestions and best management practices to local FSEs regarding FOG control. This information was assembled in a comprehensive packet and has been distributed to all FSEs within the city boundaries when the program began in 2008. A similar packet is distributed to any new FSE that applies for a business license within City limits.

Information about the FOG program, including the educational materials, is available on the city's website: <http://www.cityoflakeport.com/departments/page.aspx?deptID=48&id=85>

In recent years CLMSD has used the City's social media platforms ([Facebook](#) and [Twitter](#)) to help educate the public regarding FOG control and related issues.

FOG Disposal

[Lakeport Municipal Code Section 13.20.600](#) et seq. sets forth the FOG program regulations, including the prohibition of untreated discharge of any fats, oils, or grease into the municipal sanitary sewer system. CLMSD requirements dictate the installation and operation of grease traps and/or grease interceptors for all FSEs that generate or work with FOG. The Compliance Officer and the City's Building Official are responsible for inspecting these devices upon installation and if a FOG problem is suspected at the facility.

Several FSEs store FOG at their facilities, usually near the outdoor trash area, in a tallow bin or similar container. Some FSEs allow their generated FOG to solidify and then dispose of it in the regular trash. However, this practice is only permitted for those FSEs who produce nominal amounts of FOG. FOG generators (i.e. FSEs and some commercial establishments) are advised

to contact a local grease hauler to service their traps and interceptors and to relieve them of collected FOG.

FSEs are required to keep a cleaning record or log of their grease traps and interceptors. Such records are required to be available for inspection by the Compliance Officer, City Building Official or Lake County Environmental Health staff.

CLMSD encourages FSEs and residents to exercise BMPs for the removal and disposal of FOG, including dry-wiping plates, utensils, etc. before washing in the sink or dishwasher.

Legal Authority

The City/CLMSD Board of Directors adopted Ordinance No. 872 in 2008 which includes a variety of regulations related to sewer use and pretreatment. The ordinance has been codified and is part of the City's Municipal Code. [LMC Section 13.20.010](#) provides the legal authority to implement and enforce a FOG program within City jurisdictional boundaries. This section notes that one of the objectives of the FOG program is to "comply with the laws of the state of California and of the United States relating to the protection of the environment, control of water pollution, disposal of hazardous wastes and pretreatment of industrial discharges to publicly owned treatment works."

[LMC Section 13.20.610](#) states that "CLMSD does not accept waste products with FOG into the sanitary sewer system or any of the wastewater treatment facilities." [LMC Section 13.20.610](#) B. requires grease traps and interceptors to be installed at all facilities that produce "grease or any other substance deemed harmful to the" CLMSD.

A variance to the FOG program requirements may be obtained by an FSE or other commercial FOG producer on a case-by-case basis. The FOG variance process is set forth in [LMC Section 13.20.650](#).

FOG Program Requirements

[LMC Section 13.20.610](#) outlines the requirements of FSEs to install and maintain grease traps and interceptors. This section also includes design requirements and information regarding determining the proper size of the grease interceptor.

Authority, Enforcement, and Staffing

CLMSD staff are responsible for managing the FOG program while ensuring the applicable provisions of the Municipal Code are enforced. All City Utilities Division staff are available to perform inspection and enforcement activities at the discretion of the Utilities Superintendent and subordinate supervisors.

The FOG enforcement provisions are set forth in [LMC Section 13.20.390](#) through [Section 13.20.500](#). Methods of enforcement range from informal administrative actions to formal administrative compliance orders and the imposition of compliance schedules to ensure the timely remedy of FOG-related problems. Non-compliance can also result in the issuance of administrative civil penalties, civil actions and criminal enforcement actions.

FOG Identification and Cleaning Schedule

CLMSD maintains a GIS data layer devoted to SSO incidents which helps identify and track sewer system “hot spots” involving blockages, overflows, and backups related to fats, oils, and grease. The SSO incident map (attached as [Appendix 7. D](#)) is updated regularly, and cleaning schedules are built around the information contained therein. Additionally, such cleaning and maintenance information is entered into the layer and associated with specific geographical locations and system features.

The current CLMSD sewer system cleaning schedule is attached as ([Appendix 4. D](#)). It includes an inspection schedule of areas known to be prone to problems resulting from FOG or other types of blockages.

Source Control Measures

In addition to requiring treatment of discharge prior to receipt by the CLMSD municipal sanitary sewer system (i.e., grease traps, grease interceptors, grease separators, etc.), the adopted FOG regulations grant CLMSD the authority to issue discharge permits and regulate wastewater effluent. If determined to be necessary by the CLMSD Director or his/her designee, commercial and industrial users may be required to apply for and obtain such permits.

[LMC Section 13.20.660](#) et seq. outlines the requirements of the wastewater discharge permit process.

Element 8: System Evaluation and Capacity Assurance Plan

This section of the SSMP describes the District’s capital improvement plan to provide hydraulic capacity of key sanitary sewer elements for dry, storm, and wet weather peak flow conditions. This section fulfills the system evaluation and capacity assurance requirement of the SWRCB SSMP (Element 8).

8.1 SWRCB Requirements for System Evaluation and Capacity Assurance Element

The summarized requirements for the system evaluation and capacity assurance element of the SSMP are as follows:

The Enrollee shall prepare and implement a capital improvement plan that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. This plan shall include:

1. **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key systems components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.
2. **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (1) above to establish appropriate design criteria; and
3. **Capacity Enhancement Measures:** The steps needed to establish a short and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
4. **Schedule:** CLMSD shall develop a schedule of completion dates for all portions of the CIP developed in (1) – (3) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements, as described in Section

D.14. of SWRCB's [Order No. 2006-003-DWQ](#).

8.2 Documents, Figures and Supporting Materials

Associated documents for Element 8 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. CIP Project Timetable ([Appendix 8.A](#))
2. CIP Project Funding Source Schedule ([Appendix 8.B](#))
3. 2008 Master Sewer Plan ([Appendix 4.B](#))

8.3 System Evaluation and Capacity Assurance Discussion

In September 2006, the City of Lakeport authorized PACE Civil, Inc., to work jointly with City (CLMSD) staff to prepare a master sewer plan. The emphasis of the Master Plan was to review and analyze the existing sewer system and treatment plant and recommend improvements needed to handle potential development over the next 20 years. The findings of the wastewater collection system evaluation and the City's wastewater treatment plant are presented in the 2008 City of Lakeport Master Sewer Plan, included as [Appendix 4.B](#).

The Master Plan provides estimates of peak wet weather and dry weather flow capacities, estimated to be 3.0 million gallons per day (MGD) and 0.51 MGD, respectively. It also analyzes the capacity of key system components, which include sewer lift stations, main line pipe sizing, wet wells, head works, and various components of the treatment plant. Major causes of SSOs, or overflow events, are discussed in detail, and recommendations to mitigate those events are made.

Lakeport's Sewer Division CIP is outlined and discussed in detail in the latter half of the Master Plan. Recommendations include measures to reduce inflow and infiltration (I/I), improvements to the existing collection system and treatment plant, and necessary changes and expansion to the sewer system to accommodate future growth and development.

The Master Plan and CIP are valuable tools which have been relied on during the past 10 years. However, there is a need to update the Master Sewer Plan. The City intends to complete this task prior to 2020. The updated plan will include a new Capital Improvement Plan and updated system capacity information.

Element 9: Monitoring, Measurement, and Program Modification

This section of the SSMP describes the District’s program to accurately and consistently monitor the effectiveness of the SSMP program in terms of reducing SSOs. This section fulfills the monitoring, measurement, and program modification requirement of the SWRCB SSMP (Element 9).

9.1 SWRCB Requirements for Monitoring, Measurement, and Program Modification Element

The summarized requirements for this element of the SSMP are as follows:

The Enrollee shall:

1. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
2. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
3. Assess the success of the preventive maintenance program;
4. Update program elements, as appropriate, based on monitoring or performance evaluations; and
5. Identify and illustrate SSO trends, including: frequency, location, and volume.

9.2 Data and Maintenance Records

CLMSD uses electronic asset and operations management software ([Cartegraph](#)). The preventative maintenance program is tracked by reviewing scheduled and completed preventative maintenance work and corrective maintenance work orders. This system provides the District with vital information needed to determine the locations of high maintenance areas (HMAs) or “hot spots”, which may need further attention. Maintenance records are regularly reviewed by the Utilities Superintendent and/or Wastewater Supervisor to prioritize activities, programs and policies that may help to eliminate future SSOs.

As described in [Element 7](#), CLMSD maintains a GIS data layer devoted to SSO incidents which also helps identify and track sewer system “hot spots” involving sewer spills. The SSO incident map ([Appendix 7.D](#)) is updated regularly and is helpful when developing or revising maintenance schedules.

9.3 SSMP Updates and Program Modifications

The SSMP is a living document and elements within the SSMP will be updated in the future as needed. The intention of the District is to use the SSMP for training, planning and regular maintenance of the collection system. As the document is utilized, any deficiencies or discrepancies will be corrected.

Program elements will be updated based on performance evaluations, organizational changes, new regulatory requirements, and other changing conditions. Program changes may also occur based on the results of the biennial SSMP audit.

The Compliance Officer is primarily responsible for revising the SSMP and maintaining a revision record to track changes. Significant changes shall be presented to the Board of Directors for review. Minor changes shall be approved by the Director. The Director shall determine what is significant and what is minor. In addition, the appendices, which include telephone lists and other personnel and contact information, will be revised as staffing changes. The 2018 SSMP Update includes a Change Log Form ([Appendix 10.D.](#)) that will be used to record any revisions.

9.4 Identifying Trends

The District uses data collected during and following SSOs to track frequency, location, and volume. The [SSO incident map](#) illustrates some of the data collected in conjunction with each SSO. Trends in frequency, cause, volume and season are monitored and included in Table 9-1 below. This information is evaluated to ensure the sanitary sewer system is properly and preventatively operated and maintained.

HMA's are identified, monitored, and included in the regular maintenance schedule. If increased maintenance does not appear sufficient, repair or replacement will be considered.

Table 9.1. SSO Trends

INDICATOR	2015	2016	2017	2018
Number of SSOs (by season)*				
Wet Season (Oct-Apr)	4	5	2	
Dry Season (May-Sep)	3	2	0	
Number of SSOs (by volume)				
< 10 gal	5	5	1	
10-99 gal	2	1	1	
100-999 gal	0	1		
≥ 1000 gal	0	0		
Estimated SSO Volume				
Estimated Total SSO Volume (Gallons)	59	720	34	
Number of SSOs (by cause)				
Blockages	0	0		
Roots	2	2		
Grease	0	0		

INDICATOR	2015	2016	2017	2018
<i>(SSO by Cause, continued)</i>				
Debris				
Debris from laterals	4	2	2	
Animal carcass	0	0	0	
Construction debris	0	1	0	
Multiple causes	0	1	0	
Fats, Oils or Grease (FOG)	0	0	0	
Infrastructure failure	1	1	0	
Inflow & Infiltration (I&I)	0	0	0	
Electrical power failure	0	0	0	
Flow capacity deficiency	0	0	0	
Natural disaster	0	0	0	
Bypass	0	0	0	
Cause unknown	0	0	0	
**Number of SSOs per mile of sewer	0	0	0	
**Volume of SSOs per mile of sewer	0	0	0	
Maintenance Activities (lineal ft)				
Regular cleaning (includes Hot Spots)	5930	5930	5930	
CCTV Lateral Inspections (also includes Hot Spots)	1200	1200	1200	

* SSO totals do not include PLSDs, some of which may have been reported to CIWQS.

** Metrics collected mirror those collected by SWRCB in CIWQS, however metrics collected are appropriate to collection systems that are greater than 100 miles in length. CLMSD operates and maintains 33 miles of collection system.

Element 10: Program Audits

This element describes the District’s process for completing audits to evaluate the performance and conformance with the SSMP requirements described herein and pursuant to the General Waste Discharge Requirements. This section fulfills the program audit requirement of the SWRCB SSMP (Element 10).

10.1 SWRCB Requirements for Program Audits

The summarized requirements for the program audit element of the SSMP are as follows:

The Enrollee shall conduct periodic internal audits appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee’s compliance with its requirements identified in this section, including identification of any deficiencies in the SSMP and steps to correct them.

10.2 Documents, Figures and Supporting Materials

Associated documents for Element 10 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. Audit Report Template ([Appendix 10.A](#))
2. 2016 Audit Report ([Appendix 10.B](#))
3. Utilities Division Policy No. U-1: SSMP ([Appendix 10.C](#))
4. SSMP Program Audit Considerations ([Table 10.1](#))

10.3 Program Audit Discussion

The Compliance Officer shall be responsible to conduct and manage the biennial audit of the SSMP and produce the summary report to the CLMSD Board of Directors. The report shall be presented to the Board as a “Receive and File” agenda item no later than thirty (30) days thereafter. The final audit and the summary report shall be kept on file by the Compliance Officer for duration in accordance with City record retention policy.

The audit should provide information about the challenges and successes experienced by the CLMSD in implementing the SSMP and identify any program or policy changes that may be needed to ensure its effective implementation. Information collected during the audit will be used to plan program and/or procedural revisions necessary to improve program performance.

As part of the audit, the following information should be analyzed and presented:

- System information

- District financial information
- Sewer maintenance information, including inspection and cleaning schedules
- Performance measures

The following table presents issues related to the SSMP that should be considered when performing the program audit and when implementing the SSMP.

Table 10.1. SSMP Audit Considerations

Document Control	Yes	No
Does CLMSD have document control procedures to ensure current and historical documentation recovery?		
Are all documents located in a central place in hard copy and electronic format?		
Are CLMSD staff trained on appropriate documentation procedures?		
Are all documents legible, dated (with revisions) and readily identifiable?		
Do documents have an expiration date or reissuance date?		
Are appropriate records and documents available to appropriate staff?		
Training		
Does staff have a documented and mandatory training program, including coursework title and content requirements?		
Is staff given adequate resources (time and budget) to ensure familiarity with documented procedures as well as industry standards?		
Is staff rewarded for certification or increased proficiency?		
Are training records reviewed and kept by supervisory or other appropriate departments?		
Targets and Objectives		
Does CLMSD have a strategic plan that outlines both short and long-term objectives?		
Does CLMSD set annual objectives and targets with defined outcomes, measures, and assigned responsibilities?		
Data Management		
Does CLMSD maintain performance reports and progress tracking systems that are reviewed by appropriate management on a regular basis?		
Is that data easily transferable or compared to historical data in order to relate to baseline performance?		
Can performance data be benchmarked to other similar agencies for comparison?		
Document Procedures		
Are staff roles and responsibilities clearly identified throughout CLMSD?		
Does CLMSD have established procedures for reviewing performance data?		
Is there an assigned individual or position with authority to conduct regular performance reviews?		
Are audits done internally by a neutral party?		
Are there certain thresholds or incidents that trigger audits?		
Is there an established timeframe for the completion of audits?		
Does CLMSD have procedures for defining responsibility and authority for handling and investigating nonconformance?		

Table 10.1. (Continued)

Are audits used as a training tool?		
Is CLMSD's top management involved with the analysis of performance data and program audits?		
Outcomes		
Does CLMSD act appropriately to nonconformance with the SSMP or any WDR requirement?		
Are outcomes or recommendations from performance data review and audit findings documented?		
Are audit findings ultimately considered in the budget process for both CIP and Program Resources?		

Audit findings will be presented to the CLMSD Director, Utilities Director and appropriate division supervisors along with recommendations for improvements and a schedule for such improvements to be made. Any changes to the SSMP will be certified by the Compliance Officer on the state's online SSO database.

Element 11: Communication Program

The intent of this SSMP element is to describe CLMSD's communication program with its customers, regulators, community, and other stakeholders. This section fulfills the Communication Program requirement of the SWRCB SSMP (Element 11).

11.1 SWRCB Requirements for Communication Program Element

The summarized requirements for the Communication Program element of the SSMP are as follows:

1. The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to CLMSD as the program is developed and implemented.
2. The Enrollee shall create a plan of communication with systems that are tributary and/or satellite to its sanitary sewer system.

11.2 Documents, Figures and Supporting Materials

Associated documents for Element 11 are included in figures, presented herein, and as appendices, attached hereto. They include the following:

1. Mutual Aid Agreement with Lake County Special Districts ([Appendix 3.D](#))
2. Hazardous Materials Incident Response Plan ([Appendix 6.B](#))
3. Sanitary Sewer Overflow (SSO) Emergency Response Plan ([Appendix 6.C](#))
4. List of Stakeholders (Figures 11.1 – 11.4)

11.3 Communication Program Discussion

CLMSD uses various types of media to communicate with the public and other stakeholders but in recent years has focused most of its efforts on electronic media including web-based content; E-mail notifications; and social media outlets, such as [Facebook](#) and [Twitter](#). This strategy has improved the effectiveness of outreach efforts while reducing public costs. The following is a description of that plan divided by stakeholder:

Internal Communication: Board of Directors, Staff, Consultants

CLMSD communicates with its governing body through staff reports, memorandums, and E-mail. CLMSD management is also available to speak with Board Directors individually through scheduled office hours. A list of these stakeholder groups and their potential issues of interest are as follows:

Figure 11.1. Internal Stakeholders

Stakeholder Group	Potential Issues of Interest
Lakeport Community Development Department (Building and Planning Divisions)	FOG Program, design standards, emergency response plans
Lakeport City Engineer	Design standards, systems maps, operating procedures, laws and regulations, current enforcement actions
City of Lakeport Municipal Sewer District Board of Directors	SSMP Progress, costs, public impacts, communication program, rate increases, pending enforcement actions
Labor unions and employee organizations	Training and proposed contract work
Consultants/Contractors	Design standards, operating procedures and policies, CIP efforts, potential consulting/contracting opportunities

External Communication: Interagency and Regulators

The bulk of communication between CLMSD and other governmental agencies (e.g. Lake County Environmental Health, Lake County Sanitation District [a.k.a. Special Districts], Lake County Office of Emergency Services, etc.) is through telephone and E-mail. Formal communication is done by mail on official City or CLMSD letterhead. CLMSD staff enjoy a collaborative relationship with these agencies. A list of these stakeholder groups and their potential issues of interest are as follows:

Figure 11.2. External Stakeholders - Governmental

Stakeholder Group	Potential Issues of Interest
Central Valley Regional Water Quality Control Board	SSOs, capital improvement plan (CIP), FOG Program, permits, impacts to storm water, capacity issues, I&I mitigation, possible enforcement actions
State Water Resources Control Board	Permits and environmental regulations
Lake County Environmental Health Department	SSOs and impacts to Clear Lake and public health
California Department of Public Health	SSOs and impacts to drinking water
Lake County Sanitation District (LACOSAN) a.k.a. Special Districts	CIP and sewer flows
State Office of Emergency Services (OES)	SSOs

Emergency Communications

CLMSD is termed a “9-1-1 and run” operation, meaning that in the event of an emergency, such as an accidental chemical release, operators and other staff are to evacuate the premises and

dial 9-1-1. County Central Dispatch will coordinate the response to the incident, including notifying the County Office of Emergency Services (OES), Lakeport Fire District, Lakeport Police Department, and Lake County Sheriff’s Department.

Further details related to this can be found in the Hazardous Materials Incident Response Plan, attached as [Appendix 6.B](#). The Sanitary Sewer Overflow (SSO) Emergency Response Plan ([Appendix 6.C](#)) also includes communication/notification protocols associated with SSOs.

In 2016 the City adopted an updated Emergency Action Plan (EAP) which includes facility-specific protocols, including measures for an emergency at the wastewater treatment plant facility on Linda Lane in southwest Lakeport. City staff has been trained on the new EAP and additional training will be provided to new employees and as conditions warrant.

A list of local stakeholder groups and their potential issues of interest are as follows:

Figure 11.3. External Stakeholder - Emergency Services

Stakeholder Group	Potential Issues of Interest
Lake County OES	Hazardous materials release and incidents
Lakeport Police Department	Public safety in event of hazardous materials release
Lakeport Fire Protection District	Public safety in event of hazardous materials release
Lake County Sheriff’s Department	Public safety immediately outside District boundaries. Sheriff’s Department emergency dispatch (911) provides notification to the Lake County Fire Protection District who maintains a hazardous materials response presence in Lake County. The LC Fire Protection District maintains Chlorine A and B repair kits for use in a Chlorine gas release.

Public Communication: Residential, Commercial, Industrial, Media

Historically, CLMSD has communicated with its customers through notices included in their monthly sewer service bill or by special mailing. Future communication will continue to employ this method; however, additional media will be used to augment its effectiveness, reach a larger audience, and reduce costs associated with postage, staff time, and materials.

Attention will be focused on the City’s website as a means of disseminating accurate, up-to-date information. The City maintains active social media accounts ([Facebook](#) and [Twitter](#)) which are used to further enhance communication and allow the community to enjoy a more engaging dialogue with the District.

Formal public communication may also be done through press releases and notices in the Lake County Record Bee (hard copy publication) and Lake County News (internet-based).

A list of these stakeholder groups and their potential issues of interest are as follows:

Figure 11.4. External Stakeholders - Public and Media

Stakeholder Group	Potential Issues of Interest
Ratepayers	Proposed rate increases, FOG program, local impacts from CIP efforts
Developers and developer associations	Master planning, capacity issues, legal authority, design standards, proposed fee increases
Environmental groups	Emergency response plans, overall SSMP development and implementation, program audits, SSOs and impacts to Clear Lake
Restaurants and food service establishments	FOG program, SSOs
Local News: <ul style="list-style-type: none"> • Lake County Record Bee (print newspaper) • Lake County News (online news) 	Environmental issues, proposed rate increases, public notices
Local Radio Stations: <ul style="list-style-type: none"> • KXBX 98.3 FM / 1270 AM • KNTI 99.5 FM • KPFZ 88.1 FM 	Environmental issues, proposed rate increases, public notices

Tributary/Satellite Communication: LACOSAN (Special Districts)

CLMSD accepts and delivers sewer flows to Lake County Special Districts and operates under a mutual aid agreement to do so, attached as [Appendix 3.D](#). CLMSD has the ability to deliver flows to the county in the northern part of the district and receive flows in the south. Flow acceptance or delivery is managed through request by telephone or email between the city and county utilities superintendents. Both agencies track the flows delivered and accepted and invoice one another for those services at a mutually agreed upon rate.

The City of Lakeport Municipal Code requires all residential, governmental, non-profit, and commercial properties, etc. to be connected to the municipal sanitary sewer system. Some septic systems remain active in the District boundaries; however, existing septic systems generally cannot be repaired or replaced. Connection to the CLMSD system is typically required when a septic system fails.

Staff Communication and SSMP Training

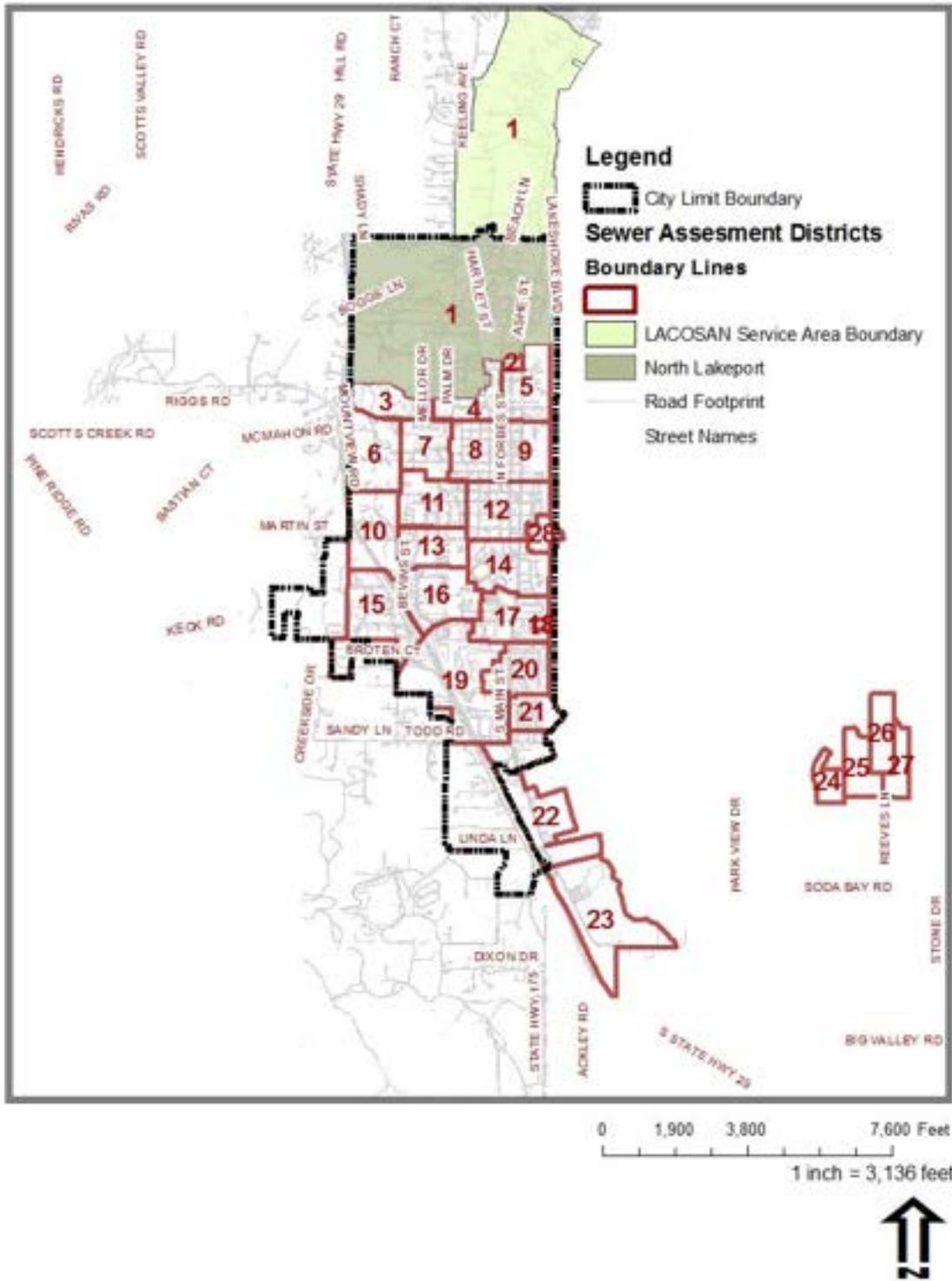
District staff will be trained by the Compliance Officer and Utilities Superintendent in a classroom setting in the use and implementation of the SSMP relative to any major revisions after they occur. District staff will also be kept informed regarding minor changes (i.e., phone numbers, staff changes, etc.) as they occur via internal e-mail or memos. Furthermore, all new

Sewer Division employees will receive SSMP training as part of their orientation. Training records are maintained as part of the City's overall training program. Electronic records are uploaded to My Safety Officer, the City's safety program records service, for permanent cloud storage.

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APPENDIX 0.0

Appendix 0.A: City and District Boundaries



Appendix 0.B: Original SSMP Work Plan and Schedule

The CLMSD's original SSMP was adopted in 2010. Work on the project began in 2008. The original work plan and schedule is included herein.

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 0.B is attached on the following pages.

SSMP Development Plan and Schedule

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Develop SSMP Work Plan and Schedule	2/2/08	6/4/08	6/4/08	Buffalo, Brannigan, Johnson	
Present the Work Plan and Schedule to the Board of Directors for approval	2/2/08	6/17/08	6/17/08	Brannigan	
Certify to the State Water Resources Control Board that this portion of the SSMP has been completed	2/2/08	6/20/08	6/17/08	Buffalo	Certification done through the Online SSO Database Questionnaire followed by printing and signing a form generated by the database and sending the form to SWRCB. Specific details are found in the GWDR

SSMP Goals

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section	5/2/08	6/11/08	6/11/08	Buffalo	
Develop SSMP Goals	5/2/08	6/11/08	6/11/08	Buffalo, Bannigan, Johnson	
Certify to SWRCB that Goals have been completed	5/2/08	6/20/08	6/17/08	Buffalo	

SSMP Organization

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	5/2/08	6/11/08	6/11/08	Buffalo	
Develop Facility Services Organziational Chart to show chain of command from Council to Field staff	5/2/08	6/11/08	6/11/08	Buffalo	
Develop list of names and phone numbers of key people on above chart	5/2/08	6/11/08	6/11/08	Buffalo	

SSMP Work Plan and Schedule
City of Lakeport Municipal Sewer District

Develop communication tree for Emergency Response Plan	5/2/08	6/11/08	6/11/08	Buffalo, Johnson	Reviewed City's Hazardous Response Plan
Implement and communicate the new SSMP organization and response charts to staff and maintenance crews	5/2/08	6/20/08		Johnson	Revised spill report form will also be presented to staff and maintenance crews
Certify to SWRCB that this portion of the SSMP has been completed	5/2/08	6/20/08	6/17/08	Buffalo	

SSMP Legal Authority

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	11/2/09	9/2/09	10/27/09	Buffalo	
Present new sewer ordinance to Board of Directors for approval	11/2/09	3/4/08	3/4/08	Brannigan	
Codify new sewer ordinance and prepare it for inclusion into SSMP appendix	11/2/09	6/20/08	N/A	Chapman	
Obtain copy of agreement with LACOSAN for mutual aid on north and south sides of town; revise, if needed	11/2/09	9/2/09	10/26/09	Buffalo	written agreement does not exist for sending flows to the north on an as-needed basis
Review current building and grease interceptor permitting processes and business license process; revise to incorporate	11/2/09	9/2/09	4/1/09	Carlton, Buffalo	
Certify to SWRCB that this portion of the SSMP has been completed	11/2/09	11/2/09	11/2/09	Buffalo	

SSMP Operations and Maintenance Program

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	11/2/09	9/2/09	10/30/09	Buffalo	
Draft description of GIS maps currently being used by City along with procedures for updating maps	11/2/09	9/2/09	10/30/09	Buffalo, Engstrom	
Research preventative maintenance information	11/2/09	9/2/09	3/5/09	Buffalo	
Research work order system for preventive maintenance	11/2/09	9/2/09	9/2/09	Buffalo	

SSMP Work Plan and Schedule
City of Lakeport Municipal Sewer District

Develop and draft a Preventive Maintenance Program	11/2/09	9/2/09	7/1/09	Johnson, Buffalo	The program should address criteria and results for short-term and long-term prioritization of corrective actions based on structural or other deficiencies identified during preventive maintenance activities.
Draft a Rehabilitation and Replacement Program	11/2/09	9/2/09	9/2/09	Johnson, Buffalo	A Capital Improvement Plan (CIP) will be part of the Sewer System Master Plan, being developed by PACE
Collect information on existing employee training program, including methods of recording individual training	11/2/09	9/2/09	9/2/09	Perez	The SSMP will include a description of our training program and whether changes or improvements are anticipated in the near future. The City currently requires contractors to be compliant with City's training requirements.
Evaluate current Parts and Equipment Inventory Program and update, if necessary	11/2/09	9/2/09	3/6/09	Perez, Brannigan	to be incorporated into SEMS management software
Write Parts and Inventory portion of SSMP	11/2/09	9/2/09	10/30/09	Buffalo	
Certify to SWRCB that this portion of the SSMP has been completed	11/2/09	11/2/09	11/2/09	Buffalo	

SSMP Overflow Emergency Response Plan

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	11/2/09	9/2/09	10/30/09	Buffalo	
Evaluate existing Overflow Emergency Response Plan to ensure it meets the new GWDR requirements; draft policy to update Plan	11/2/09	9/2/09	9/2/09	Buffalo	Plan will include the following: notification scenarios and the process for receiving, response, reporting and notification, impact mitigation, and training
Review field report forms to verify that appropriate data is being collected; re-write as necessary	11/2/09	6/13/08	6/13/08	Buffalo	Appropriate data is any information required by the online SSO reporting system
Train all personnel on the plan	11/2/09	9/2/09	7/1/09	Buffalo	Training will be conducted annually as a refresher for existing staff and introduction to new staff
Certify to SWRCB that this portion of the SSMP has been completed	11/2/09	11/2/09	11/2/09	Buffalo	

SSMP FOG Control Program

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	11/2/09	9/2/09	10/28/09	Buffalo	
Develop FOG control program	11/2/09	8/29/08	8/1/09	Buffalo	Ordinance No. 872 (2008) requires all FSE's to have a grease trap installed and functioning
Develop implement marketing plan strategy to inform local businesses of new ordinance and FOG program	11/2/09	7/31/08	7/5/08	Buffalo	
Develop grease trap inspection protocols	11/2/09	7/31/08	6/2/08	Buffalo	
Present FOG ordinance to City Council for approval	11/2/09	3/4/08	3/4/08	Brannigan	FOG Ordinance part of new sewer ordinance
Characterization data integration of FOG sources into GIS	11/2/09	9/2/09	11/2/09	Engstrom, Cesar	incorporation of database information into GIS program
Certify to SWRCB that this portion of the SSMP has been completed	11/2/09	11/2/09	11/2/09	Buffalo	

SSMP Design and Construction Standards

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	5/2/10	3/2/10	4/1/10	Buffalo	
Identify and review existing design standards and process for revising those standards	5/2/10	3/2/10	7/1/09	Harter, Carlton, Buffalo	The SSMP can also include a list of the design standards and specifications most commonly referenced in the Agency's specifications or contract documents
Review and outline procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects	5/2/10	3/2/10	7/1/09	Harter, Carlton, Buffalo	The SSMP can describe the existing compliance inspection standards that are in place and can also describe an assessment of the porcess to imrove these standards.
Draft this section of the SSMP	5/2/10	3/2/10	3/26/10	Harter	
Review and revise draft of this section	5/2/10	4/2/10	4/5/10	Buffalo	

Certify to SWRCB that this portion of the SSMP has been completed	5/2/10	5/2/10	5/2/10	Buffalo	
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SSMP System Evaluation and Capacity Plan

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	5/2/10	3/2/10	3/16/10	Buffalo	
Review and include the Sewer System Master Plan in this SSMP	5/2/10	3/2/10	11/3/08	Brannigan, Buffalo	
If capital improvements are needed, develop a plan to fund, design, and construct them	5/2/10	6/30/09	6/15/08	Brannigan	CIP is included in 2008 Master Sewer Plan, which includes project time-lines and costs
Certify to SWRCB that this portion of the SSMP has been completed	5/2/10	5/2/10	5/2/10	Buffalo	

SSMP Monitoring, Measurement, and Program Modifications

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	5/2/10	3/2/10	3/25/10	Buffalo	
Develop performance measurements and a system for tracking them	5/2/10	3/2/10	3/25/10	Buffalo	used to evaluate the effectiveness of the SSMP on reducing SSOs
Ensure we are capable of identifying and illustrating SSO trends, including frequency, location, and volume	5/2/10	3/2/10	7/1/09	Engstrom	This will be done using GIS
Certify to SWRCB that this portion of the SSMP has been completed	5/2/10	5/2/10	5/2/10	Buffalo	

SSMP Internal Program Audits

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	5/2/10	3/2/10	3/22/10	Buffalo	

SSMP Work Plan and Schedule
City of Lakeport Municipal Sewer District

Draft an SSMP policy for the Utilities Department that outlines audit requirements and protocols	5/2/10	3/2/10	8/14/08	Buffalo, Brannigan, Johnson	Audit needs to be performed on SSMP program at least every two years; found in Community Development/Utilities Policy No. U-1
Prepare a written report on the audit and add the report to the SSMP document	5/2/10	3/2/10	3/22/10	Buffalo	template was developed and audit forms created
Certify to SWRCB that this portion of the SSMP has been completed	5/2/10	5/2/10	5/2/10	Buffalo	

SSMP Communication Program

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Write introduction to this section of the SSMP	5/2/10	3/2/10	3/11/10	Buffalo	
Identify key stakeholders and issues associated with the development of the SSMP	5/2/10	3/2/10	3/11/10	Brannigan	Stakeholders include: sewer operations, management, Environmental Health, RWQCB/WRCB, Fish and Game, Lakeport Chamber of Commerce, etc.
Develop methods of communicating the status of the SSMP preparation and use to the public	5/2/10	3/2/10	7/1/09	Buffalo	
Certify to SWRCB that this portion of the SSMP has been completed	5/2/10	3/2/10	5/2/10	Buffalo	

SSMP Completion and Certification

Activities	Required Due Date	Expected Comp Date	Date Completed	Responsible Person(s)	Comments
Present the final version of the SSMP to the City Council for approval and implementation	5/2/10	4/20/10	5/4/10	Buffalo	plan will be certified by required deadline, presented to Council thereafter to accommodate adequate review period
Certify to the State Water Resources Control Board that the entire SSMP has been developed and that the programs contained within are being implemented	5/2/10	5/2/10	5/2/10	Buffalo	

APPENDIX 2

Appendix 2.A: Staff Directory

City of Lakeport Municipal Sewer District Staff Directory



<i>Title</i>	<i>Name</i>	<i>Phone</i>	<i>Email</i>
Board of Directors	Lakeport City Council	707-263-5615	
City Manager	Margaret Silveira	707-263-5615 x104	msilveira@cityoflakeport.com
CLMSD Director	Douglas Grider	707-263-3578 x401	dgrider@cityoflakeport.com
City Engineer	Paul Curren	707-263-5613 x407	pcurren@cityoflakeport.com
Utilities Superintendent	Paul Harris	707-263-3578 x402	pharris@cityoflakeport.com
Compliance Officer	Andrew Britton	707-263-3578 x403	abritton@cityoflakeport.com
Building Official	Tom Carlton	707-263-3056 x202	tcarlton@cityoflakeport.com
Wastewater Supervisor	Carlos Pradomerze	707-263-3578 x702	cpradomerze@cityoflakeport.com
Field Staff	J Kennedy, Supervisor	707-263-3578 x601	jkennedy@cityoflakeport.com

Appendix 2.B: SSO External Reporting Reference Guide



CITY OF LAKEPORT PUBLIC WORKS DEPARTMENT
 225 PARK STREET, LAKEPORT, CA 95453 (707) 263-3578
compliance@cityoflakeport.com

Sanitary Sewer Overflow & Backup Response Regulatory Reporting Guide

ALWAYS document regulatory reporting regardless of whether reporting is done during business hour or after hours.

Reporting Instructions

Deadline	See Side B for definitions of the categories of spills of untreated or partially treated wastewater from City-owned sanitary sewer system.			Private Lateral Sewage Discharge (PLSD)
	Category 1	Category 2	Category 3	
2 hours after awareness of SSO	1. Notify CalOES at (800) 852-7550 of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water 2. Obtain CalOES incident number			
48 hours after awareness of SSO	1. If 50,000 gal or more were NOT recovered, begin water quality sampling and initiate impact assessment 2. Notify Lake County Environmental Health Dept (707-263-1164; after hrs: 707-263-8656) to determine if public warning signs are necessary			
3 Days after awareness of SSO	1. Submit Draft Spill Report in the CIWQS* database 2. Call Regional Water Quality Control Board, Guy Childs (916) 464-4648	1. Submit Draft Spill Report in the CIWQS* database 2. Call Regional Water Quality Control Board, Guy Childs (916) 464-4648		
15 Days after awareness of SSO	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end time	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end time		
30 Days after awareness of SSO			Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end time	
30 Days after SSO end time	If 50,000 gal or more were NOT recovered, submit SSO Technical Report using CIWQS			Submit Spill Report in CIWQS database* (optional)

*In the event the CIWQS database is not available, notify the State Water Resources Control Board (SWRCB) by phone.

Note: For reporting purposes in the CIWQS database, if one SSO event results in multiple appearance points, submit one report based on the location of the SSO failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.

Definitions of Spill Categories

Be sure to document how the category was determined: See Utilities Division Policy U-11 SSO Emergency Response Plan for details.

Category	Definition
Category 1:	Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either: <ul style="list-style-type: none"> • Reached surface water and/or drainage channel tributary to surface water; or • Reached a Municipal Separate Storm Sewer System (MS4) and was not full captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.
Category 2:	Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer failure or flow condition that either: <ul style="list-style-type: none"> • Did not reach surface water, a drainage channel or an MS4; or • The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.
Category 3:	All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer failure or flow condition.
Private Lateral Sewage Discharge (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately-owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the SSO Database.

APPENDIX 3

Appendix 3.A: Lakeport Municipal Code Ch. 13.20 Sewer Use and Pretreatment regulations

Online source: [Lakeport Municipal Code](#)
[Chapter 13.20 SEWER USE AND PRETREATMENT](#)

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 3.A is attached on the following pages.

Appendix 3.B: CLMSD Board Resolution No. 2315 (2008)

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 3.B is attached on the following pages.

Appendix 3.C: Utilities Division Policies U-3, U-4 and U-6

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 3.C is attached on the following pages.

Appendix 3.D: Mutual Aid Agreement with LACOSAN

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 3.D is attached on the following pages.

Chapter 13.20
SEWER USE AND PRETREATMENT

Sections:

ARTICLE I. GENERAL PROVISIONS

13.20.010 Purpose and policy.

13.20.020 Definitions.

13.20.030 Abbreviations.

13.20.040 Severability.

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ARTICLE II. REGULATIONS

13.20.060 Permissible discharges.

13.20.070 General discharge prohibition.

13.20.080 Prohibited discharges.

13.20.090 Prohibited substances or characteristics.

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13.20.110 National categorical pretreatment standards.

13.20.120 Specific pollutant limitations.

13.20.130 State and federal requirements and standards.

13.20.140 CLMSD right of revision.

13.20.150 Prohibited dilution.

13.20.160 Slug discharges.

13.20.170 Hazardous waste discharges.

13.20.180 Prohibition on medical waste.

13.20.190 Connection requirements.

13.20.200 Extension of mains.

13.20.210 Subdivision system requirements.

13.20.220 Annexation to district--Contract.

ARTICLE III. FACILITIES REQUIREMENTS

13.20.230 Spill containment facilities.

13.20.240 Monitoring/metering facilities.

13.20.250 Drawing submittal requirements.

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ARTICLE IV. ADMINISTRATION

13.20.270 Wastewater discharges.

13.20.280 Responsibility of users.

13.20.290 Classes of users.

13.20.300 Wastewater discharge permit.

13.20.310 Reporting requirements.

13.20.320 Monitoring.

13.20.330 Signatory requirements.

13.20.340 Rights of entry.

13.20.350 Pretreatment.

13.20.360 Publication of users in significant noncompliance.

13.20.370 Records retention.

13.20.380 Confidential information.

ARTICLE V. ENFORCEMENT

13.20.390 Enforcement mechanisms.

13.20.400 Informal administrative actions.

13.20.410 Administrative orders and compliance schedules.

13.20.420 Noncompliance fees.

13.20.430 Assessment of charges for obstruction or damage to CLMSD facilities or operations.

13.20.440 Suspension or termination of service.

- 13.20.450 Administrative civil penalties.
- 13.20.460 Civil action.
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- 13.20.480 Notification procedures.
- 13.20.490 Costs.
- 13.20.500 Responding to significant noncompliance.

ARTICLE VI. HEARINGS AND APPEALS

- 13.20.510 Availability of administrative appeal.
- 13.20.520 Show cause hearings.

ARTICLE VII. FEES

- 13.20.530 Purpose.
- 13.20.540 Sewer service charges.
- 13.20.550 Scope of rates, fees and charges.
- 13.20.560 Payment of fees, charges and delinquencies--Creation of lien.
- 13.20.570 Reinstatement deposit.
- 13.20.580 Connection fee--Construction fund.
- 13.20.590 Maintenance fees--Maintenance fund.

ARTICLE VIII. FATS, OILS, AND GREASE PROGRAM

- 13.20.600 FOG purpose.
- 13.20.610 Application to install a FOG pretreatment system.
- 13.20.620 FOG discharge limits.
- 13.20.630 FOG prohibitions and violations.
- 13.20.640 FOG fines.
- 13.20.650 FOG variance for cause request/appeals.

ARTICLE IX. SPECIAL PURPOSE DISCHARGE PERMIT

- 13.20.660 Special purpose discharge permit application.
- 13.20.670 Conditions and limitations.

13.20.680 Permit fee.

13.20.690 Permit modifications of terms and conditions.

13.20.700 Permit duration.

13.20.710 Discharge fees.

* Prior legislation: Ords. 427, 695 and 730.

ARTICLE I. GENERAL PROVISIONS

13.20.010 Purpose and policy.

This chapter sets forth uniform requirements for contributors to the wastewater collection and treatment system of the city of Lakeport municipal sewer district (hereafter CLMSD) and enables the CLMSD to comply with all applicable state and federal laws required by the Clean Water Act of 1977 as amended and the General Pretreatment Regulations (40 CFR Part 403).

The objectives of this chapter are:

- A. To comply with the laws of the state of California and of the United States relating to the protection of the environment, control of water pollution, disposal of hazardous wastes and pretreatment of industrial discharges to publicly owned treatment works.
- B. To prevent the introduction of wastes which will interfere with the operation of the system or other CLMSD operations.
- C. To prevent the introduction of wastes into the CLMSD wastewater system which will pass through the system, inadequately treated, into receiving waters.
- D. To prevent the introduction of substances which would cause the CLMSD to fail to meet air quality goals of the Lake County air quality management district.
- E. To prevent introduction of toxic substances to the CLMSD wastewater system which could reach the environment in toxic amounts.
- F. To prevent the introduction of wastes into the system which may affect the CLMSD's ability to dispose of, recycle, or reclaim its sludge or other residuals.
- G. To reasonably maintain the opportunity to recycle and reclaim wastewater from the system.
- H. To prevent the introduction of wastes that the CLMSD facilities are not designed to adequately treat and may therefore adversely affect the environment or may cause a violation of the CLMSD NPDES permit or may contribute to the need for modification of the CLMSD NPDES permit.
- I. To protect CLMSD personnel while conducting activities related to the collection, treatment and disposal of wastes through the CLMSD facilities.

J. To prevent a public hazard or public nuisance arising from the collection, treatment and disposal of wastes through the CLMSD system.

K. To prevent the introduction of wastes to sewers connected to the CLMSD system that could result in the CLMSD being classified as a hazardous waste treatment, storage or disposal facility under the laws of the state of California or the United States.

This chapter provides for the regulation of contributors to the CLMSD wastewater collection system through the issuance of permits to certain users and through enforcement of general requirements for the other users, authorizes monitoring and enforcement activities, and requires user reporting.

This chapter shall apply to all discharges within the CLMSD and to discharges from other governmental bodies or agencies who are, by contract or agreement with the CLMSD, users of the CLMSD treatment plant. Except as otherwise provided herein, the director of the CLMSD will administer, implement, and enforce the provisions of this chapter. (Ord. 872 §1.1, 2008)

13.20.020 Definitions.

Unless the context specifically indicates otherwise, the following terms and phrases, as used in this chapter, shall have the meanings hereinafter designated:

"Act" or "the Act" means the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 USC 1251 et seq.

"Authorized representative of industrial user" may be:

1. A principal executive officer, if the industrial user is a corporation;
2. A general partner or proprietor, if the industrial user is a partnership or proprietorship, respectively;
3. A duly authorized representative of the individual designated above, if such representative is responsible for the overall operation of the facilities from which the discharge originates and if such representative is identified in writing by the individual designated in subsection (1) or (2) of this definition.

"Biochemical oxygen demand (BOD)" is the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure, over five days at twenty degrees Celsius, expressed in terms of weight and concentration (milligrams per liter, mg/L).

"Building sewer/private sewer lateral" means the pipeline conveying sewage from the plumbing fixtures in the structure to a point where the private property ends and the public right-of-way begins. The building sewer is located on private property and is maintained by the property owner.

"Building sewer leakage test" means the procedure approved by the CLMSD to determine the amount of leakage in the building sewer.

"Bypass" means the intentional diversion of waste streams from any portion of an industrial user's treatment facility.

"California Plumbing Code" means written guidelines, regulations and ordinances governing the plumbing criteria for type and use of plumbing systems in the state of California and its political subdivisions.

"Categorical industrial user" means all industrial users subject to national categorical pretreatment standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.

"Categorical standards" means national pretreatment standards which specify quantities or concentrations of pollutants or pollutant properties that may be discharged by industrial users in specified industrial subcategories as defined in 40 CFR Chapter I, Subchapter N, Parts 405 through 471.

"Chemical oxygen demand" (COD) means the quantity of oxygen utilized, by a strong chemical oxidant, in the oxidation of organic and oxidizable inorganic material under standard laboratory procedures, expressed in terms of weight and concentration (mg/L).

"City of Lakeport municipal sewer district" means the collective wastewater treatment system owned and/or operated by the city, including all devices, systems and appurtenances thereto used in the collection, storage, treatment, recycling, distribution and reclamation of municipal sewage, industrial wastes of liquid nature, or other wastewater. The city of Lakeport municipal sewer district is referred to herein as "CLMSD."

"Class I user" means any user who is subject to national categorical pretreatment standards.

"Class II user" means any nondomestic user of the CLMSD wastewater disposal system who is not subject to national categorical standards and (1) has an average discharge flow of twenty-five thousand gallons or more per day, excluding sanitary, noncontact cooling water, and blowdown wastewaters; or (2) contributes a process waste stream which makes up five percent or more of the average dry weather hydraulic or organic (BOD, TSS) capacity of a treatment plant; or (3) has a reasonable potential, in the opinion of the CLMSD, to adversely affect CLMSD facility operation or for violating a pretreatment standard, local limit, or discharge requirement; or (4) has been determined by the CLMSD to discharge wastewater having a potential variability in the character of the wastewater, or the potential for increased operational or administrative cost to the CLMSD due to the characteristics of the waste.

"Class III user" means any nondomestic user who is not designated as a Class I or a Class II user. Class III users may include users who are not industrial nor commercial users and (1) have a reasonable potential to adversely affect the CLMSD's ability to meet the objectives of this chapter; or (2) generate hazardous waste, whether or not said waste is discharged into the sanitary sewer system, or if, in the determination of the CLMSD, there is a potential for this waste to be discharged into the sewer, even through accident, in nonprocess or process of handling of the waste; or (3) store or use hazardous materials, whether or not a hazardous waste is produced in the industrial or commercial process, if, in the determination of the CLMSD, a potential exists for

significant impact upon the CLMSD facilities due to a release of these materials into the environment.

Class III users may be individually designated by the CLMSD based on the criteria set forth above, or on categorization of the user as a member of a particular business category. A Class III user designation may include, but is not limited to, landfill operations, landfill leachate, or ground water cleanup sites.

Class IV User. Any nondomestic user who is not designated as a Class I, Class II, or Class III user may be designated as a Class IV user if the user (1) has a reasonable potential to adversely affect the CLMSD's ability to meet the objectives of this chapter; or (2) generates hazardous waste, whether or not said waste is, in the normal course of the industrial or commercial process, discharged into the sanitary sewer system, or if, in the determination of the CLMSD, there is a potential for this waste to be discharged into the sewer, even through accident, in nonprocess or process of handling of the waste; or (3) stores or uses hazardous materials, whether or not a hazardous waste is produced in the industrial or commercial process, if, in the determination of the CLMSD, a potential exists for significant impact upon the CLMSD facilities due to a release of these materials into the environment. Class IV users may be individually designated by the CLMSD based on the criteria set forth above or on categorization of the user as a member of a particular business category. The Class IV user designation shall include, but is not limited to, the following business categories: analytical laboratories, clinical laboratories, dry cleaners, laundries, vehicle maintenance facilities, vehicle repair facilities, gasoline stations, printing shops, printing allied industries, photo processors, pesticide formulators, pesticide applicators, dental offices, dental laboratories and x-ray laboratories, and veterinary providers.

"CLMSD board" means the board of directors of the city of Lakeport municipal sewer district.

"CLMSD facilities" means all of the CLMSD system of collecting, conveying and treating; including, but not limited to, the collection system and treatment plant. This includes any publicly owned facility connected to the CLMSD collection system which generates wastewater treated at the CLMSD treatment plant.

"Collection system" means the CLMSD pipelines, pump stations, manholes and other similar facilities which accept, collect and convey sanitary sewage to the treatment plant.

"Cooling water" means the water discharged from any use such as air conditioning, cooling or refrigeration, or to which the only pollutant added is heat.

"Cost recovery" shall refer to costs associated with the cleanup and/or decontamination of a site after discharge of substances into the sanitary sewer, storm sewer and/or to the environment that caused interference, pass-through or a sanitary sewer blockage. This includes cleanup and decontamination of all structures/areas including residential, commercial, surface waters and the environment.

"Director" means the CLMSD board-appointed director of the city of Lakeport municipal sewer district or his/her designee.

"Domestic user" means any person, including those located outside the jurisdictional limits of the city, who contributes, or causes or permits the contribution of, wastewater into the CLMSD from ordinary living processes of humans of such character as to permit satisfactory disposal, without special treatment, into the public sewer by means of a private building sewer. The parameters by which a domestic user shall be distinguished from a nondomestic user is the concentration of BOD and suspended solids. The concentration shall be considered to have no more than three hundred milligrams per liter BOD and suspended solids.

"Domestic wastewater" means the liquid, solid, and water-carried waste derived from ordinary living processes of humans of such character as to permit satisfactory disposal, without special treatment, into the public sewer by means of a private building sewer. The parameters by which domestic wastewater shall be distinguished from nondomestic wastewater or industrial or commercial wastewater is the concentration of BOD and suspended solids. The concentration shall be considered to have no more than three hundred milligrams per liter BOD and suspended solids.

"Enforceable best management practices (E-BMPs)" means methods, tools, and techniques that have been determined to be the most effective and practical means of preventing or reducing pollution, including documentation of employee training, documentation of grease interceptor cleaning, and removal and disposal of grease.

"Environmental Protection Agency" or "EPA" means the U.S. Environmental Protection Agency or, where appropriate, the term may also be used as a designation for the administrator or other duly authorized official of said agency.

"Fats, oils, and greases (FOG)" means organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. These substances are measured using analytical test procedures established in 40 CFR Part 136. Fats, oils, and greases are collectively referred to herein as "grease," "greases," and/or "FOG."

"Food service facilities (FSF)" means those facilities primarily engaged in activities of preparing, serving, or making available food or foodstuffs for consumption by the public such as a restaurant, commercial kitchen, grocery store, caterer, hotel, school, hospital, prison, correctional facility, or care institution. These facilities use one or more of the following preparation activities: frying, baking, grilling, sauteing, rotisserie cooking, broiling, boiling, blanching, roasting, toasting, poaching, infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot nondrinkable food product in or on a receptacle that requires washing.

"Grab sample" means a sample which is taken from a waste stream on a one-time basis with no regard to the flow in the waste stream and without consideration of time.

"Grease interceptor" means a device for separating and retaining greases and like compounds prior to entry into the CLMSD facilities. These devices also serve to remove and collect settleable solids from food service facilities prior to entry into the sanitary sewer. Such devices are collectively referred to herein as "grease interceptors."

"Grease interceptor minimum design capability" means the design features of a grease interceptor and its ability or volume to effectively intercept and retain greases from grease-laden wastewater discharge to the sanitary sewer.

"Hazardous pollutants" means any constituent or combination of constituents that is classified as hazardous under state or federal regulations or is included on the federal list of toxic pollutants as specified in 40 CFR Part 403.

"Holding tank waste" means any waste from holding tanks such as vessels, chemical toilets, campers, trailers and vacuum-pump tank trucks.

"Indirect discharge" means the discharge or the introduction of pollutants from any nondomestic source regulated under Section 307(b), (c), or (d) of the Act (33 USC 1317) into the CLMSD treatment works (including holding tank wastes discharged into the system).

"Industrial user (IU)" means a source of indirect discharge. (See definition of "indirect discharge.")

"Industrial waste or wastewater" means all water-carried wastes and wastewater of the community, excluding domestic wastewater, derived from any producing, manufacturing, processing, institutional, commercial, agricultural, or other operation. Industrial wastewater may also include wastes of human origin similar to domestic wastewater which have been mixed with industrial wastes or wastewater prior to discharge to CLMSD facilities.

"Interceptor" means a device for separating and retaining greases and like compounds prior to entry into CLMSD facilities. These devices also serve to remove and collect settleable solids prior to entry into CLMSD facilities.

"Interference" means a discharge which, alone or in conjunction with a discharge or discharges from other sources:

1. Both inhibits or disrupts the CLMSD, its treatment processes or its operations, use, or disposal, and therefore causes a violation of any requirement of the CLMSD National Pollutant Discharge Elimination System (NPDES) permit (including an increase in the magnitude or duration of a violation) or prevents sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Act (33 USC 1345), the Clean Air Act, and the Toxic Substances Control Act;
2. Is likely to endanger life, health, or property or otherwise cause a nuisance; or
3. In the opinion of the CLMSD, otherwise adversely affects the CLMSD's ability to meet the objectives of Section 13.20.010.

"National categorical pretreatment standard" means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act (33 USC 1317) which applies to industrial users. These regulations are found in 40 CFR, Chapter I, Subchapter N, Parts 405 through 471.

"National Pollution Discharge Elimination System or NPDES permit" means a permit issued pursuant to Section 402 of the Act (33 USC 1342).

"New source" means a facility from which there is, or may be, a discharge of pollutants, construction of which began after the publication of the proposed pretreatment standards pursuant to Section 307(c) of the Act, which will apply to the facility if the standards are promulgated, provided certain location and construction criteria are met as defined in 40 CFR 403.3(k).

"Noncooking facilities" means those facilities primarily engaged in the preparation of precooked foodstuffs that do not include any form of cooking. These include cold dairy and frozen foodstuffs preparation and serving facilities.

"Notice of violation (NOV)" means a document informing the user that the user has violated this chapter and requiring user to prescribe appropriate corrective action.

"Ordinance," referring to the term "this ordinance" and/or "pretreatment ordinance" and similar uses of the term "ordinance," shall refer to the entirety of the ordinance codified in this chapter, as may be amended and modified.

"Owner" shall mean individual, firm, company, corporation, or group upon whose property the building or structure is located or will be constructed.

"Pass-through" means a discharge which exits the CLMSD into waters of the United States in quantities or concentrations which cause, or in the determination of the CLMSD have a potential for causing, a violation of any requirement of the CLMSD NPDES permit (including an increase in the magnitude or duration of a violation).

"Person" means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine and the singular shall include the plural where indicated by the context.

"pH" means the logarithm (base ten) of the reciprocal of the concentration of hydrogen ions expressed in moles per liter of solution. pH is a measure of the acidity or alkalinity of a solution.

"Pollutant" includes sewage or any characteristic of sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any commercial producing, manufacturing, or processing operation of whatever nature.

"Pollution" means an alteration of the quality of the waters of the United States by waste to a degree which unreasonably affects (1) such waters for beneficial use or (2) facilities which serve such beneficial uses, or which creates a hazard to the public health.

"Pretreatment" or "treatment" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into CLMSD

facilities. The reduction or alteration can be obtained by physical, chemical or biological processes, or process changes by other means, except as prohibited by 40 CFR Section 403.6(d).

"Pretreatment requirement" means any substantive or procedural pretreatment requirement, other than a national pretreatment standard, applicable to industrial users (IUs).

"Pretreatment standard" means any regulation of the CLMSD, state, or EPA containing pollutant discharge limits or other procedural or substantive requirements of all users.

"RCRA" means the Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) and as amended.

"RUE" means the residential unit equivalent representing the average amount of sewage generated by a detached single-family dwelling in the city. The volume of the sewage flow generated by an RUE is approximately two hundred gallons per day which is equal to approximately eight hundred cubic feet per month. The RUE flow rate does not include the extraneous leakage that may occur in the piping between the property line and the plumbing fixtures inside and outside of the structure.

"Sanitary sewer" means a pipe or conduit intended to carry wastewater or waterborne wastes from homes, businesses, and industries to the CLMSD; a sewer collection system.

"Significant industrial user (SIU)" means any industrial user of the CLMSD facilities which is:

1. A categorical industrial user (CIU); or
2. Any other industrial user that:
 - a. Discharges an average of twenty-five thousand gallons per day or more of process wastewater (excluding sanitary, noncontact cooling water, and boiler blowdown wastewaters); or
 - b. Contributes a process waste stream which makes up five percent or more of the average dry weather hydraulic or organic (BOD, TSS) capacity of the treatment plant; or
 - c. Has a reasonable potential, in the opinion of the CLMSD, to adversely affect CLMSD facility operation or for violating a pretreatment standard or requirement;
3. The CLMSD may determine that an industrial user which has no reasonable potential for adversely affecting CLMSD facility operation or for violating any pretreatment standard or requirement is not a significant industrial user. 40 CFR 403.3(t)(2).

"Significant noncompliance" means one or more of the following:

1. Chronic violations, defined as those in which sixty-six percent or more of all the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit for the average limit for the same pollutant parameter;

2. Technical review criteria (TRC) violations, defined as those in which thirty-three percent or more of all the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC equals 1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);
3. Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the CLMSD determines has caused, alone or in combination with other discharges, interference or pass-through (including endangering the health of the CLMSD facility, personnel or the general public);
4. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or the environment, or has resulted in the CLMSD's exercise of its emergency authorities under 40 CFR 403.8(f)(1)(vi)(B) to halt or prevent such a discharge;
5. Failure to meet, within ninety days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
6. Failure to provide, within thirty days after the due date, required reports such as baseline monitoring reports, ninety-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules.

"Slug discharge" means a discharge capable of causing adverse impacts to the CLMSD, its workers, or the environment, or any pollutant including an oxygen-demanding pollutant released in a discharge at a flow rate and/or pollutant concentration which may cause interference with the operation of the CLMSD sewerage system. The discharge will be considered a slug discharge if the flow rate or concentrations or quantities of pollutants exceed, for any time period longer than fifteen minutes, more than five times the average twenty-four-hour concentration, quantity or flow during normal operations. A slug discharge is considered to be a discharge of a nonroutine, episodic nature, including, but not limited to, an accidental spill, or a noncustomary batch discharge. Batch discharges are intentional, controllable discharges that occur periodically within an industrial user's process (typically the result of a noncontinuous process). Accidental spills are unintentional, largely uncontrolled discharges that may result from leaks or spills of storage containers or manufacturing processes in an area with access to floor drains.

"Standard Industrial Classification (SIC)" means a federal classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President of the United States of America, Office of Management and Budget.

"State" means the state of California.

"Stormwater" means any flow occurring during or following any form of natural precipitation and resulting therefrom.

"Suspended solids" means the total suspended matter that floats on the surface of, or is suspended in, water, wastewater or other liquids, and which is removable by laboratory filtering.

"Total suspended solids (TSS)" refers to a standardized water quality measurement that uses a filter to capture and weigh trapped particles from a water sample.

"Toxic pollutant" means any pollutant or combination of pollutants listed in Appendix A to the ordinance codified in this chapter.

"Trap" means a cast iron or stainless steel containment device used for trapping substances and to prevent grease, sand or flammable liquids from entering the sewerage system.

"Treatment plant" means any facility owned by the CLMSD that is designed to provide treatment to wastewater.

"User" means any person, including those located outside the jurisdictional limits of the city, who contributes, or causes or permits the contribution of, wastewater into the CLMSD.

"Variance for cause request" means a submittal provided by a food service facility or other user to provide site-specific technical information which demonstrates why a grease interceptor is not feasible, practicable, and/or necessary for a particular use, activity and/or structure.

"Wastewater" or "waste" means the liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with any ground water, surface water, and stormwater that may be present, whether treated or untreated, which is contributed into or permitted to enter CLMSD facilities.

"Wastewater discharge permit" is set forth in Section 13.20.300.

"Waters of the state" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

"Waters of the U.S." means all portions of oceans within twelve nautical miles of baseline of any shore of any state in the U.S.; streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which carry water across or share jurisdiction or rights with more than any single state within the United States of America. (Ord. 872 §2.1, 2008)

13.20.030 Abbreviations.

The following abbreviations shall have the designated meanings:

BOD--Biochemical Oxygen Demand

CCR--California Code of Regulations

CFR--Code of Federal Regulations

COD--Chemical Oxygen Demand

EPA--Environmental Protection Agency

L--Liter

mg--Milligrams

mg/L--Milligrams per Liter

NPDES--National Pollutant Discharge Elimination System

SIC--Standard Industrial Classification

TSS--Total Suspended Solids

USC--United States Code

(Ord. 872 §2.2, 2008)

13.20.040 Severability.

If any provision, paragraph, word, section, or article of this chapter is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections, and articles shall not be affected and shall continue in full force and effect. (Ord. 872 §2.3, 2008)

13.20.050 Conflict.

All other ordinances and parts of other ordinances inconsistent or conflicting with any part of this chapter are hereby repealed to the extent of such inconsistency or conflict. (Ord. 872 §2.4, 2008)

ARTICLE II. REGULATIONS

13.20.060 Permissible discharges.

Wastewater may be discharged into public sewers for collection, treatment, and disposal by the CLMSD; provided, that such wastewater discharge is in compliance with this chapter and/or conditions of any wastewater discharge permit; and further provided, that the user pays all applicable CLMSD sewer fees and charges including any penalties or charges assessed under this chapter. (Ord. 872 §3.1, 2008)

13.20.070 General discharge prohibition.

No user shall contribute or cause to be contributed any pollutant or wastewater which causes pass-through or interference. These general prohibitions and the specific prohibitions contained in this chapter apply to each user introducing pollutants into CLMSD facilities whether or not the user is subject to national pretreatment standards or any other national, state, or CLMSD pretreatment standards or requirements. (Ord. 872 §3.2, 2008)

13.20.080 Prohibited discharges.

A user may not discharge, or cause to be discharged, wastewater into any CLMSD facility if it contains substances or has characteristics which, either alone or by interaction with other wastewater, cause or threaten to cause:

A. Damage to CLMSD facilities.

- B. Interference or impairment of operation or maintenance of CLMSD facilities.
- C. Obstruction of flow in CLMSD facilities.
- D. Hazard to human life.
- E. Interference with treatment plant or disposal processes or any alteration of the CLMSD treatment plant processes.
- F. In no case shall substances discharged to the CLMSD facilities cause the plant to be in noncompliance with federal, state and local laws, rules and regulations pertaining to sludge, biosolids or effluent disposal.
- G. Unreasonable interference with recycling and reclamation of wastewater, residues, sludge or scum.
- H. The CLMSD to violate its NPDES permit or the receiving water quality standards.
- I. Flammable or explosive conditions.
- J. A noxious or malodorous condition, a public nuisance, a hazard to life, or conditions sufficient to prevent normal entry into the sewers or other CLMSD facilities for maintenance and repair.
- K. Objectionable coloration or other condition in the quality of the CLMSD treatment plant influent which interferes with or passes through the treatment plant.
- L. Conditions which violate any statute, rule, regulation, or ordinance of any public agency relating to releases of hazardous wastes, hazardous substances or other pollutants to the environment when such release is to any portion of CLMSD facilities.
- M. Any alteration or change of the CLMSD NPDES permit or any additional regulatory supervision, intervention or oversight of the CLMSD operations.
- N. Any significant alteration of CLMSD operations, including but not limited to affecting the ability of the CLMSD to procure adequate insurance and/or subjecting the CLMSD operations to significantly increased potential liability. (Ord. 872 §3.3, 2008)

13.20.090 Prohibited substances or characteristics.

- A. Any liquids, solids, or gases which, by reason of their nature or quantity, are or may be sufficient, either alone or by interaction with other substances, to create a fire or explosion hazard or damage to CLMSD facilities or be injurious to human health and safety or to the operation of CLMSD facilities. At no time shall a waste stream exceed a closed cup flash point of one hundred forty degrees Fahrenheit or sixty degrees Celsius using the test method specified in 40 CFR Part 261.21. At no time shall two successive readings on a combustible gas meter, at the point of discharge into the system (or at any point in the system), be more than five percent nor any single reading over ten percent of the lower explosive limit (LEL) of the meter. The meter shall be properly calibrated in accordance with the manufacturer's instructions using pentane as the calibration standard. The materials which may be prohibited if they cause explosive or fire dangers

as defined herein include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, and sulfides.

B. Any solid or viscous substance in amounts or concentrations which may cause or threaten to cause obstruction to the flow in a sewer or pass-through of, or interference with, the operations of any CLMSD facilities, such as, but not limited to, feathers, ashes, cinders, sand, cat litter, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastic, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, petroleum oil, non-biodegradable cutting or machine oils, products of mineral oil origin, mud, cement grout, glass, grinding or polishing wastes, grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails or whole blood.

C. Any discharges having a pH less than 6.0 or equal to or greater than 12.0 or having any other corrosive property outside the specified range in Appendix A, attached to the ordinance codified in this chapter, or corrosive property capable of causing damage or hazard to structures, equipment, humans or animals.

D. Any wastewater containing hazardous pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, to constitute a hazard to human or animal health or safety, to create an adverse effect on the waters of the state, or to cause the CLMSD to exceed the limitations set forth in a national pretreatment standard.

E. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference or pass-through, but in no case heat in such quantities that the temperature at the introduction into the treatment plant exceeds forty degrees Celsius or one hundred four degrees Fahrenheit.

F. Any pollutants, including oxygen-demanding pollutants (BOD, COD, etc.) released at a flow rate and/or pollutant concentration which, alone or in combination with others, may cause interference or pass-through. Regardless of whether a slug discharge causes or will cause interference or pass-through, in no case shall a slug discharge have a flow rate or contain concentrations or quantities of pollutants that exceed, for any time period longer than fifteen minutes, more than five times the average twenty-four-hour concentration, quantities, or flow during normal operation.

G. Any discharge which results in the presence of toxic gases, vapors, or fumes in a quantity that may cause acute worker health and safety problems within any CLMSD facility.

H. Any noxious or malodorous liquids, gases, or solids.

I. Any wastewater containing any radioactive wastes unless:

1. The user is authorized to use radioactive materials by the State Department of Health or other governmental agency empowered to regulate the use of radioactive materials; and

2. The waste is discharged in strict conformity with current California Radiation Control Regulations (California Code of Regulations, Title 17) for safe disposal; and

3. The user is in compliance with all rules and regulations of all other applicable regulatory agencies.

J. Any stormwater, ground water, rain water, street drainage, subsurface drainage, yard drainage or diatomaceous earth filter backwash, unless a specific permit is issued by the CLMSD. The CLMSD may approve such discharge only when no other reasonable alternative for disposal is available and all other provisions of this chapter are met.

K. Any unpolluted water including, but not limited to, cooling water, process water or blowdown from cooling towers or evaporative coolers or any other unpolluted water unless a permit for such has been obtained from the CLMSD prior to the discharge. The CLMSD may approve the discharge of such water only when no reasonable alternative method of disposal is available and all other provisions of this chapter are met.

L. Any waste defined as hazardous, by any definition set forth in federal and/or state statutes or regulations, unless such waste has been delisted or decertified by the appropriate federal or state agency, and/or a variance has been granted by the appropriate federal or state agency, including provisions for discharge to a CLMSD facility, and said variance provisions are approved by the CLMSD.

M. Any substance, waste, wastewater, or constituent thereof as may be specifically prohibited or prohibited by concentration levels as may be set forth in local limits adopted by resolution by the CLMSD board.

N. Any substance, waste, wastewater or constituent thereof, which may by itself or in combination with other discharges cause the CLMSD to violate any permit conditions related to toxicity of the effluent or otherwise cause or contribute to the potential for toxic substances being released from CLMSD facilities into the environment in toxic amounts.

O. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through.

P. Any trucked or hauled pollutants, except at discharge points designated by the CLMSD. (Ord. 872 §3.4, 2008)

13.20.100 Prohibited discharge location.

No user shall discharge any wastewater directly into a manhole or other opening in the CLMSD sewerage system other than through sewer laterals or other sewer connection approved by the CLMSD, unless a permit has been obtained for such discharge. A permit will be issued only for such direct discharge in the event the discharge is otherwise in compliance with provisions of this chapter and no other alternative is reasonably available in the opinion of the CLMSD. (Ord. 872 §3.5, 2008)

13.20.110 National categorical pretreatment standards.

National categorical pretreatment standards, found in 40 CFR Chapter I, Subchapter N, Parts 405-471, are hereby incorporated into this chapter and made a part thereof. (Ord. 872 §3.6, 2008)

13.20.120 Specific pollutant limitations.

No person shall discharge wastewater to a CLMSD facility which exhibits any characteristic which is specifically prohibited by an action of the CLMSD board, or any wastewater containing constituents in excess of any specific constituent level limitations as may be set by the CLMSD board by resolution.

Any violation of a specific pollutant limitation as may be set forth in a CLMSD resolution shall subject the user to the same administrative actions, penalties, and/or enforcement actions as would be available for any other violation of this chapter. The term "ordinance," as used elsewhere within this chapter, shall be read to include the specific pollutant limitations and/or waste characteristics as may be set forth by resolution. See Appendix A to the ordinance codified in this chapter for maximum allowable concentrations as adopted by resolution. All specific pollutant limitations set by the CLMSD shall be deemed pretreatment standards for the purposes of Section 307(d) of the Act. (Ord. 872 §3.7, 2008)

13.20.130 State and federal requirements and standards.

In the event that either state or federal standards and requirements for discharges to CLMSD facilities are more stringent than the limitations, requirements, and standards set forth in this chapter, the most stringent standard or requirement shall apply. Modifications of the federal or state standards and requirements which are more stringent than the limitations, standards, and requirements as set forth in this chapter and are promulgated subsequent to the adoption of this chapter shall be applied to discharges to CLMSD facilities at such time and in such manner as is set forth in Sections 13.20.300(D) and (F) and 13.20.690. (Ord. 872 §3.8, 2008)

13.20.140 CLMSD right of revision.

The CLMSD reserves the right to establish by ordinance or resolution more stringent standards or requirements on discharges to the CLMSD facilities if deemed necessary to comply with the objectives presented in this chapter. No revision of standards or requirements hereunder shall subject the CLMSD to civil liability or penalty for interference with a vested right of any user. (Ord. 872 §3.9, 2008)

13.20.150 Prohibited dilution.

No user shall increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the national pretreatment standards, or in any other pollutant-specific limitation developed by the CLMSD or state, with this chapter or the user's permit, or to establish an artificially high flow rate for permit mass emission rates. An increase in the use of process water which is reasonably proportional to increased production and which is required for said increase in production will not be considered an excessive discharge hereunder. (Ord. 872 §3.10, 2008)

13.20.160 Slug discharges.

A. All users shall be prohibited from allowing slug discharges, as elsewhere defined herein, from entering the CLMSD sewerage system.

B. Each user shall provide protection from slug discharges of restricted materials or other substances regulated by this chapter. Facilities to prevent slug discharges of restricted materials shall be provided and maintained at the user's own cost and expense.

C. In accordance with 40 CFR 403.8(f)(2)(v), the CLMSD must evaluate, at least once every two years, whether each SIU needs a slug discharge control plan. Upon evaluation, certain users will be required to prepare slug discharge prevention and contingency plans (SDCP) containing at least the following information:

1. A description of the discharge practices including nonroutine batch discharges.
2. A description of stored chemicals.
3. The procedures for promptly notifying the CLMSD of slug discharges, including any discharge that would violate a specific discharge prohibition with procedures for follow-up written notification within five days.
4. If required by the CLMSD, procedures to prevent adverse impact from accidental spills including maintenance and inspection of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building or containment structures or equipment, measures for containing toxic pollutants (including solvents), and/or measures or equipment for emergency response.
5. If required by the CLMSD, follow-up practices to limit the damage suffered by the treatment plant or the environment.

These plans shall be submitted to the CLMSD for review and approval. All users required to have SDPC plans shall submit such a plan within three months and complete implementation within six months of receiving notice regarding the requirements of such plan. Review and approval of such plans and operating procedures shall not relieve the user from the responsibility to modify the user's facility as necessary to meet the requirements of this chapter.

D. In the case of a slug discharge, it is the responsibility of the user to immediately notify the CLMSD of the incident. The notification shall include location of the discharge, type of waste, concentration and volume and corrective action. The user shall provide the CLMSD with a detailed, written report of this incident in a manner and within the time frame as elsewhere provided in this chapter.

E. A notice shall be permanently posted on the user's premises advising the employees whom to call in the event of a slug discharge. The user shall ensure that all employees who may cause or allow such slug discharge to occur are advised of the emergency notification procedure.

F. Each user who violates any of the requirements of the slug discharge program, or allows a slug discharge to occur, shall be subject to the enforcement provisions of this chapter. (Ord. 872 §3.11, 2008)

13.20.170 Hazardous waste discharges.

All industrial users shall notify the CLMSD, the EPA Regional Waste Management Division Director, and state hazardous waste authorities, in writing, of any discharge to CLMSD facilities of a substance which if otherwise disposed of would be a hazardous waste under 40 CFR Part 261 or as otherwise defined by state statute or regulation.

Such notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of the discharge (continuous, batch, or other). If the industrial user discharges more than one hundred kilograms of such waste per calendar month to CLMSD facilities, the notification shall also contain the following information, if known: (A) an identification of the hazardous waste constituents contained in the waste; (B) an estimation of the mass and concentration of such constituents in the waste stream discharged during that calendar month; and (C) an estimation of the mass constituents in the waste stream expected to be discharged during the following twelve months. Industrial users shall provide notification prior to obtaining a discharge permit.

In the case of any notification made under this section, the industrial user shall certify that it has a program in place to reduce the level of toxicity of hazardous waste generated to the degree it has determined to be economically practical. Nothing contained in this section is intended to modify the prohibitions set forth in Section 13.20.090(N). (Ord. 872 §3.12, 2008)

13.20.180 Prohibition on medical waste.

A. No user shall discharge solid wastes from hospitals, clinics, offices of medical doctors, convalescent homes, medical laboratories or other medical facilities to the sewerage system including, but not limited to, hypodermic needles, syringes, instruments, utensils or other paper and plastic items of a disposable nature except where prior written approval for such discharges is given by the CLMSD director.

B. The CLMSD shall have the authority to require that any discharge of an infectious waste to the sewer be rendered noninfectious prior to discharge if the infectious waste is deemed to pose a threat to the public health and safety, or will result in any violation of the applicable waste discharge requirements. (Ord. 872 §3.13, 2008)

13.20.190 Connection requirements.

A. Every lot, block, tract or parcel of land occupied by a residence, building, structure or place of business, producing sewage within the CLMSD or area serviced by special agreement with the CLMSD, to which the nearest property line is within two hundred feet of the point at which a lateral may be connected to the CLMSD, shall be connected to such, excepting only such lots, blocks, tracts or parcels of land served by an adequate, existing septic tank or disposal system in good working order.

B. Except as provided below, no septic tank or system shall be constructed or connected to any structure built, erected, moved or reconstructed, on any premises within the CLMSD, or on premises in any area contracting for discharge of sewage into the CLMSD, if the nearest line of such premises is within two hundred feet of the point of connection to the system.

In the event that the CLMSD cannot immediately accommodate the flow from the premises for any reason, the use of a septic tank or system may be approved by the CLMSD; provided, that the following conditions are satisfied:

1. The appropriate sewage expansion fees for the premises are paid.
2. The appropriate sewage connection fees are paid.
3. The facilities needed to connect the premises to the CLMSD are in place or are guaranteed by a cash deposit in an amount of two hundred percent of the estimated installation cost for the facilities.
4. The monthly sewer service charges that normally would be paid by the premises are paid to the CLMSD during the period that the septic tank or system is in use.
5. The user(s) of the premises agree to conditions of use and abandonment of the septic tank or system as prescribed by the CLMSD.

C. No lateral service connection shall serve more than one ownership.

D. No existing septic tank or separate disposal system serving any property or area within such two-hundred-foot distance which hereafter becomes defective, and requires major repair work or reconstruction, shall be so repaired or reconstructed except by a special grant permitting a variance authorized by the CLMSD, upon application therefor; but such use or user shall be connected into the CLMSD. "Major repairs or reconstruction" is defined as any repair or reconstruction requiring the installation of a new tank, leaching field or equivalent, or such work as will exceed fifteen percent of the cost of all laterals and connections or appurtenances thereto, constructed on the property of any applicant, or on any area outside the CLMSD. Such repair or reconstruction shall be inspected and approved by the CLMSD, prior to being covered or concealed and before the connection pursuant to a permit is made.

E. It is unlawful to lay any lateral or connection line or appurtenance thereto on the property of any user or applicant other than with such materials as the CLMSD may prescribe by resolution.

F. It is unlawful for any person, other than the CLMSD, its agents or employees, to connect any pipe, drain or facility with, or cause the same to penetrate, break, injure, remove or open any portion of, the sewerage system of the CLMSD, or any line, pipe, manhole, flush tank, pump, meter, motor inspection line or any other part of or appurtenance to such system, without a written permit therefor, issued by the CLMSD.

G. The city council shall prescribe by resolution the conditions, forms, fees and manner of connecting to the CLMSD. (Ord. 872 §3.14, 2008)

13.20.200 Extension of mains.

The city council shall prescribe by resolution the manner, financing, and provision for any refunds to promote extension of collector mains in the CLMSD, except for ordinary costs associated within subdivision boundaries or in areas served by the CLMSD, and except special districts organized for the purpose of such construction. (Ord. 872 §3.15, 2008)

13.20.210 Subdivision system requirements.

- A. All new subdivisions within the CLMSD or in areas served by the CLMSD shall have an adequate collection system for sewage.
- B. The plan, design and size of mains must be approved by the CLMSD for such purpose. Such system shall include provision for future growth within the area or adjacent areas which will ultimately use mains within such subdivision, and shall comply with standards otherwise established within the city.
- C. The subdivider shall pay all costs, as described in this chapter, of such system. (Ord. 872 §3.16, 2008)

13.20.220 Annexation to district--Contract.

- A. Additional areas may be annexed to the CLMSD in the manner provided by law.
- B. All charges therefor shall be prescribed by resolution of the city council.
- C. Contracts for acceptance and treatment of sewage shall be entered into only with areas which contemplate future annexation to the CLMSD. Such contracts shall require compliance with provisions of this chapter and any resolution adopted pursuant hereto and shall not provide for acceptance and treatment without annexation for a period of more than ten years, and shall be so drawn that they shall encourage and promote annexation at the earliest date after original construction. (Ord. 872 §3.17, 2008)

ARTICLE III. FACILITIES REQUIREMENTS

13.20.230 Spill containment facilities.

All users shall provide spill containment for protection against discharge of prohibited materials or other wastes regulated by this chapter. Such protection shall be designed to secure the discharges and to prevent them from entering into the CLMSD sewer system in accordance with reasonable engineering standards. Such facilities shall be provided and maintained at the user's expense. (Ord. 872 §4.1, 2008)

13.20.240 Monitoring/metering facilities.

- A. The CLMSD may require the user to construct and maintain in proper operating condition, at the user's sole expense, flow monitoring, constituent monitoring and/or sampling facilities.
- B. Any sample taken from a sample box or other representative sampling location is considered to be representative of the discharge to CLMSD facilities.
- C. Monitoring or metering facilities may be required to include a security closure that can be locked to prevent unauthorized access.
- D. The location of the monitoring or metering facilities shall be subject to approval by the CLMSD.
- E. The user shall provide to the CLMSD immediate, clear, safe and uninterrupted access to the user's monitoring and metering facilities.

F. When required by the CLMSD, the user shall install a suitable control manhole in the side sewer to facilitate observation, sampling and measurement of wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the CLMSD. The manhole shall be installed by the user at the user's expense, and shall be maintained by the user at their expense, and shall be maintained as to be safe and accessible at all times. (Ord. 872 §4.2, 2008)

13.20.250 Drawing submittal requirements.

A. Detailed plans shall be submitted to the CLMSD for review of existing or proposed construction of pretreatment facilities, spill containment facilities, monitoring facilities, metering facilities, and operating procedures. CLMSD approval of plans for proposed construction shall be received prior to commencement of construction. The review of the plans and procedures shall in no way relieve the user of the responsibility of modifying the facilities or procedures in the future, as necessary, to meet the requirements of this chapter or any requirements of other regulatory agencies.

B. Three copies of all drawings shall be submitted for review.

C. All drawings shall include the following:

1. North arrow;
2. Scale size;
3. User name, project site, address, and assessor's parcel number;
4. Drawing name and drawing number;
5. Date drawn or revised;
6. Name of draftsman and name of person approving drawing.

D. The CLMSD may require drawings to scale depicting the manufacturing process (waste-generating sources), spill containment, pretreatment facilities, and/or monitoring/metering facilities.

E. The CLMSD may require a schematic drawing of the pretreatment facilities.

F. The CLMSD may require the drawings be prepared by a California registered chemical, mechanical, or civil engineer. (Ord. 872 §4.3, 2008)

13.20.260 Pollution prevention requirements.

User shall provide pollution prevention plans, and/or pollution prevention audits, and/or waste management plans, to identify and quantify waste streams, and identify and evaluate source reduction measures. Evaluation and implementation measures may include, but are not limited to, input changes, operational improvements, production process changes, product reformulation, product substitution, recycling, inventory control, employee education and training, and other steps as necessary to avoid or reduce waste produced. (Ord. 872 §4.4, 2008)

ARTICLE IV. ADMINISTRATION

13.20.270 Wastewater discharges.

It shall be unlawful to discharge any waste or wastewater to any CLMSD facility without a CLMSD permit except as is authorized by the provisions of this chapter. (Ord. 872 §5.1, 2008)

13.20.280 Responsibility of users.

It shall be the responsibility of the user to comply with all of the provisions of this chapter. The omission to act by the CLMSD and/or the failure of the CLMSD to acknowledge the nature of the operation of the user and/or the properties of the user's wastewater shall not relieve the user of responsibility to comply with the conditions of this chapter, including, but not limited to, such requirements regarding permitting, pretreatment, monitoring and reporting. It shall be the responsibility of the user to make determinations as to the nature of its operation and wastewater flow and to take such actions as may be required under this chapter prior to any discharge of wastewater, whether or not the user has been informed by the CLMSD of the requirements which may apply to the user regarding its discharge.

All users must notify the CLMSD of changes to be made to processes or methods of operation which may affect the nature of the discharge. This information shall be reported to, and be approved by, the CLMSD prior to the user's initiation of the changes.

All industrial users who meet the definition of Class I, Class II, or Class III and who are currently connected or contribute to CLMSD facilities, or who propose to connect or contribute to CLMSD facilities, shall make application for a wastewater discharge permit. This application shall be made before connecting to or contributing to CLMSD facilities, or within ninety days after the enactment of the ordinance codified in this chapter in the event the user is currently connected and not currently permitted. All existing industrial users connected to or contributing to CLMSD facilities and having a current wastewater discharge permit shall be required to obtain a new permit upon the expiration of their existing permit.

Class IV users may be required to receive a permit in order to connect to the CLMSD facilities or to continue to discharge to CLMSD facilities. At such time as the CLMSD undertakes such a program to permit Class IV users, existing Class IV users will be required to apply for a permit within ninety days of notice to said users by personal service, mail or publication. Thereafter it shall be the responsibility of all Class IV users to obtain a permit prior to connection. (Ord. 872 §5.2, 2008)

13.20.290 Classes of users.

The CLMSD will classify all users in accordance with the principal activity conducted on the premises where the discharge occurs. The purpose of the classification is to facilitate regulation of discharges to CLMSD facilities on the basis of each user's waste quality, quantity and flow. The classification will further provide a means of imposing an appropriate level of oversight, control and enforcement according to the source of the discharge. As set forth in Section 13.20.020, there are two categories of users: domestic users and nondomestic users. Nondomestic users are categorized as Class I, II, III, or IV.

All users are subject to the prohibitions set forth in this chapter, with such federal and state statutes and regulations as may apply, and the specific pollutant limitations as may be

promulgated by the CLMSD board either by ordinance or resolution.

Domestic users under normal circumstances will not be required to apply for or receive a wastewater discharge permit as defined in this chapter; provided, that said domestic user discharges only that wastewater which is consistent with the definition of domestic wastewater set forth herein.

Nondomestic users may be subject to wastewater discharge permit requirements depending on the volume, characteristics, and origin of their wastewater discharge. Industrial users may be required to supply such information and data concerning their processes, including discharge samples, as may be necessary for the CLMSD to determine whether such user should be designated as Class I, II, III or IV. Industrial users must, if requested, provide such other information regarding the nature of the entity, its operations, storage and use of chemicals and storage and use of hazardous substances as may be reasonably necessary to make such determination as to the classification of said user. The CLMSD may also require information relating to potential for accidental discharges of hazardous or prohibited substances to a CLMSD facility. Such inquiries may include information regarding the current disposal procedures of the user with regard to chemicals and/or substances which are not in the ordinary course of the user's operations discharge to a CLMSD facility.

A. Class I. For the purpose of this chapter, any user subject to the national categorical pretreatment standards is a categorical industrial user (CIU) and will be designated a Class I user.

B. Class II. The CLMSD may designate a nondomestic user who is not subject to a national categorical pretreatment standard, but may be considered a significant industrial user (SIU), to be a Class II user, based on whether the discharge of wastewater is equal to or greater than twenty-five thousand gallons per average work day flow, or whether it has in its untreated wastewater pollutants which are in excess of any pretreatment standard, including any standard identified in this chapter or local limit set by resolution of the CLMSD board, or whether it may, in the opinion of the CLMSD, have a significant impact, either singularly or in combination with other contributing industries, on the CLMSD's ability to meet the objectives of this chapter.

In addition, the designation of a nondomestic user as a Class II user may be based on the unusual character of the wastewater due to its volume, strength, composition, or its derivation from a hazardous waste or substance, or the potential variability in the character of the wastewater, or on the potential for increased administrative cost to the CLMSD due to the unusual character of the waste. Any additional administrative costs to be considered may include increased potential for the administrative oversight by federal, state and local agencies as well as the potential for increased liability exposure and associated legal costs. The CLMSD may also take into consideration difficulties in enforcement of this chapter under a wastewater discharge permit and the enforcement violation and compliance history of the user with the CLMSD, as well as other regulatory agencies.

C. Class III. The CLMSD may designate any nondomestic user who is not designated as a Class I or Class II user as a Class III user. Class III users may include nondomestic users who are not industrial nor commercial users and (1) have a reasonable potential to adversely affect the

CLMSD's ability to meet the objectives of this chapter; or (2) generate hazardous waste, whether or not said waste is discharged into the sanitary sewer system, or if, in the determination of the CLMSD, there is a potential for this waste to be discharged into the sewer, even through accident, in nonprocess or process of handling of the waste; or (3) store or use hazardous materials, whether or not a hazardous waste is produced in an industrial or commercial process, if, in the determination of the CLMSD, a potential exists for significant impact upon CLMSD facilities due to a release of these materials into the environment.

Class III users may be individually designated by the CLMSD based on the criteria set forth in this subsection, or on categorization of the user as a member of a particular business category. A Class III user designation may include, but is not limited to, landfill operations, landfill leachate, or ground water cleanup sites.

D. Class IV. Any nondomestic user who is not designated as a Class I, Class II, or Class III user may be designated as a Class IV user if the user (1) has a reasonable potential to adversely affect the CLMSD's ability to meet the objectives of this chapter; or (2) generates hazardous waste, whether or not said waste is, in the normal course of the industrial or commercial process, discharged into the sanitary sewer system, or if, in the determination of the CLMSD, there is a potential for this waste to be discharged into the sewer, even through accident, in nonprocess or process of handling of the waste; or (3) stores or uses hazardous materials, whether or not a hazardous waste is produced in the industrial or commercial process, if, in the determination of the CLMSD, a potential exists for significant impact upon CLMSD facilities due to a release of these materials into the environment.

Class IV users may be individually designated by the CLMSD based on the criteria set forth in this subsection or on categorization of the user as a member of a particular business category. The Class IV user designation shall include, but is not limited to, the following business categories: analytical laboratories, clinical laboratories, dry cleaners, laundries, vehicle maintenance facilities, vehicle repair facilities, gasoline stations, printing shops, printing allied industries, photo processors, pesticide formulators, pesticide applicators, dental offices, dental laboratories and x-ray laboratories, and veterinary providers. (Ord. 872 §5.3, 2008)

13.20.300 Wastewater discharge permit.

A. Permit Application. All Class I, Class II, and Class III users are required to obtain a wastewater discharge permit by completing and filing with the CLMSD an application in the form prescribed by the CLMSD. At such time as the CLMSD undertakes such a program to permit Class IV users, existing Class IV users will be required to apply for a permit within ninety days of notice to said users by personal service, mail or publication. Thereafter it shall be the responsibility of all Class IV users to obtain a permit prior to connection. A permit fee may be assessed at the time of the application as set by the CLMSD board by resolution. Existing Class I, Class II, and Class III users shall apply for a wastewater discharge permit within ninety days following the effective date of the ordinance codified in this chapter, and proposed new users shall apply at least thirty days prior to connecting to or contributing to CLMSD facilities. In support of the application, the user may be required to submit, in units and terms appropriate for evaluation, some or all of the following information:

1. Name and address of the operator or owner and location of the facility for which the permit application is being made.
2. SIC number(s) according to the Standard Industrial Classification Manual, Executive Office of the President of the United States, Office of the Budget, 1972, as amended, for all operations conducted at the facility.
3. A list of all environmental control permits and hazardous substance release response (spill) plans that are held by or for the facility.
4. Time(s) and duration of all process discharges.
5. Average daily and fifteen-minute peak wastewater flow rates, including daily, monthly and seasonal variations if any. Flow rates shall be provided for each regulated process stream.
6. Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, and appurtenances by the size, location and elevation.
7. Description of activities, facilities and plant processes on the premises including all materials which are or could be discharged. A description of any and all existing or proposed wastewater pretreatment facilities. Construction drawings and design criteria shall also be submitted.
8. The nature and concentration of any pollutants in the discharge which are limited by the CLMSD, state, or national pretreatment standards, or which are otherwise requested by the CLMSD. Pollutant data shall be provided for each regulated process stream. In the case of an existing user, a statement regarding whether or not the pretreatment standards are being met on a consistent basis and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required for the user to meet applicable pretreatment standards.
9. The nature and concentration of any pollutants in the discharge which are limited by state or federal standards concerning the release or discharge of any hazardous substance or waste.
10. If additional pretreatment, housekeeping, process changes and/or operations will be required to meet the pretreatment standards; the shortest schedule by which the user shall provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established by the EPA, the state or the CLMSD for the applicable standard. The following conditions will apply to this schedule:
 - a. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable standards (e.g., hiring an engineer, completing preliminary plans, completing final plans,

executing contract for major components, commencing construction, completing construction, etc.).

b. Not later than fourteen days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the CLMSD director including, as a minimum, whether or not the user complied with the increment of progress to be met on such date and, if not, the date on which the user expects to comply with the increment of progress, the reason for delay, and the steps being taken by the user to return the construction to the schedule established.

11. Each product produced by type, amount, process or processes and rate of production.
12. Type and amount of raw materials processed (average and maximum per day).
13. Number, type and volume/amount of hazardous substances stored on the premises and a description of the method of storage and/or the containment device for such substance.
14. A description of the spill protection and emergency response procedures used or proposed to be used at the facility.
15. Waste minimization plans or audits.
16. Number and classification of employees, and hours of operation of plant and proposed or actual hours of operation of pretreatment system.
17. A certification statement that the information presented in the permit application is true and accurate to the best of the responsible person's knowledge.
18. Any other information as may be deemed by the CLMSD to be necessary to evaluate the permit application.

B. Permit Application Evaluation. All new prospective industrial users shall arrange for a CLMSD representative to conduct a walk-through site inspection of the user's facilities during the ninety-day period prior to connecting to CLMSD facilities. New industrial users shall submit to the CLMSD, within ninety days after commencement of discharge to CLMSD facilities, an analysis of said discharge delineating wastewater constituents and characteristics including, but not limited to, those mentioned in Article II of this chapter.

The CLMSD will evaluate the data furnished by the user and may require additional information. After evaluation and acceptance of the data furnished, the CLMSD may determine that no wastewater discharge permit is required, or the CLMSD may determine that the user is either a Class I, Class II, Class III or Class IV user.

If the CLMSD determines that the user is a Class I, Class II or Class III user, the CLMSD will issue a wastewater discharge permit subject to the terms and conditions provided in this chapter. If the CLMSD determines that the user is a Class IV user, the CLMSD may issue a wastewater discharge permit subject to the terms and conditions provided in this chapter.

C. Permit Conditions. Permits may contain provisions, requirements and standards appropriate to carry out the objectives of this chapter, including but not limited to the following:

1. The unit charge or schedule of user charges and fees for the wastewater to be discharged to CLMSD facilities.
2. Limits on the average and maximum wastewater constituents and characteristics. These limits may be based on pollutant concentration and/or mass and may include prohibitions on discharge of said pollutants.
3. Limits on average and maximum rate and time of discharge or requirements for flow regulation and/or equalization.
4. Requirements for installation and maintenance of sampling and flow metering facilities.
5. Requirements for monitoring programs which may include flow metering; sampling locations; methods of sampling; frequency of sampling; number; types and standards for tests; and reporting schedule.
6. Compliance schedules.
7. Requirements for submission of technical reports or periodic compliance reports.
8. Requirements for maintaining and retaining, for a minimum of three years, plant records relating to wastewater discharge, hazardous waste manifests and chemical inventories as specified by the CLMSD.
9. Requirements for notification of the CLMSD of any new introduction of pollutants or any change in plant processes or in the volume or character of the wastewater constituents being introduced into CLMSD facilities.
10. Requirements for notification of slug or accidental discharges, including discharge limit violations, or upset of the pretreatment facility.
11. Requirements for providing the CLMSD with design and construction plans and specifications of the wastewater pretreatment facility whether proposed or in existence.
12. Requirements for providing the CLMSD with plans and specifications of the user's industrial or commercial operation and/or processes, including such other information as the CLMSD may reasonably request that pertains to the industrial user's operation.
13. Requirements for providing the CLMSD with waste minimization audits/plans.
14. Requirements for notification of any planned alteration of the proposed or existing wastewater pretreatment system.
15. Requirements for the notification of the CLMSD of planned alterations of the operations processes of the industrial user which could result in an alteration of the user's process discharge or the potential for an accidental spill or slug discharge.

16. Requirements prohibiting bypass of the wastewater pretreatment facility, unless bypass is essential for maintenance, or unavoidable to prevent loss of life, injury or severe property damage.
 17. Requirement that the user notifies the CLMSD prior to any proposed bypass other than due to accident or emergency.
 18. Requirements to have emergency spill plans on file with the CLMSD.
 19. Requirements to certify that the industrial user has not discharged through a CLMSD facility hazardous substances without a permit, which substances have been stored or used in the user's process and which the user contends will not, in the ordinary course of the user's operation, enter the sewer system.
 20. Requirements for resampling following a discharge violation and the submittal of reports explaining the cause of the violation and the steps that have been or shall be taken to prevent a recurrence of the violation.
 21. Requirements for providing access to CLMSD personnel at all reasonable times to conduct sampling and/or inspection of any and all processes which can contribute to waste stream, including the actual wastewater discharge.
 22. Requirements for providing the CLMSD with operation and maintenance records for the wastewater pretreatment facility, including periodic updates, as appropriate.
 23. The prohibition of dilution as partial or complete substitute for adequate treatment to achieve compliance with permit conditions.
 24. Signatory requirements specifying the responsible corporate officer for the industrial user.
 25. Other conditions as deemed appropriate by the CLMSD to ensure compliance with this chapter.
 26. Technical provisions or requirements related to the wastewater pretreatment facility which, in the opinion of the CLMSD, may be necessary to ensure the adequacy and reliability of the wastewater pretreatment system. These technical conditions may include conditions requiring continuous monitoring, training personnel, alarm systems, automated shutoff, flow-through monitoring, and/or provisions for discharges in batch amounts only subsequent to sample testing.
- D. Duration of Permits. Permits will be issued for a specified time period, not to exceed three years. A permit may be issued for a period less than a year or may be stated to expire on a specific date. The user shall apply for permit reissuance a minimum of ninety days prior to the expiration of the user's existing permit. The terms and conditions of the permit may be subject to modification by the CLMSD during the term of the permit as limitations or requirements as identified in Article II are modified or other just cause exists. The user will be informed of any

proposed changes in his permit at least thirty days prior to the effective date of change. Any changes or new conditions in the permit will include a reasonable time schedule for compliance.

E. Wastewater Discharge Permit. The CLMSD will require Class I, Class II, and Class III users to have a wastewater discharge permit for connecting to or contributing wastewater to CLMSD facilities. At such time as the CLMSD undertakes such a program to permit Class IV users, existing Class IV users will be required to apply for a permit within ninety days of notice to said users by personal service, mail or publication. Thereafter it shall be the responsibility of all Class IV users to obtain a permit prior to connection. The wastewater discharge permit will incorporate the provisions of this chapter by reference including all requirements and standards as may be set forth herein or promulgated by the CLMSD board by resolution. In addition, the permit may contain additional provisions, including but not limited to the following:

1. Provisions for liquidated damages for discharges in violation of the discharge prohibitions and limitations of this chapter and/or of such special prohibitions or limitations as may be set forth in the permit. These liquidated damages provisions may be proposed without regard to proof of pass-through, damage to the environment, or interference with CLMSD facilities or operations and may be assessed on a strict liability basis for violation of the noted provisions.
2. Requirements for providing proof of insurance, indemnification of the CLMSD, and bonding in order to adequately protect the CLMSD, in its judgment, from the potential of the increased exposure to liability due to the user's discharge.
3. Provisions for revocation of the permit and wastewater sewer service for violation of this chapter or other wastewater permit condition(s).
4. Any and all other conditions as may be deemed appropriate by the CLMSD to ensure compliance with all provisions of this chapter and the objectives set forth herein.

F. Permit Modifications. Within ninety days of promulgation of a national pretreatment standard, the wastewater discharge permit of users subject to such standards shall be revised to require compliance with such standards within the time frame prescribed by such standard. When a user, subject to a national pretreatment standard, has not previously submitted an application for a wastewater discharge permit as required by subsection B of this section, the user shall apply for a wastewater discharge permit within one hundred eighty days after the promulgation of the applicable national pretreatment standard. In addition, the user with an existing wastewater discharge permit shall submit to the CLMSD director, within one hundred eighty days after the promulgation of an applicable national pretreatment standard, the information required by subsection A of this section.

In the event the CLMSD determines that it is necessary in order to comply with the objectives of this chapter to impose more stringent limitations or requirements on discharges to the CLMSD facilities than are set forth in an existing permit (for reasons other than issuance of a new national pretreatment standard), the CLMSD shall have the right to require such reasonable modifications of an existing permit to incorporate such more stringent limitations or requirements. In the event

such permit modification is required, the user will be provided with reasonable time to make such modifications to its processes or procedures as may be required to meet the more stringent limitations and requirements. After consultations with the user, a compliance schedule agreement will be issued which would set forth a reasonable schedule for the user to comply with the more stringent standards. If the permit modification will require construction or acquisition of equipment related to pretreatment, the compliance schedule agreement will provide for up to one hundred eighty days to comply; however, this period may be extended for a period not to exceed an additional one hundred eighty days upon determination by the CLMSD director or CLMSD engineer that good cause exists for an additional period. To the extent that the user remains in compliance with the permit conditions in effect prior to amendment during the compliance period, the user shall not be liable pursuant to the terms of this chapter for noncompliance with the more stringent standards or requirements during the period of the compliance schedule agreement; provided, that the user is also complying with the terms of said compliance schedule agreement.

G. Permit Transfer. Wastewater discharge permits are issued to a specific user for a specific operation. A wastewater discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without the prior approval of the CLMSD. However, nothing in this section shall be construed to prevent the application of the terms and conditions of this chapter, including enforcement penalties, from applying to a succeeding owner, successor in interest, or other assigns of an existing contract of permit holder. (Ord. 872 §5.4, 2008)

13.20.310 Reporting requirements.

A. Notification of Slug Discharge or Accidental Discharge or Accidental Spill. It is the responsibility of all users to immediately telephone and notify the CLMSD of any slug discharge or accidental discharge or accidental spill as defined in Section 13.20.160. Notification shall include location of discharge, type of waste, concentration and volume and corrective actions.

1. Written Notice. Within five days following the accidental discharge, accidental spill, or slug discharge, the user shall submit to the CLMSD director a detailed written report describing the cause of the incident and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to CLMSD facilities, fish kills, or any other damage to person or property; nor shall notification relieve the user of any fines, penalties, or other liability which may be imposed by this chapter or other applicable law.

2. Notice to Employees. Users who are employers shall permanently post a notice on their bulletin board or other prominent place advising employees of the user whom to call in the event of such a discharge. The user shall ensure that all employees who may cause or suffer such discharge to occur are advised of the emergency notification procedure.

B. Baseline Monitoring Report. All industrial users, subject to categorical pretreatment standards, shall submit to the CLMSD a baseline monitoring report (BMR) within one hundred and eighty days of the effective date of a categorical pretreatment standard or one hundred and eighty days after final decision on a category determination by EPA or the state, whichever is

earlier. The BMR shall contain the information specified in 40 CFR 403.12(b), including a statement reviewed by an authorized representative of the industrial user and certified by a qualified professional indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance and/or additional pretreatment is required for the user to meet the pretreatment standards and requirements. The information required for application for a permit under Section 13.20.300(A) and/or for modification of a permit under Section 13.20.300(F) may fulfill the requirements of the baseline monitoring report. If in submitting information to apply for or modify a permit, the user also intends to fulfill the requirements for the BMR, the user shall so state.

C. Compliance Report. Within ninety days following the date for final compliance with applicable pretreatment standards and requirements or, in the case of a new user connection, following commencement of the introduction of wastewater into CLMSD facilities, any user subject to pretreatment standards and requirements shall submit to the CLMSD, per 40 CFR 403.12(b), a report which includes the following information:

1. Name and address of facility, including the name of the operator and owners.
2. List of any environmental permits held by and for the facility.
3. Description of operations, including:
 - a. Nature of operations;
 - b. Average rate of production;
 - c. SIC code;
 - d. Diagram of discharge points to the sanitary system.
4. Flow measurement, in gallons per day.
5. Measurement of pollutants.
6. Certification statement signed by an authorized representative of the industrial user.
7. Compliance schedule, if additional pretreatment and/or actions will be required to meet pretreatment standards.

Filing of this compliance report does not relieve the user of any fines, civil penalties or other liability which may be imposed by this chapter or other applicable law or failure to meet the applicable pretreatment standards and requirements subsequent to the date for final compliance with such applicable standard.

D. Compliance Schedule Reports. Compliance schedule reports must include the following per 40 CFR 403.12(c):

1. A schedule containing increments of progress leading to construction and operation of additional pretreatment required for compliance of categorical standards.

2. Increments of progress shall not be greater than nine months.
3. Progress report shall be submitted to the CLMSD not later than fourteen days following the end date in the schedule, whether or not it complied with the increments of progress set forth in the schedule.

E. Periodic Compliance Reports.

1. Class I and II users and SIUs shall submit a report to the CLMSD twice a year or more frequently as specified in the permit. Unless otherwise specified in the permit, reports for Class I and II users and SIUs are due on the 30th of January and December of each year. Class III users may be required to submit periodic compliance reports depending on the nature of their discharge. Periodic compliance reports shall be submitted within forty-five days of collection of the wastewater samples. The compliance report shall contain such information as may be deemed by the CLMSD to be necessary to ensure compliance with the provisions of this chapter. Compliance reports shall, at a minimum, contain the following:

- a. The results of sampling and analysis showing the nature and concentration of pollutants which are limited by pretreatment standards or which are specified in the permit for each regulated stream.
 - b. A record of average and maximum daily flows for the reporting period for each regulated stream.
 - c. Such other wastewater effluent data as the user has obtained since the last compliance report, whether or not that data is specifically required by the user's permit.
 - d. Methods utilized by the user in collecting the wastewater sample for analysis, including but not limited to the sampling device(s) used, the sampling period, the amount of each sample collected, sample handling and preservation techniques used, and date of sample delivery to the laboratory for analysis.
 - e. For those CIUs subject to production-based pretreatment standards, the user's actual average production rate for the reporting period.
2. Resampling Requirement. In the event a sample from a periodic compliance report indicates that a constituent is in violation of the allowable concentration levels as set forth in the user's permit, the user shall inform the CLMSD within twenty-four hours of becoming aware of the violation, repeat the sampling and pollutant analysis for the parameter in violation, and submit in writing the results of this second analysis within thirty days of the discovery of the first violation. The initial sampling and analysis report shall be submitted within five days of discovering the violation, with a cover report setting forth the causes of the violation, the remedial actions taken to date in regard to the violation, and the scheduled additional actions which will be implemented to prevent a recurrence.
3. The CLMSD may also at any time require a signed statement by the user setting forth management practices and/or material usage practices which have an effect on the nature,

volume and quality of the wastewater discharge and/or which potentially will affect the ability to comply with pretreatment standards and requirements.

4. The CLMSD may impose mass limitations on users where the imposition of mass limitations is appropriate. In such cases, the report required under subsection (E)(1)(a) of this section shall indicate the mass of pollutants regulated by pretreatment standards in the effluent of the user. These reports shall contain the results of all sampling and analysis of the discharge, including the flow, concentration and mass of pollutants regulated by the applicable pretreatment standard. The user shall provide the actual average production rate of the regulated processes during the reporting period. (Ord. 872 §5.5, 2008)

13.20.320 Monitoring.

A. Monitoring Requirements. Any user may be required to provide wastewater samples and/or monitoring results or to submit to monitoring by the CLMSD in order to assist the CLMSD in establishing the appropriate class of the user and/or to evaluate compliance with the standards and requirements of this chapter.

1. Classification Sampling. All industrial users may be required to sample and analyze their discharge to determine the appropriate class of the user. Classification sampling shall be at the CLMSD's request. The number and type of samples and pollutants analyzed shall be as specified by the CLMSD in order to adequately characterize the user's discharge(s).

2. Baseline Sampling. All Class I, Class II and Class III users shall sample and analyze their discharge as part of a permit application or modification of a permit as specified in Sections 13.20.300(A) and (F). In addition, all users subject to categorical pretreatment standards who are required to submit baseline monitoring reports, as specified in Section 13.20.310(B), shall sample and analyze their discharge in accordance with the requirements of 40 CFR 403.12(b). Samples shall be analyzed for constituents or characteristics including, but not limited to, those mentioned in Article II of this chapter and/or in applicable state or national pretreatment standards or as otherwise required by the CLMSD.

3. Initial Compliance Sampling. All Class I, Class II and Class III users shall sample and analyze their discharge for the compliance report as specified in Section 13.20.310(C). Samples shall be analyzed for those pollutants regulated in the applicable pretreatment standard or as otherwise required by the CLMSD.

4. Periodic Compliance Sampling. All Class I, Class II and Class III users shall sample and analyze their discharge to evaluate compliance with the user's permit. Periodic compliance sampling shall be conducted at least twice each year unless specified more frequently in the user's permit or in the applicable national pretreatment standard. Samples shall be analyzed for those pollutants regulated in the applicable pretreatment standard or as otherwise required by the CLMSD.

5. Confirmation Sampling. Whenever sampling results indicate that the user's discharge is in violation of any pretreatment standard, the user shall collect a second sample to assess the degree of violation. For the second sample, the user need only analyze for the

pollutant(s) found to be in violation. The user shall provide the CLMSD with the results from the confirmation sampling within thirty days of the date the violation was discovered.

6. Sampling and Evaluation Program (SEP). If confirmation sampling indicates a second violation, then the CLMSD may initiate a SEP. The SEP will be conducted by the CLMSD and may include collection of from three to five samples. The SEP will establish whether there is continued noncompliance by the user. Samples collected during the SEP may be analyzed for other pollutants in addition to the pollutant(s) in violation.

7. Other Compliance Sampling. All Class I, Class II and Class III industrial users may be required by the CLMSD to conduct compliance sampling in addition to those described above. This could include, but is not limited to, sampling required by the CLMSD in an enforcement compliance schedule agreement.

8. CLMSD Sampling. The CLMSD may collect and analyze samples on its own or request the user to split samples to evaluate compliance with this chapter or the user's permit. The CLMSD also reserves the right to conduct all sampling and analysis for the user with all costs to be paid by the user. In the event that data obtained by the CLMSD differs from data provided by the user, the CLMSD data shall be presumed accurate unless and until the user provides substantial evidence otherwise. In the event that the CLMSD performs the sampling, whether announced or unannounced, the user may request that the CLMSD split its samples and provide one of the split samples for the user's independent analysis.

B. Sampling Procedures. All sampling and testing undertaken for the purpose of compliance with the requirements of this chapter shall be undertaken in the manner set forth herein. Except as otherwise provided in this section, each sample shall be a composite, discrete sample which reflects the discharge of the user's regulated waste stream(s) throughout the entire work day or twenty-four-hour period. Samples for pH, cyanide, sulfide, phenols, oil and grease, and volatile organics shall be grab samples. Minimum frequency for composite samples shall be each hour, and for grab samples at least every four hours. Each regulated waste stream shall be sampled and analyzed separately unless the user's permit allows for sampling and analyzing the combined waste streams.

The methods of obtaining the sample shall be specified by the CLMSD in the user's permit. As an alternative, a sampling program proposed by the user shall be submitted to the CLMSD for review prior to initiating said program. The CLMSD may state special sampling requirements as needed to ensure compliance with this chapter.

C. Sampling and Analytical Procedures. All samples shall be collected, preserved, and analyzed in accordance with the procedures presented in 40 CFR 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants). Unless approved otherwise by the CLMSD, all analyses shall be performed by laboratories certified by the state for the specific pollutants and matrix to be analyzed.

D. Sampling Records. For each sampling event, the user shall record and maintain the following information:

1. The date, exact place, method, and time of sampling and the names of the person or persons taking the samples.
2. Sample preservation used.
3. The dates analyses were performed.
4. Chain of custody of sample.
5. Who performed the analyses.
6. The analytical techniques/methods used.
7. The results of such analyses.

E. **Monitoring Facilities.** The CLMSD may require monitoring facilities, to be provided and operated at the user's own expense, to allow inspection, sampling, and flow measurement of regulated discharge. The monitoring facility shall be accessible to CLMSD staff at all times and should normally be situated on the user's premises, but the CLMSD may, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.

There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling, and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user.

Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the CLMSD requirements and all applicable local construction standards and specifications.

F. **Obtaining a Sewer Lateral Certificate of Compliance for the Privately Owned Portion of a Sewer Lateral/Building Sewer.** Setting forth the minimum standards to which private sewer laterals will be repaired, replaced, or relined for the purpose of obtaining a sewer lateral certificate of compliance. The CLMSD requires the cleaning, inspection, and testing of private sewer laterals connected to public sewers and serving residential, multifamily residential, commercial or industrial use properties upon the occurrence of stipulated property events. The CLMSD assumes that all sewer laterals, not meeting the requirements set forth in this section and not subject to the exemptions provided herein, allow inflow and infiltration into CLMSD facilities.

1. In the CLMSD, the exempted transactions or events requiring the cleaning, inspection and testing of a private sewer lateral are:
 - a. The application for a new connection to the sewer collection system;
 - b. The application for a building permit for a remodel of any structure being served by the private sewer lateral where the cost of the cumulative value of applicable

- improvements over the past five years exceeds forty-five thousand dollars in 2007 dollars and adjusted every year for inflation;
- c. The application for a building or plumbing permit to install additional toilet facilities on the property served;
 - d. The application for a change of use on property served from residential to commercial or from non-restaurant commercial to restaurant commercial;
 - e. Any repair or replacement of the main sewer to which the private sewer lateral is connected;
 - f. A determination by the director that the cleaning, inspection, and testing is required for the protection of the public health, safety, and welfare; or
 - g. The user chooses to close and stop payment for an existing sewer account without the transfer of such account to another user.
2. The property owner is responsible for the repair or replacement of a privately owned sewer lateral which has been found through testing and inspection to exhibit conditions which would permit excessive infiltration to enter the sewer collection system or excessive exfiltration. The "privately owned sewer" is defined as that part of the sewer lateral that is required to be maintained by the property owner in accordance with ordinances adopted by the CLMSD and described in Section 13.20.020 under "building sewer/private sewer lateral." Upon completion of the repair or replacement of the private sewer lateral, re-inspections are to be conducted until the private sewer lateral passes the required testing. "Excessive infiltration or exfiltration" is defined as exceeding the allowable amount as specified herein. Once the private sewer lateral has successfully passed the inspection and testing procedure, the director shall execute a sewer lateral certificate of compliance which shall be filed with the director and the building department having jurisdiction and recorded with the county recorder of Lake County.
3. There are two categories of sewer lateral certification of compliance for the continued service of a lateral based upon materials and performance:
- a. A ten-year certificate for existing laterals that do not conform to the current material standards for new laterals as established in the California Plumbing Code adopted by the CLMSD and do not exfiltrate at a rate greater than that established in the exfiltration pressure test for existing laterals (refer to the provisions specified in specified pressure tests of these standards).
 - b. A twenty-five-year certificate for existing, existing repaired or existing replaced private sewer laterals that meet the current material and testing standards for new laterals as established in the California Plumbing Code adopted by the CLMSD. For a twenty-five-year certificate, the private sewer lateral must be watertight. An alternative testing and inspection procedure for a ten-year certificate consisting only of a CCTV

inspection of the private sewer lateral is applicable when the potential for hydrostatic conditions around the private sewer lateral does not exist.

4. Currently, all property served by the CLMSD is within the zone designated as having the potential for hydrostatic pressures. In the CLMSD there are four exemptions to the cleaning, inspection, and testing requirements set forth in this chapter other than certain transfers of interest in real property and they are:

a. Private sewer laterals that have been inspected within the last twenty-five years where the lateral is made of PVC, metal, or other modern material meeting the California Plumbing Code;

b. Private sewer laterals that have been inspected within the last ten years where the lateral is not made of PVC, metal, or other modern material meeting the California Plumbing Code;

c. Private sewer laterals that were last installed or replaced within the last twenty-five years where the lateral is made of PVC, metal, or other modern material meeting the California Plumbing Code; and

d. Any building where the director determines that testing and/or repairs have been made in accordance with this chapter within the last five years.

5. Certificates of compliance will be issued indicating that the private sewer lateral is exempt from the inspection and testing provisions of this chapter if the private sewer lateral meets the exemptions stated above. However, the certificate of compliance for an exemption expires upon the occurrence of an event requiring the inspection or testing or upon the occurrence of another exempted event.

G. Approved Repair Methods and Materials for Privately Owned Sewer Laterals.

1. Materials used in the repair or replacement of existing private sewer laterals which have failed to pass an inspection and/or test shall be made of pipe materials, fittings, couplings, and other joining materials which have been approved for use pursuant to the current edition of the California Plumbing Code at the time of the inspection and/or testing, and as modified and specified in these standards.

2. Private sewer laterals constructed of an approved pipe material which have cracked pipe sections where the pipe has retained its original shape and does not show excessive deflection and is not subjected to hydrostatic pressures either outside or inside the pipe may be repaired with an approved cured-in-place spot repair lining.

3. Private sewer laterals which are subjected to hydrostatic water conditions either inside or outside the pipe and which have not passed a required pressure test may be repaired with an approved cured-in-place pipe lining system installed within the entire length of the sewer lateral from the wye in the sewer main to the private sewer lateral cleanout closest to the building footing or replaced in its entirety with approved pipe materials. At the conclusion of

the repair, replacement, or relining the complete sewer lateral must pass specified pressure tests.

4. The replacement of damaged pipe sections with approved materials, fittings, and couplings is only acceptable where the private sewer lateral is not subjected to hydrostatic pressures either inside or outside of the pipe unless the complete private sewer lateral can pass the required pressure test after the repairs are complete.
5. Whenever fifty percent or less of the private sewer lateral is repaired, replaced, or relined (minor or no repair), cleanouts shall be provided to grade to facilitate the inspection and testing at either the junction of the building drain and the private sewer lateral at a point approved by the permitting agency, typically within two feet of the structure being served by the lateral, or at or near the property line at a point and in a manner approved by the city of Lakeport community development department if in the public right-of-way, or at a point and in a manner approved by the permitting agency if not in the public right-of-way and on private property. For that portion of the private sewer lateral being repaired, replaced, or relined, cleanouts shall also be provided to grade at intervals not to exceed one hundred feet in run of a cleaning snake to reach the adjacent run of a cleaning snake, and for each aggregate horizontal change in direction exceeding one hundred thirty-five degrees in accordance with the California Plumbing Code.
6. Whenever a private sewer lateral is more than fifty percent replaced or relined (major repair or replacement), cleanouts shall be provided to grade in accordance with the California Plumbing Code which include all of the following locations:
 - a. At the junction of the building drain and the private sewer lateral at a point approved by the permitting agency, typically within two feet of the structure being served by the lateral.
 - b. At intervals not to exceed one hundred feet in run of a cleaning snake to reach the adjacent run of a cleaning snake, and for each aggregate horizontal change in direction exceeding one hundred thirty-five degrees.
 - c. At or near the property line at a point and in a manner approved by the city of Lakeport community development department if in the public way, or at a point and in a manner approved by the permitting agency if not in the public way and on private property.
7. Approved trenchless technologies such as pipe bursting may be utilized to replace private sewer laterals.
8. Spot repairs consisting of the placement of metal or other sheeting materials and concrete or mortar will not be accepted.
9. Remortaring of joints as a repair method is not acceptable without prior approval of the permitting agency.

10. Pipe and pipe couplings shall be joined and installed in accordance with the manufacturer's recommendations. Pipe repairs shall be made in a manner which provides the least number of pipe joints.

11. Damaged wyes at the sewer main shall be replaced by the CLMSD.

H. Backfilling Methods in the Public Right-of-Way for Privately Owned Sewer Laterals. Backfilling methods utilized in the public right-of-way shall conform to the standards and specifications adopted by the agency having jurisdiction of the public right-of-way and in accordance with the provisions of the encroachment permit issued by the permitting agency.

I. Types of Pipe Damage That Must Be Repaired or Pipe Sections Replaced for Privately Owned Sewer Laterals.

1. Where the private sewer lateral is not subjected to hydrostatic conditions and the exfiltration test is not required (allowed CCTV inspection), the pipe repairs must be made for the following pipe conditions:

- a. A separation or offset in the pipe joint, including any fish mouth condition at the joint.
- b. Holes or cracks in the pipe bell, barrel, or coupling.
- c. For PVC pipe, a deflection in the pipe cross-section exceeding one-fourth inch.
- d. Failed trench section causing excessive belly or sump condition in a pipe section causing retention of water of one inch or more.
- e. Root penetration into the pipe.

2. Where the private sewer lateral is subjected to hydrostatic conditions and the pipe repair option selected is pipe lining, repairs shall be made to the private sewer lateral prior to the installation of the liner and the repair shall correct the following deficiencies:

- a. A separation or offset in the pipe joint including any fish mouth condition at the joint which the lining system cannot bridge based on the liner manufacturer's recommendations.
- b. Holes in the pipe bell, barrel, or coupling that the lining system cannot bridge.
- c. For PVC pipe, a deflection in the pipe cross-section exceeding one-fourth inch.
- d. Failed trench section causing excessive belly or sump condition in a pipe section causing retention of water of one inch or more.
- e. Root penetration into the pipe.
- f. Other lateral defects which the manufacturer of the lining system recommends be corrected prior to the placement of the liner.

J. Hydrostatic Pressure Conditions Defined for Privately Owned Sewer Laterals.

1. Hydrostatic pressures exist around the private sewer lateral when the lateral is completely or partially submerged by ground water or exists within the lateral when discharges to the lateral exceed the capacity of the pipe or are subject to water head.
2. The following circumstances shall be prima facie evidence that the private sewer lateral is subject to hydrostatic pressures:
 - a. The property being served by the CLMSD is located within a special flood hazard area as defined by the latest flood insurance rate map issued by the National Flood Insurance Program; and if any portion of the property is located within one hundred feet of the bank of a stream, creek or drainage ditch and any portion of the lateral is below the elevation of the nearest bank.
 - b. For commercial or industrial uses, at any time the discharge to the private sewer lateral exceeds the following flows for a three-inch-diameter sewer pipe at the indicated slopes or if there exists on the property a plumbing fixture that has the indicated capacity:
 - i. Fifty gallons per minute with slope of one-eighth inch per foot;
 - ii. Thirty-five gallons per minute with slope of one-eighth inch per foot.
 - c. For commercial or industrial uses, at any time the discharge to the private sewer lateral exceeds the following flows for a four-inch-diameter sewer pipe at the indicated slopes or if there exists on the property a plumbing fixture that has the indicated capacity:
 - i. One hundred gallons per minute with slope of one-eighth inch per foot;
 - ii. Seventy-five gallons per minute with slope of one-eighth inch per foot.
 - d. For commercial or industrial uses, at any time the discharge to the private sewer lateral exceeds the following flows for a six-inch-diameter sewer pipe at the indicated slopes or if there exists on the property a plumbing fixture that has the indicated capacity:
 - i. Three hundred ten gallons per minute with slope of one-eighth inch per foot;
 - ii. Two hundred fifteen gallons per minute with slope of one-eighth inch per foot.
 - e. Verification from a closed circuit television inspection that clear water is being discharged into the sewer main from the private sewer lateral.
 - f. Evidence that a basement sump pump is utilized on the property being served.
3. All pressure laterals shall be pressure tested at one and one-half times the operating pressure and no more than a one percent pressure loss shall be detected within a ten-minute test.

K. Specified Pressure Tests for Privately Owned Sewer Laterals. When hydrostatic pressure conditions can exist outside or inside of the private sewer lateral at any time, the private sewer lateral shall be pressure tested by the exfiltration method by plugging the end of the private sewer lateral at its point of connection to the public sewer and completely filling the private sewer lateral with water from the lowest to the highest point thereof. To perform a pressure test, the private sewer lateral must have a cleanout located near the building footing which is served by the private sewer lateral or at the property line. If the cleanout does not exist, one must be installed by a qualified owner/builder or by a licensed contractor under a plumbing permit issued by the agency having jurisdiction over the property as part of the test procedure. The contractor or qualified owner may perform preliminary pressure tests prior to completing the backfill operations; however, the final pressure test shall be performed after the completion of the backfill operations. A video inspection of the downstream side of the test plug must be performed during the exfiltration pressure test to confirm that the test plug has sealed.

1. The exfiltration pressure test for a gravity private sewer lateral shall be performed with potable or recycled water by filling the private sewer lateral to a level three inches below the lowest floor drain or fixture connection to the building drain system up to a maximum water column of thirty-three feet above the test plug in the lateral at the lateral wye fitting below the property line cleanout. If necessary, a stand pipe shall be fitted to the top of the cleanout to achieve the required testing water level. The testing water level shall also be at least higher than the elevation of the back edge of the public sidewalk at the point above the approximate location of the private sewer lateral, or the top of curb if there is no public sidewalk or the edge of pavement if there is no curb or public sidewalk. An approved backwater valve and cleanout shall be installed at the property line if there is any gravity-drained plumbing fixture in the structure being served that is below the elevation of the back edge of the public sidewalk at the point above the approximate location of the sewer lateral, or the top of curb if there is no public sidewalk or the edge of pavement if there is no curb or public sidewalk. A lateral may be tested in segments subject to the approval of the inspector. When segmental pipe testing is performed, each tested pipe segment must not exceed the allowed leakage rate.

2. The private sewer lateral will have passed the pressure test if the testing water level within the testing standpipe does not drop more than the indicated rate for the given diameter of testing standpipe indicated below. The allowed leakage per sewer lateral is 212.5 gallons per day or 8.85 gallons per hour or .15 gallons per minute or 34.08 cubic inches per minute.

- a. Three-inch diameter: five inches per minute;
- b. Four-inch diameter: two and one-half inches per minute;
- c. Six-inch diameter: one and one-half inches per minute.

L. The Metering of Pumps. All users operating pumps that convey any discharge to the CLMSD shall meter such pumps. All pumps and meters shall be maintained at all times in a safe and proper operating condition at the expense of the user and be located as to allow safe and

continuous access at all times. Such meters may be read by CLMSD representatives. (Ord. 872 §5.6, 2008)

13.20.330 Signatory requirements.

All applications, reports or other information submitted to the CLMSD must contain the following certification statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and in accordance with the system designed to insure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

This statement shall be signed by an authorized representative of the user as defined in 40 CFR 403.12(l)(1-4). BMRs and ninety-day compliance reports shall also be certified by a qualified professional in accordance with 40 CFR 403.12(b)(6). (Ord. 872 §5.7, 2008)

13.20.340 Rights of entry.

The CLMSD has the right of inspection of the facilities of any user to ascertain whether the objectives of this chapter are being met and all standards and requirements are being complied with. Persons or occupants of premises where wastewater is generated or discharged, or where hazardous substances or hazardous wastes are present, shall allow the CLMSD or its representative ready access at all reasonable times to all parts of the premises for the purposes of inspection, sampling, photographing, analysis, records examination, records copying or performance of any of their duties. The CLMSD, or its authorized representative, accompanied by such other representatives of other public agencies as may be appropriate, shall have the right to set up on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations.

Where a user has security measures in force which would require proper identification and clearance before entry onto their premises, the user shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the CLMSD, along with other authorized representatives, shall be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

Such inspection(s) will be made with the consent of the owner or possessor of such facilities or, if such consent is refused, with a warrant duly issued pursuant to the procedures set forth in Title 13 (commencing with Section 1822.5) of Part 3 of the California Code of Civil Procedure; provided, however, that in the event of an emergency affecting public health or safety, such inspection may be made without consent or the issuance of a warrant. To the extent that the owner or possessor of the premises requires that a warrant be received, the CLMSD may, in its discretion, suspend the permit and/or any other right to discharge to sanitary facilities immediately, and such suspension may continue until such time as a warrant has been received and the inspection has been completed. If no violation of this chapter is found, the suspension will be lifted. In the event that violations of this chapter or the CLMSD permit, if applicable, are found, then the suspension

may, in the discretion of the CLMSD, be continued, or permit and/or right to discharge to CLMSD facilities terminated, or other enforcement remedies may be sought.

The CLMSD may choose to inspect the facility to determine compliance with all standards set forth in this chapter, the CLMSD permit, if applicable, and additionally, such inspections may be undertaken to verify the wastewater flows and strengths reported by the user. (Ord. 872 §5.8, 2008)

13.20.350 Pretreatment.

Users shall provide necessary wastewater treatment as required to comply with this chapter and shall achieve compliance with all national pretreatment standards within the time limitations as specified by the federal regulations, or this chapter, or the CLMSD permit, whichever is earliest. Any facilities required to pre-treat wastewater to a level acceptable to the CLMSD shall be provided, operated, and maintained at the user's expense. Detailed plans showing the pretreatment facilities and operating procedures shall be submitted to the CLMSD for review, and shall be approved by the CLMSD before construction of the facility. The review of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the CLMSD under the provisions of this chapter. Any subsequent changes in the pretreatment facilities or method of operation shall be reported to and be approved by the CLMSD prior to the user's initiation of the changes. (Ord. 872 §5.9, 2008)

13.20.360 Publication of users in significant noncompliance.

Pursuant to federal requirements, the CLMSD shall annually publish, in the highest circulated daily newspaper in the CLMSD service area, a list of the users who were in significant noncompliance with any pretreatment requirements or standards at any time during the twelve previous months. The notification will also summarize any enforcement actions taken against the user(s) during the same twelve months. (Ord. 872 §5.10, 2008)

13.20.370 Records retention.

All records relating to compliance with pretreatment requirements and standards shall be made available to officials of the EPA, state, and CLMSD, or their authorized representatives. Such records shall include for all samples: (A) the date, exact place, method, and time of sampling and the names of the person or persons taking the samples; (B) the dates analyses were performed; (C) who performed the analyses; (D) the analytical techniques/methods used; and (E) the results of such analyses. These records shall be retained for a minimum of three years, or longer in the case of unresolved litigation, enforcement action, or when requested by the CLMSD, state or EPA. (Ord. 872 §5.11, 2008)

13.20.380 Confidential information.

Information and data on a user obtained from reports, questionnaires, permit applications, permits, monitoring programs and inspections will be available to the public or other governmental agency without notification unless the user specifically requests confidentiality and is able to demonstrate to the satisfaction of the CLMSD that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user.

When requested by a user furnishing information to the CLMSD, the portions of that information which might disclose trade secrets or secret processes will not be made available for inspection by the public but will be made available upon written request to other governmental agencies for uses related to this chapter, and/or the National Pollutant Discharge Elimination System (NPDES). Those portions of the information will also be available for use by the state or any state agency in judicial review or enforcement proceedings involving the user furnishing the information. Wastewater constituents and characteristics will not be recognized as confidential information.

Information and data requested from a user which the user believes to be proprietary and the release of which to the public would substantially impair the operations of the user may alternatively be provided to the CLMSD for its review at the facility of the user rather than provided to the CLMSD for its keeping, at the discretion of the CLMSD. The burden will be on the user to demonstrate to the satisfaction of the CLMSD that such information is proprietary and that this alternative procedure is necessary or appropriate and will not prevent the CLMSD from properly carrying out the objectives of this chapter.

Information accepted by the CLMSD which is demonstrated to be confidential will not be transmitted to anyone other than a governmental agency without prior notification to the user. (Ord. 872 §5.12, 2008)

ARTICLE V. ENFORCEMENT

13.20.390 Enforcement mechanisms.

It is the intent of this article to provide adequate mechanisms to achieve a maximum degree of compliance with this chapter by all users. These enforcement provisions apply to all classes of users to the extent such user violates any provision of this chapter or administrative order of the CLMSD pursuant to this chapter. In order to achieve the maximum degree of compliance desired, the CLMSD will use a variety of enforcement mechanisms. The enforcement mechanisms set forth range from informal administrative action to formal criminal prosecution. The CLMSD may, in its discretion, implement the use of any mechanism or the concurrent use of several mechanisms in order to enforce the provisions of this chapter. The enforcement mechanisms provided herein may be cumulative in respect to such other enforcement mechanisms or civil and criminal penalties as may be otherwise available under the laws of the state of California and the United States of America. Nothing in this chapter is intended to prevent state and/or federal regulatory agencies from undertaking enforcement actions as may otherwise be available due to a violation of this chapter which also constitutes a violation of state and/or federal statutes and regulations.

The enforcement mechanisms available to the CLMSD for violations of the provisions of this chapter, applicable CLMSD resolutions and permit provisions are the following:

- A. Informal administrative action (including notices of violation and warning notices).
- B. Administrative orders, compliance schedules, and other reports.
- C. Imposition of fines and fees for noncompliance with permit requirements.
- D. Imposition of penalties for noncompliance with administrative orders.

- E. Assessment of charges for obstruction or damage to CLMSD facilities or operations.
- F. Suspension or termination of services.
- G. Civil action.
- H. Criminal action. (Ord. 872 §6.1, 2008)

13.20.400 Informal administrative actions.

CLMSD staff may, on an informal basis, take action against a user for minor violations or technical or clerical shortcomings of a user or a user's compliance submittals. These informal administrative actions may include informal notices (i.e., telephone calls to the user's representative), notices of violation (NOVs), informal meetings or warning letters. Such action will not prevent a subsequent or concurrent imposition of noncompliance fees or other enforcement mechanisms. (Ord. 872 §6.2, 2008)

13.20.410 Administrative orders and compliance schedules.

When the CLMSD finds that a user has violated the prohibitions or requirements of this chapter, or the provisions of a wastewater discharge permit, or applicable state or federal regulations, the CLMSD may issue an administrative order directed at those users not complying with such prohibitions, limitations, requirements or provisions to (A) cease to discharge immediately (suspension of service); (B) comply with requirements immediately; or (C) make such changes to their pretreatment facility and procedures immediately as to ensure full compliance.

The CLMSD may also issue, under the circumstances set forth above, an order containing a compliance schedule or a time schedule setting forth dates by which specific corrective actions must be completed. Any user subject to a compliance schedule shall submit to the CLMSD, for each compliance step in the schedule, a report stating whether or not compliance was achieved. Where compliance is not achieved, the report must state the reasons for noncompliance, steps being taken to comply with the schedule, and the date when compliance with the increment in question is expected. Each report must be submitted not later than fourteen days after the date of the compliance step specified in the compliance schedule.

All users shall submit to the CLMSD any other reports as deemed reasonable and necessary by the CLMSD, in addition to those described above, to demonstrate compliance with this chapter, their wastewater discharge permit, or any applicable state or federal regulations. Such reports include, but are not limited to, any reports or plans required by state, federal or local laws or regulations, including this chapter. (Ord. 872 §6.3, 2008)

13.20.420 Noncompliance fees.

A. **Noncompliance Fees for Pollutant Limitation Violations.** If a periodic compliance sampling performed by the user or the CLMSD reveals noncompliance by the user with the prohibitions or specific pollutant limitations contained in this chapter, the permit, or resolutions by the CLMSD board, or which violates specific national pretreatment standards or state standards on discharges, then the user is liable for fees of up to one thousand dollars for each day of violation per violation. The purpose of these fees is to compensate the CLMSD for additional costs of sampling, monitoring, laboratory analysis, treatment, disposal and administrative processing

incurred as a result of the noncompliance. These fees will be in addition to, and not in lieu of, any penalties as may be assessed pursuant to Sections 13.20.450, 13.20.460 and 13.20.470.

1. For the purpose of this section, a fee of three hundred dollars shall be imposed for each violation of the constituent limit for the first violation of that constituent limit during the term of the permit.
 2. Second or subsequent violations of this same constituent limit during the term of the permit may result in increased fees for each violation of the constituent limit resulting from a single day's sample. The maximum fee which shall be imposed for multiple violations of any constituent limits from a single day's sample, where one or more of the individual constituent violations constitute second or subsequent violations of that constituent, shall be one thousand dollars per day.
 3. Whenever periodic compliance samples or the CLMSD unannounced samples indicate a significant noncompliance (SNC), the CLMSD may undertake a sample and evaluation program. This program will consist of CLMSD sampling of the user's wastewater at the first opportunity convenient to the CLMSD. Daily samples may be taken each day for up to five days. The CLMSD or outside laboratory will analyze these samples for the violating constituents and provide notice to the user in regard to the results of said sampling. Violations that may occur during the sample and evaluation program shall constitute subsequent violations under this chapter or under any applicable law.
 4. In the event a sampling and evaluation program indicates a need for corrective actions to be undertaken, the CLMSD may place the user on a compliance schedule or undertake another sampling and evaluation program. A compliance schedule shall provide for minimum required actions to be undertaken by the user to alleviate the violation and a schedule for completion of said actions. This compliance schedule may include interim constituent level maximums. All violations of constituent maximums or other requirements set forth in the compliance schedule, including failure to meet schedule dates, shall subject the violator to a fee of one thousand dollars per violation. Each day in which the user fails to meet a schedule date may, in the discretion of the CLMSD, constitute a separate violation. Any violation of a constituent limit during the compliance schedule period may also result in the implementation of an additional sample and evaluation program.
- B. In addition to the penalty fees set forth in subsection A of this section, a significant violation of the discharge standard may result in the immediate termination of the user's permission to discharge, at the discretion of the CLMSD. The termination of permission to discharge may be for a set period or for the entire remaining term of the permit, at the discretion of the CLMSD. Any violation of the discharge standards where a constituent concentration is determined to be five times the concentration standard set forth in Appendix A, attached to the ordinance codified in this chapter, shall be determined to be a significant violation. Any series of three or more violations of the same constituent within a one-year period shall constitute a significant violation.
- C. Preliminary Determination of Noncompliance with Permit Requirements. Noncompliance with permit discharge requirements may be determined by an analysis of a sample of the effluent of a

user for a constituent or condition specified in the user's permit. If the effluent of a user is found by the analysis of the sample to be in excess of the concentrations or conditions specified in the permit, or concentrations or conditions incorporated by reference therein, noncompliance fees as set forth in subsection A of this section shall be levied. The user shall notify the CLMSD, as specified in Section 13.20.480(B), of the violation and shall collect a second sample of the effluent for analysis. Pursuant to Section 13.20.320(A)(5), the user shall provide the CLMSD with the results of the second sample within thirty days of the date the violation was discovered. If the second sample reveals noncompliance, then the sampling and evaluation program may be initiated by the CLMSD.

D. Sampling and Evaluation Program.

1. If the sampling and evaluation program (SEP) reveals noncompliance by the user with the prohibitions or specific pollutant limitations specified in this chapter or in the user's permit, the user shall pay fees as specified above and may be assessed all other costs incurred during the SEP for sampling and analysis, including labor, equipment, materials, outside services and overhead.
2. If noncompliance by the user with the prohibitions or limitations of this chapter or of the user's permit is determined following the initiation of an SEP, the CLMSD may implement one of the following enforcement actions:
 - a. Amend the existing permit through an enforcement compliance schedule agreement (ECSA). This may be done after consultation with the user and when the user has shown good faith in trying to comply but requires additional time for construction and/or acquisition of equipment related to pretreatment. The permit may be amended with the ECSA for a period up to one hundred eighty days; however, this period may be extended for a period not to exceed an additional one hundred eighty days upon determination by the CLMSD director that good cause exists for an additional period. No further extensions shall be granted except upon approval of the CLMSD board.
 - b. If a user remains in noncompliance because corrective action is not taken within a reasonable time after completion of the SEP or the expiration of the ECSA, then an administrative order may be issued. Additionally, any of the other enforcement actions as outlined in this chapter may also be commenced. The payment of noncompliance fees will not bar the CLMSD from undertaking such enforcement procedures as are otherwise set forth herein. (Ord. 872 §6.4, 2008)

13.20.430 Assessment of charges for obstruction or damage to CLMSD facilities or operations.

When a user's discharge, whether due to negligence, accident, spill or otherwise, causes an obstruction, damage or any other impairment to CLMSD operation or facilities, the CLMSD may impose a charge on the user for the cost to clean or repair the facility, or costs incurred to resume normal operations. An administrative service fee of twenty-five percent of the CLMSD costs may be added to these charges. The total amount shall be paid within thirty days of invoicing by the CLMSD. If it can be shown that the user's discharge caused or significantly contributed to the

CLMSD violating its discharge requirements or incurring additional expenses or suffering loss or damage to the operation or facilities, then the user shall be responsible for any costs or expenses, or a prorated portion of such expenses, including assessments or penalties imposed by other agencies or the court on the CLMSD. (Ord. 872 §6.5, 2008)

13.20.440 Suspension or termination of service.

A. **Suspension of Service.** The CLMSD may suspend the wastewater treatment service and/or a wastewater discharge permit by issuance of a cease and desist order when the CLMSD makes the determination that such suspension is necessary. A suspension shall be justified in order to prevent an actual or threatened discharge which presents, or may present, an imminent or substantial endangerment to the health or welfare of individuals or the environment, causes or may cause interference to the treatment plant or other CLMSD operations, or causes or may cause the CLMSD to violate any condition of its NPDES permit. Additionally, a permit may be suspended for any of the conditions justifying revocation of permit as set forth in subsection B of this section. Nothing in this subsection shall limit the rights of the CLMSD to suspend or terminate service pursuant to specific permit conditions which may be more stringent.

The CLMSD may take steps to immediately halt or prevent a discharge that threatens the health and welfare of individuals. Any user notified of a suspension of service and/or the wastewater discharge permit shall immediately stop or eliminate the discharge. In the event of a failure of the user to comply voluntarily with the administrative order, the CLMSD will take such steps as deemed necessary to prevent or minimize damage to CLMSD facilities or endangerment to persons or the environment. The CLMSD may reinstate the wastewater discharge permit and/or the wastewater treatment service upon proof of the elimination of the noncomplying discharge.

B. **Revocation of Permit.** Any user who violates the following conditions is subject to having its permit revoked:

1. Any user who knowingly gives or provides a false statement, representation, record, report, plan or other document to the CLMSD or falsifies, tampers or knowingly renders inaccurate any monitoring device or method required under Section 13.20.320;
2. Failure of a user to factually and completely report the wastewater constituents and characteristics of his/her discharge;
3. Failure of the user to report significant changes in operations, or wastewater constituents and characteristics;
4. Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring;
5. Failure of a user to notify the CLMSD immediately of accidental discharge and/or take appropriate corrective action to prevent a recurrence;
6. Failure of a user to file a periodic compliance report in such time and in such manner as is required by this chapter;

7. Significant violation(s) of the permit requirements or conditions and/or violation of this chapter. Any violation of discharge standards where a constituent concentration is determined to be five times the limit for that constituent or any series of three or more violations of the same constituent within a one-year period shall constitute a significant violation;
8. Failure to pay fees and charges, including noncompliance fees or other penalties established pursuant to this chapter.

C. Immediate Termination of Discharge. In the case of an actual or threatened discharge which reasonably appears to present an imminent danger to the health or welfare of persons, the CLMSD may, after reasonably attempting to informally notify the user, take all necessary steps to halt or prevent such discharge including but not limited to the disconnection of the user's water service, the disconnection of the user's access to CLMSD facilities and all associated punitive actions described in the most recent edition of the California Building Code. (Ord. 872 §6.6, 2008)

13.20.450 Administrative civil penalties.

Pursuant to the authority of California Government Code Sections 54739 through 54740.6, the CLMSD or CLMSD staff may issue administrative complaints, conduct administrative hearings and/or impose civil penalties in accordance with the procedures set forth in these sections for violation of the CLMSD requirements relating to pretreatment of industrial waste or the prevention of the entry of industrial waste into the CLMSD collection system or treatment works. These penalties shall be as follows:

- A. In an amount which shall not exceed two thousand dollars for each day for failing or refusing to furnish technical or monitoring reports.
- B. In an amount which shall not exceed three thousand dollars for each day for failing or refusing to timely comply with any compliance schedule established by the CLMSD.
- C. In an amount which shall not exceed five thousand dollars per violation for each day for discharges in violation of any waste discharge limitation, permit condition, or requirement issued, reissued, or adopted by the CLMSD.
- D. In an amount which shall not exceed ten dollars per gallon for discharges in violation of any suspension, cease and desist order or other orders, or prohibition issued, reissued, or adopted by the CLMSD.

Unless appealed, orders setting administrative civil penalties shall become effective and final upon issuance thereof, and payment shall be made within thirty days.

As to court actions authorized by the above-referenced sections, the CLMSD council, or other special council designated by the CLMSD board, will institute appropriate actions to effect statutory authorized remedies, upon order of the CLMSD board. (Ord. 872 §6.7, 2008)

13.20.460 Civil action.

The CLMSD board may direct the city of Lakeport council or other special council to bring such civil actions as may be available by law or in equity in any court of competent jurisdiction to enforce the provisions of this chapter and to recover such charges, fees, penalties and/or damages as may be assessed or may be incurred under the provisions of this chapter.

A. Injunction. Whenever a discharge of wastewater is in violation of or has the reasonable potential to violate any provision of this chapter, permit condition, or any federal pretreatment standard and requirement as set forth in 40 CFR Section 403.8 et seq., or user fails to submit required reports, or refuses to allow the CLMSD entry to inspect or monitor the user's discharge, the CLMSD may petition the superior court for the issuance of a preliminary or permanent injunction, or both, as may be appropriate to restrain the continued violation or to prevent threatened violations by the user.

B. Civil Actions for Penalties. Any user who violates any provision of this chapter, permit condition, cease and desist order, prohibition or effluent limitation shall be liable civilly for a penalty not to exceed twenty-five thousand dollars for each day in which such violation occurs pursuant to California Government Code Section 54740. The CLMSD council, or other special council designated by the board, upon order of the CLMSD board, will institute such actions as may be appropriate in the superior court to impose, assess and recover such sums.

C. Other Civil Actions. The CLMSD may require compliance with permit conditions or limitations by issuing administrative orders, including cease and desist orders, and compliance schedules. Said orders are enforceable in a California court of general jurisdiction. The CLMSD, however, may directly undertake any court action available by law or equity, including but not limited to a civil action for penalties, without first seeking an administrative order or making use of a compliance schedule, and it may concurrently undertake such administrative and court actions as deemed appropriate. (Ord. 872 §6.8, 2008)

13.20.470 Criminal action.

A. General Criminal Penalties. Any person who violates any provision of this chapter, permit, administrative order, prohibition or effluent limitation is guilty of a misdemeanor, and upon conviction is punishable by a fine of one thousand dollars per day per violation or imprisonment of up to thirty days in the county jail, or both. Each day a violation occurs may constitute a new and separate offense and may subject the violator to an additional full measure of penalties as set forth herein.

B. Falsifying Information. Any person who knowingly makes any false statements, representations, or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this chapter, or wastewater discharge permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this chapter, shall upon conviction be punished by a fine of not more than one thousand dollars or imprisonment for not more than thirty days in the county jail, or both. Each separate act of falsification, tampering, or knowingly rendering inaccurate information shall constitute a new and separate offense and shall be subject to the penalties contained herein.

Nothing in this section is intended to exclude the potential for prosecution under the applicable perjury statutes of the state of California to the extent such falsification was incorporated in a document signed under the penalty of perjury. (Ord. 872 §6.9, 2008)

13.20.480 Notification procedures.

A. Notification to User. Whenever the CLMSD finds that any user has violated or is violating the provisions of this chapter, a wastewater discharge permit, or any prohibition, limitation or requirements contained herein, the CLMSD may serve upon such person a written notice stating the nature of the violation. Within thirty days of the date of this notice, a plan for the satisfactory correction of the violation shall be submitted to the CLMSD by the user. Failure to respond to the violation shall be considered a separate violation.

Whenever the CLMSD assesses a noncompliance fee, penalty or other form of enforcement action under the provisions of this chapter, the CLMSD will serve upon such user a written notice stating the nature of the enforcement action being taken.

B. Notification to CLMSD. When a user discovers that he has violated or is violating a provision of this chapter, wastewater discharge permit, or any prohibition, limitation or requirement contained therein, including a violation as may be caused by accidental discharge or spill, the user shall immediately notify the CLMSD upon discovery of such violation. Thereafter, within five days following the accidental discharge or discovery of a violation, the user shall submit to the CLMSD a detailed, written report, describing the accidental discharge or violation, and the measures taken by the user to prevent similar future occurrences. This written report regarding the violation may be included as a part of a periodic compliance report, or other report as may be required under this chapter, as long as the written report is provided within five days of discovery. Said notification shall not relieve the user of any expense, penalty, fee or other liability which may be incurred as a result of the violation. (Ord. 872 §6.10, 2008)

13.20.490 Costs.

All costs associated with the CLMSD undertaking enforcement actions pursuant to this chapter, including attorney's fees for civil actions undertaken, shall be paid by the user. These costs may include, but not be limited to, the costs for termination of service, reinstatement of service, compliance sampling and analysis and administrative activities undertaken by the CLMSD. However, if the user prevails in an appeal to the CLMSD board or a civil action taken to nullify an enforcement action pursued by the CLMSD under this chapter, the user shall not be responsible for the costs incurred by the CLMSD in pursuing said enforcement action. (Ord. 872 §6.11, 2008)

13.20.500 Responding to significant noncompliance.

Any violation of pretreatment requirements, including limits, sampling, analysis, reporting and meeting compliance schedules, and regulatory deadlines, is an instance of noncompliance for which the industrial user is liable for enforcement including penalties. The CLMSD is required to identify violations or patterns of violations by industrial users that are deemed to be instances of significant noncompliance (SNC). To the extent that a violation or pattern of violations is determined to be SNC, the CLMSD will give additional priority to enforcement actions with regard to that industrial user. Additionally, the determination of SNC will be used as the basis for reporting same to the regulatory authorities and the publishing of the list of users who are in

significant noncompliance as is required of the CLMSD by law. The following are criteria for significant noncompliance which will be used in determining instances of SNC.

A. Violations of Wastewater Discharge Limits.

1. Chronic Violations. Chronic violations shall be deemed to be present when sixty-six percent of all the measurements taken during a six-month period exceed the daily maximum limit or the average limit for the same parameter (any magnitude of exceedence).
2. Technical Review Criteria Violations. A technical review criteria (TRC) violation occurs if at least thirty-three percent of all the measurements taken for each pollutant parameter during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the TRC. "TRC" is defined as 1.4 for BOD, TSS, fats, oil and grease and 1.2 for all other pollutants except pH.
3. Other Effluent Limit Violations. Any other violation(s) of an effluent limit (average or daily maximum) that the CLMSD determines has caused, alone or in combination with other discharges, interference (e.g., slug discharges) or pass-through (including adverse effect on any toxicity testing); or endangered the health of CLMSD facilities, personnel or the general public.
4. Danger to Human Health or Welfare. Any discharge of a pollutant that has caused imminent endangerment of human health/welfare or of the environment and has resulted in the exercise of CLMSD emergency authority to immediately halt or prevent such a discharge.

B. Violation of Compliance Milestones. Failure to meet any compliance schedule milestone, contained in any order given to the user by the CLMSD, including an ECSA for starting and completing construction, or attainment of final compliance, by ninety days or more after scheduled date shall result in additional enforcement mechanisms including a suspension or termination of service and/or civil action.

C. Failure to Provide Proper Data. Failure to provide reports for compliance schedules, self-monitoring data, or categorical standards (baseline monitoring reports, ninety-day compliance reports, and periodic reports) within thirty days after the date such reports or other data are due shall result in an imposition of fines and fees for noncompliance as described in Section 13.20.420.

D. Failure to Accurately Report. Failure of a user to accurately and promptly report any noncompliance, and any attempt to circumvent the reporting requirements or otherwise withhold noncompliance data from the CLMSD shall result in an imposition of fines and fees for noncompliance as described in Section 13.20.420.

E. Other Violations. Any other violation or group of violations that the CLMSD determines may adversely affect its operations or the accomplishment of the objectives of this chapter shall result in administrative action as described in this article. (Ord. 872 §6.12, 2008)

ARTICLE VI. HEARINGS AND APPEALS

13.20.510 Availability of administrative appeal.

Any user, permit applicant or permit holder affected by any decision, enforcement action or determination made by the CLMSD interpreting or implementing the provisions of this chapter or in any permit issued herein may file with the CLMSD director a written request for reconsideration of a staff decision, action or determination within fifteen days of notification of said staff decision, action or determination. The written request for reconsideration shall detail facts supporting the user's request and such facts shall include a statement listing all relevant facts which shall be considered including such facts as may not have been known or available to the CLMSD at the date of such action. The CLMSD director will render a decision on the request for reconsideration within fifteen days of receipt of the request, unless the CLMSD director requests additional information from CLMSD staff or the user. The CLMSD director will concur with, modify or rescind the action, decision or determination previously made or may grant a show cause hearing regarding such decision, action or determination. If the ruling on the request for reconsideration made by the CLMSD director is unacceptable, the user may, within ten days after the date of notification of the CLMSD director's determination, file with the CLMSD secretary a request for appeal to the CLMSD board.

A user shall not have a right to an appeal to the CLMSD board unless the user has complied with the procedures concerning the request for reconsideration by the CLMSD director as set forth above.

When a written request for appeal to the CLMSD board has been properly filed with the CLMSD secretary, the CLMSD secretary shall schedule the matter to be heard by the CLMSD board within forty-five days from the date of the filing of the written request. The CLMSD board will make a ruling on the appeal within fifteen days from the date of the hearing unless the board requests additional information from CLMSD staff or the user. (Ord. 872 §7.1, 2008)

13.20.520 Show cause hearings.

A. The CLMSD may order any user who violates any of the provision(s) of this chapter, or permit condition(s), to appear before a designated hearing officer to show cause why a proposed enforcement action should not be taken. Notice will be provided to the user specifying the time and place of the hearing. A notice for a show cause hearing will set forth the violation, the reasons why an action is to be taken, the proposed enforcement action, and such other information as will notify the user of the nature of the hearing. The user has the burden of proof to demonstrate that the proposed action should not be taken or that the decision, action or determination previously made should be rescinded or modified. A notice of hearing will be served personally or by registered or certified mail (return receipt requested) at least ten days before the hearing. Service of the notice may be made on an agent of the user or officer of the user's business entity.

B. A CLMSD employee or officer may conduct the hearing and take evidence, or the CLMSD may designate another independent person to do so. The CLMSD will not, as a matter of course, provide for stenographic recording of the hearing; however, the user may provide for such stenographic recordation at its own expense.

C. After the hearing officer has reviewed the evidence, administrative orders may be issued which specifically relate to the issues set forth in the notice of show cause hearing. If the user is dissatisfied with the determination of or the administrative order issued by the hearing officer, the user may file a written request for appeal to the CLMSD board. The request for appeal shall be filed with the CLMSD secretary within ten days of the issuance of the determination order of the hearing officer. The CLMSD secretary will calendar the matter before the CLMSD board within forty-five days of the date of filing of the written request for appeal to the CLMSD board. (Ord. 872 §7.2, 2008)

ARTICLE VII. FEES

13.20.530 Purpose.

It is the purpose of this article to provide for both the recovery of costs from users of CLMSD facilities and related programs established herein and to provide for a sewer service charge to be imposed on all users of the CLMSD sewerage system. The applicable charges or fees will be set forth in the CLMSD schedule of rates, fees and charges. (Ord. 872 §8.1, 2008)

13.20.540 Sewer service charges.

All users shall pay a sewer service charge for the CLMSD wastewater disposal services. The sewer service charge shall reflect the quantity, quality and flow of the wastewater of the user and will be based on the CLMSD's operating costs to intercept, treat and dispose of the wastewater.

The sewer service charge will be set from time to time by the CLMSD board. (Ord. 872 §8.2, 2008)

13.20.550 Scope of rates, fees and charges.

The CLMSD may adopt charges and fees to compensate the CLMSD for its activities under this chapter which may include:

- A. Setting up and operating the CLMSD sewer use and pretreatment program, septage program, industrial user notification program and slug discharge program.
- B. Monitoring, sampling, inspection and surveillance procedures.
- C. Reviewing accidental discharge procedures and construction.
- D. Processing permit applications.
- E. Implementation of administrative and legal enforcement measures.
- F. Other fees as the CLMSD may deem necessary to carry out the requirements of the programs contained herein.

These fees relate solely to the matters covered by this chapter and are separate from all other fees chargeable by the CLMSD. These fees and charges may include staff costs, as well as legal, consulting and laboratory costs, associated with the CLMSD activities in implementation of these programs. See Appendix B, attached to the ordinance codified in this chapter, for more details. (Ord. 872 §8.3, 2008)

13.20.560 Payment of fees, charges and delinquencies--Creation of lien.

- A. Except as otherwise provided, all fees, charges and penalties made pursuant to the provisions of this chapter are due and payable upon receipt of notice thereof. All such amounts shall become delinquent thirty days after the date of invoice.
- B. A penalty for delinquent accounts will be charged in accordance with the following:
1. Thirty days after the date of invoice, a penalty of ten percent of the base invoice amount, not to exceed a maximum of one thousand dollars.
 2. Ninety days after the date of invoice, an additional penalty of ten percent of the base invoice amount shall be imposed; the cumulative total of the penalties will not exceed a maximum of four thousand dollars.
- C. Any invoice outstanding and unpaid after ninety days will be cause for immediate initiation of permit revocation proceedings.
- D. Penalties charged under this section shall not accrue to those invoices successfully appealed, provided the CLMSD receives written notification of said appeal prior to the payment due date. Payment of disputed charges is still required during CLMSD review of any appeal submitted by users.
- E. Any fees, charges and penalties authorized pursuant to this chapter which remain unpaid after the delinquent dates as set forth in this section may be collected thereafter by the CLMSD as provided in this section and otherwise as allowed by law.
1. The CLMSD shall cause a report of delinquent sewer fees, charges and penalties to be prepared periodically. The CLMSD shall fix a time, date and place for hearing the report and any objections or protests thereto.
 2. The CLMSD shall cause notice of the hearing to be mailed to the landowners listed on the report not less than fifteen days prior to the date of the hearing.
 3. At the hearing, the CLMSD shall hear any objections or protests of landowners liable to be assessed for delinquent fees, charges and/or penalties. The CLMSD may make such revisions or corrections to the report as it deems just, after which, by resolution, the report shall be confirmed.
 4. The delinquent fees, charges and/or penalties set forth in the report as confirmed shall constitute special assessments against the respective parcels of land, and are a lien on the property for the amount of such delinquent fees, charges and/or penalties and costs incurred by the CLMSD as authorized by this chapter. A certified copy of the confirmed report shall be filed with the clerk, or auditor appointed by the CLMSD, for amounts of the respective parcels of land as they appear on the current assessment roll. The lien created attaches upon recordation, in the office of the county recorder, of a certified copy of the resolution of confirmation. The assessment may be collected at the same time and in the same manner as other property taxes and penalties and the same procedure and sale in case of delinquency

as provided for such taxes. All laws applicable to the levy, collection and enforcement of ad valorem property taxes shall be applicable to such assessment. (Ord. 909 §1, 2016: Ord. 872 §8.4, 2008)

13.20.570 Reinstatement deposit.

Permitted users who have been subject to enforcement proceedings may be required to deposit with the CLMSD an amount determined by the CLMSD director prior to permission being granted for further discharges to CLMSD facilities. The deposit shall be provided as a security to ensure that the requirements of this title are complied with, and all fees and charges associated with the user's permit are paid. The security may be returned after one year; provided, that the user has not been subject to any enforcement actions or enforcement fees within that one-year period. The deposit shall be cash or other security acceptable to the CLMSD. (Ord. 872 §8.5, 2008)

13.20.580 Connection fee--Construction fund.

A. All connection fees collected from applicants within the CLMSD shall be deposited in an appropriate construction fund, and shall be expended for major repair, improvement and expansion of the facilities of the CLMSD.

B. All such funds collected from applicants outside the CLMSD shall be placed in a separate fund for such area, and pending annexation or termination of the contract with such area shall be expended only as provided by such contract. Upon annexation, any balance in such special fund shall be transferred to the CLMSD connection fee fund. Upon termination of the contract, such fund balance shall be disbursed as provided by such contract. (Ord. 872 §8.6, 2008)

13.20.590 Maintenance fees--Maintenance fund.

All maintenance charges collected by the CLMSD, whether collected from users within or without the CLMSD, shall be placed in the maintenance fund of the CLMSD and shall be expended for operation and normal maintenance of the existing facilities of the CLMSD, and the facilities of such areas outside the CLMSD as the contracts with such areas may provide for the CLMSD to maintain; provided, however, that the CLMSD may collect from users from outside the CLMSD, in areas served by the CLMSD, such additional charges along with the normal maintenance charges as such contracts may provide, which additional charges shall be deposited, maintained and expended as provided by such contracts. (Ord. 872 §8.7, 2008)

ARTICLE VIII. FATS, OILS, AND GREASE PROGRAM

13.20.600 FOG purpose.

The purpose of this article is to outline the wastewater pretreatment requirements for food service facilities and other commercial facilities that discharge FOG in their wastewater flow. All new and existing facilities that generate and discharge FOG in their wastewater flow shall install, operate and maintain a FOG pretreatment system. The requirements of this article shall supplement and be in addition to the requirements of the city of Lakeport municipal sewer district's sewer use ordinance (this Chapter 13.20). (Ord. 872 §9.1, 2008)

13.20.610 Application to install a FOG pretreatment system.

Properly sized grease interceptors are required for all commercial food and restaurant facilities connected to the CLMSD, and all facilities described in subsection B of this section unless

otherwise designated by the director. The CLMSD does not accept waste products with FOG into the sanitary sewer system or any of the wastewater treatment facilities.

A. Interceptors Required. Grease, oil and sand interceptors shall be provided when in the opinion of the director they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, and other harmful ingredients; except that such interceptors shall not be required for buildings used solely for residential purposes. All grease interceptors shall be of a type and capacity approved by the director, meet minimum design capability and follow all E-BMPs. Grease interceptors shall be so located as to be readily and easily accessible for user cleaning and CLMSD inspection.

B. Maintenance of Interceptors.

1. All grease interceptors shall be maintained by the user, at his/her expense, in continuously efficient operation at all times. Grease interceptors shall be installed by users as required by the director. Grease interceptors shall be installed at the user's expense, when such user operates a food service facility, school, child care facility with twenty or more children, deli, meat market, grocery store, bakery, entertainment club, caterer, church and fraternal organization, or when deemed necessary by the director for the proper handling of liquid wastes containing grease or any other substance deemed harmful to the city of Lakeport municipal sewer district.

2. The sizing of grease interceptors will be based on the number of seats (EPA 1 Procedure) or the number of meals served in a single day (EPA 2 Procedure) or other methods approved by the director. All such grease interceptors shall be serviced and emptied of accumulated waste content as required in order to maintain minimum design capability or effective volume of the grease interceptor, but not less often than once every sixty days, or more often as determined by the director. Indoor grease interceptors shall be cleaned a minimum of once every fourteen days. Users who are required to, based on solids, pass water through a grease interceptor shall:

a. Provide for a minimum hydraulic retention time of twenty-four minutes at actual peak flow or twelve minutes at the calculated theoretical peak flow rate, as predicted by the Uniform Plumbing Code fixture criteria, between the influent and effluent baffles with twenty percent of the total volume of the grease interceptor being allowed for sludge to settle and accumulate, identified hereafter as a "sludge pocket."

b. Remove any accumulated sludge pocket as required, but at intervals of not longer than once every sixty days, or more often as determined by the director, at the user's expense. Grease interceptors shall be kept free of inorganic solid materials such as grit, rocks, gravel, sand, eating utensils, cigarettes, shells, towels, rags, etc., which could settle into this pocket and thereby reduce the effective volume of the grease interceptor.

c. Accept the following conditions: if any skimmed or pumped wastes or other materials removed from grease interceptor are treated in any fashion on site and reintroduced back into the grease interceptor as an activity of and after said on-site

treatment, the user shall be responsible for the attainment of established grease numerical limit consistent with and contained in Section 13.20.620 on all discharges of wastewater from said grease interceptor into the city of Lakeport's sanitary sewer collection and treatment system.

d. Operate the grease interceptor in a manner so as to maintain said device such that attainment to the grease limit is consistently achieved. "Consistent" shall mean any wastewater sample taken from said grease interceptor shall be subject to terms of numerical limit attainment described in Section 13.20.620. If legitimate space constraints (as determined by the director) exist that prohibit the sewer user from installing a grease interceptor, a variance for cause request may be submitted (Section 13.20.650).

e. Understand and agree that: the use of biological additives as a grease degradation agent is conditionally permissible, upon prior written approval by the director. Any food service facility using this method of grease abatement shall maintain the interceptor in such a manner that attainment of the grease wastewater discharge limit, as measured from the interceptor's outlet, is consistently achieved.

f. Understand and agree that: the use of automatic grease removal systems is conditionally permissible, upon prior written approval by the director. Any food service facility using this equipment shall operate the system in such a manner that attainment of the grease wastewater discharge limit, as measured from the unit's outlet, is consistently achieved.

g. Understand and agree that: the director reserves the right to make determinations of grease interceptor adequacy and need based on review of all relevant information regarding grease interceptor performance. The director reserves the right to conduct facility site and building plan review and to require repairs to, modification of, or replacement of such interceptors.

3. All users shall provide a written record of interceptor maintenance and/or pumping to the director within five working days after such work has been completed.

4. Non-grease-laden sources shall not be connected to sewer lines upstream of the grease interceptor. Grease interceptors are intended only for grease-laden sources.

5. Should an obstruction of a CLMSD sewer main(s) occur that causes a sewer overflow to the extent that an impact on the environment is realized and that said overflow or failure of the sanitary sewer collection system to convey sewage can be attributed in part or in whole to an accumulation of grease in the CLMSD sewer main(s), the CLMSD will take appropriate enforcement actions, as stipulated in Sections 13.20.630 and 13.20.640, against the generator or contributor of such grease.

C. Facilities to Install Interceptors.

1. All facilities described in subsection (B)(1) of this section shall be required to install grease interceptors within one year of written notification by the director, or file a variance for

cause request within six months of the same notification (Section 13.20.650). If the variance is not granted by the director, the user will have six months from written notification of denial to complete said installation as directed.

2. If an overflow or failure of the sanitary sewer collection system to convey sewage can be attributed in part or in whole to an accumulation of grease from an existing FSF without a grease interceptor, the CLMSD will require the FSF to install a grease interceptor within one hundred eighty days of written notification. Any additional fixtures that are added to the existing FSF that discharge grease-laden waste streams shall be plumbed into the interceptor. If said fixtures cause the interceptor to exceed its minimum design capability, a new interceptor may be required by the director.

3. Except as provided herein, for a period of one year following adoption of the ordinance codified in this chapter, although installation of grease interceptors will be required to be installed, no enforcement actions will be taken under this article for failure to achieve limits on grease discharges from grease interceptors. If, during this one-year period, an obstruction of a CLMSD sewer main(s) occurs that causes a sewer overflow to the extent that an impact on the environment is realized and that said overflow or failure of the sanitary sewer collection system to convey sewage can be attributed in part or in whole to an accumulation of grease in a CLMSD sewer main(s), the CLMSD will take appropriate enforcement actions, as stipulated in Sections 13.20.630 and 13.20.640, against the generator or contributor of such grease.

4. Access manholes, with a minimum diameter of twenty-four inches, shall be provided over each chamber and sanitary tee. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall also have readily removable lids and inflow and infiltration saucer covers in order to facilitate inspection, allow for grease removal, and permit wastewater sampling activities.

D. Design Requirements for Grease Interceptors.

1. As per California Plumbing Code requirements, grease interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperatures, shall be of substantial construction, watertight, and equipped with easily removable covers. The grease interceptor shall contain a baffle system, which adequately diverts and slows the flow to avoid short-circuiting. Grease interceptors located in roadways or parking lots shall be traffic rated.

2. Since the FSF is liable for the condition of their pretreatment devices, the FSF owner/representative should witness all cleaning/maintenance activities in order to verify that the grease interceptor is being fully cleaned and properly maintained.

E. How to Determine the Size of an Exterior, In-Ground Grease Interceptor. As determined by the director, the user installing a grease interceptor may be required to use either the sizing criteria of the Manning formula or the formula described in the most recent edition of the California Plumbing Code to determine the size of said grease interceptor.

The Manning formula for calculating grease interceptor sizing is:

Gallons of interceptor = $[(1) = \text{GPM/fixture (derived from Manning formula)} \times (2) = \text{total \# fixture ratings of grease-laden waste streams}] + (3) \text{ direct flow from a dishwasher, laundry washer, glass washer (in GPM)} \times (4) = 24\text{-minute retention time}$

Components of equation =

1. **GPM/Fixture.** The following examples are derived from the Manning formula. It takes into account the slope; roughness of the pipe (plastic) used, and pipe diameter size. When applying the Manning formula, we arrive at the drainage rates of various pipe diameter sizes:

0.5 inch pipe diameter = 0.8 GPM/fixture

1.0 inch pipe diameter = 5.0 GPM/fixture

1.5 inch pipe diameter = 15 GPM/fixture

2.0 inch pipe diameter = 33 GPM/fixture

2.5 inch pipe diameter = 59 GPM/fixture

3.0 inch pipe diameter = 93 GPM/fixture

2. **Fixture Ratings of Grease-Laden Waste Streams.** In the data below, fixtures that have a heavy grease-laden waste stream received higher values, while fixtures with a light grease-laden waste stream received lower values.

Common commercial kitchen fixtures and their corresponding rating (each):

2, 3, or 4 compartment pot sink = 1.0

1 or 2 compartment meat prep sink = 0.75

Pre-rinse sink = 0.5

1 or 2 compartment vegetable prep sink = 0.25

Can wash = 0.25

Mop sink = 0.25

Floor drain = 0.00

3. **Direct Flow from Dishwashers, Laundry Washers, and Glass Washers.** These flows must be added directly to the GPM flow because of their potential for discharging large quantities of water in a short time period. Since these appliances have pumps, the Manning formula cannot be applied to predict flow. Make sure to use the manufacturer's discharge rate for flow in GPM but not less than the draw down rate.

4. **Twenty-Four Minute Retention Time.** Engineers have determined that when applying several criteria to determine proper grease (animal and vegetable lipids) separation (using Stokes's Law, specific gravity of lipids, etc.), a twenty-four-minute retention time is required.

Example No. One: A restaurant has the following fixtures in their kitchen (all fixtures have a 1.5 inch pipe diameter):

- One three-compartment pot sink
- One pre-rinse sink
- One two-compartment vegetable prep sink
- One dishwasher that discharges ten GPM

Using the formula to size exterior grease interceptors, we get:

Gallons needed for grease interceptor

$$= [15 \text{ GPM} \times [1 + 0.5 + 0.25] + 10 \text{ GPM}] \times 24 \text{ minutes}$$

$$= [[15 \text{ GPM} \times 1.75] + 10 \text{ GPM}] \times 24 \text{ minutes}$$

$$= 26.25 \text{ GPM} + 10 \text{ GPM} \times 24 \text{ minutes}$$

$$= 36.25 \text{ GPM} \times 24 \text{ minutes}$$

$$= 870 \text{ gallons; round up to the next size =}$$

A 1,000-gallon grease interceptor is required.

Example No. Two: A restaurant has the following fixtures:

At 0.5 inch pipe diameter: Pre-rinse sink

At 1.5 inch pipe diameter:

- One three-compartment pot sink
- 1 pre-rinse sink
- 1 meat prep sink
- 1 vegetable prep sink

At 3.0 inch pipe diameter:

- 1 can wash

Using the formula to size exterior grease interceptors, we get:

For the pre-rinse sink, we take

$$0.8 \text{ GPM} \times 0.5 = 0.4 \text{ GPM}$$

For the 1.5 inch pipe diameter fixtures:

$$15 \text{ GPM} \times [1 + 0.5 + 0.75 + 0.25] = 37.5 \text{ GPM}$$

For the can wash:

$$93 \text{ GPM} \times 0.25 = 23.25 \text{ GPM}$$

$$\text{Add } 0.4 \text{ GPM} + 37.5 \text{ GPM} + 23.25 \text{ GPM} = 61.15 \text{ GPM} \times 24 \text{ minutes} = 1,468 \text{ gallons; round up to the next size =}$$

A 1,500-gallon grease interceptor is required.

F. How to Determine the Size of an Indoor Point-of-Use Grease Interceptor.

1. Step One.
 - a. Determine the cubic contents of the fixture by multiplying length times width times depth.
 - b. Number of compartments times 24 inches long by 24 inches wide by 14 inches deep. Cubic contents: 3 times 24 times 24 times 14 equals 24,192 cubic inches.
 2. Step Two.
 - a. Determine the capacity in gallons. One gallon equals 231 cubic inches.
 - b. Contents in gallons: 24,192 divided by 231 equals 104.7 gallons.
 3. Step Three.
 - a. Determine actual drainage load. The fixture is usually filled to about 75 percent of capacity with wastewater. The items to be washed displace about 25 percent of the fixture content. Actual drainage load equals 75 percent of fixture capacity.
 - b. Actual Load: .75 times 104.73 gallons equals 78.55 gallons.
 4. Step Four.
 - a. For design considerations, it is good practice to calculate the flow rate in GPM equal to or greater than 75 percent of the fixture capacity.
 - b. Calculated flow rate for design capacity in GPM on 75 percent of fixture capacity: 75 percent of fixture capacity equals 78.55 gallons. Flow rate equals 78.55 GPM.
 5. Step Five.
 - a. Select the grease interceptor that matches the calculated design flow rate. Note: Select the next larger size when the flow rate falls between two sizes.
 - b. Hence, any value greater than 78 but less than or equal to 79 should be considered 79. In this example, a grease interceptor with a minimum design capability of 79 GPM is needed.
- G. Notification of Change in Ownership or Closure of a Food Service Facility.
1. A change in ownership of a FSF shall be reported to the director in writing within thirty days of the ownership change. Failure to comply will result in a minor violation, failure to submit records. See Section 13.20.640.
 2. Any FSF that goes out of business shall report such closure to the director in writing within thirty days of closure and shall ensure that any grease interceptor shall be cleaned and pumped before the building is vacated. Failure to comply shall result in an intermediate violation, failure to maintain necessary equipment. See Section 13.20.640. (Ord. 872 §9.2, 2008)

13.20.620 FOG discharge limits.

A. Types of Wastes Prohibited. Any water or waste which may contain more than one hundred parts per million, by weight, of FOG. (Ord. 872 §9.3, 2008)

13.20.630 FOG prohibitions and violations.

A. No user shall contribute or cause to be contributed into the sanitary sewer collection system any of the following:

1. Hot water running continuously through a grease interceptor.
2. Discharge of concentrated alkaline or acidic solutions into a grease interceptor.
3. Discharge of concentrated detergents into a grease interceptor.
4. Discharge of FOG into the sanitary sewer system.

B. It shall be a violation of this chapter for any person or user to:

1. Modify a grease interceptor's structure without consent from the director.
2. Provide falsified data and/or information to the CLMSD, including but not limited to grease interceptor maintenance and/or cleaning records.
3. Violate or fail to comply with any applicable section or provision of this article.

Violations	Days from Notification to Correct Violation
Equipment Not Registered	30 days
Equipment Not Properly Installed	90 days
Major Violations	30 days
Intermediate Violations	60 days
Minor Violations	90 days

(Ord. 872 §9.4, 2008)

13.20.640 FOG fines.

Any user that is identified, in whole or in part, as the source of a sanitary sewer blockage and/or overflow shall be assessed a fine of no less than five hundred dollars and no more than twenty-five thousand dollars per incident, plus cost recovery, in addition to any fines dispensed from the state of California. Users committing one or more of the offenses listed herein will be assessed the corresponding amounts on a calendar year basis. The user will have no more than one hundred eighty days from written notification by the director to surrender said moneys to the CLMSD.

The fines associated with all violations of this chapter including minor, intermediate, and major violations and subsequent violations will be set from time to time by the CLMSD board. (Ord. 872 §9.5, 2008)

13.20.650 FOG variance for cause request/appeals.

A. Variance.

1. A variance to deviate from any/all requirements set forth in Section 13.20.610 may be requested of the CLMSD upon submission of sufficient documentation. Such documentation shall provide a written explanation for the need to vary from the requirements of Section 13.20.610. After submission of a request to the CLMSD, the CLMSD will review all information submitted and will notify the user in writing of its acceptance or denial of the variance request. All users requesting a variance shall agree to submit to a variance study and the associated fee.
2. The CLMSD has the right to discontinue the variance study at any time the FSF or other director-designated facility adversely affects the sanitary sewer collection system or treatment works. Fees associated with the variance request will be set from time to time by the CLMSD board, which includes estimated costs associated with processing and conducting the variance study. All fees are non-refundable and shall be paid in advance.
3. A variance to exceed the interval requirement for scheduled maintenance set forth in this article may be granted if the accumulated grease cap and sludge pocket measurements remain below twenty-five percent of the total depth from the grease interceptor's interior floor to the static or working water level, at any point between the influent and effluent pipes/baffles of the grease interceptor.
4. No variance will be granted to exceed a one hundred eighty-day maintenance interval, with the exception of schools and seasonal event facilities that may exceed a one hundred eighty-day maintenance interval upon submitting a variance application to the director and receiving written permission from the director.
5. Any user who is found to violate the twenty-five percent rule as set forth in subsection (B)(6) of this section may be required to pump more frequently than monthly.

B. Variance Study Procedure. Once a variance has been granted, a variance study shall be conducted in accordance with the following procedures:

1. Prior to a variance study, the grease interceptor shall be completely pumped and sufficiently cleaned by a servicing company at the user's expense. A variance study cannot be conducted unless the grease interceptor is properly serviced, as determined by the director.
2. The user shall contact the CLMSD a minimum of two working days prior to the scheduled grease interceptor cleaning.
3. Once the grease interceptor is cleaned properly and refilled with water from the establishment, the CLMSD will conduct a visual inspection of the grease interceptor and verify that all components of the device are in place and in proper working order. If a grease interceptor fails the visual inspection, the user shall correct all inadequacies at the user's expense. The user shall notify the CLMSD in writing of all corrected measures upon

completion. Such notification shall be mailed to the address set forth in subsection G of this section.

4. Two weeks after initial pumping, the CLMSD will measure the grease cap and sludge pocket to obtain data to determine grease interceptor performance.
5. Four weeks after the initial pumping, the CLMSD will remeasure the grease cap and sludge pocket to further evaluate grease interceptor performance.
6. This process will continue on a biweekly frequency until the accumulated grease cap and sludge pocket reach twenty-five percent of the total depth of the grease interceptor. Variance studies shall not exceed a period of one hundred eighty days.
7. The CLMSD will review all data obtained and submit in writing the results of the variance to the user. The result will only be furnished to the user requesting the variance.
8. The CLMSD will not be responsible for any grease discharge, odor, or blockage during or after the variance study. At no time during the variance study shall the grease interceptor be pumped, except by direct approval of the director.

C. Variance Revocation. A variance to deviate from the interval requirement for scheduled maintenance may be revoked by the CLMSD, at its discretion, if at any time after a variance is granted one or more of the following occur:

1. Grease interceptor discharge adversely affects the CLMSD as determined by the director.
2. Grease and solids accumulation is greater than twenty-five percent of the total depth from grease interceptor's interior floor to the static or working water level, at any point within the grease interceptor.
3. A user increases food service production by more than thirty-three percent.
4. A user increases seating capacity by more than twenty-five percent.
5. A user enacts a menu change that increases grease-laden waste to an amount no longer applicable to the original variance.
6. A user causes or contributes to a sanitary sewer blockage or overflow.

D. Reconsideration Petition.

1. Any user may petition the director to reconsider the terms of any enforcement action within thirty calendar days of issuance.
2. Failure to submit a timely petition for review shall be deemed to be a waiver of the administrative appeal process.

3. The petition shall indicate the terms objected to, the reasons for the objection and any additional information that should be considered.

4. If the director fails to act within fifteen days of receipt, the request for reconsideration shall be deemed as denied.

E. Final Appeal Hearing with the CLMSD.

1. Any user whose reconsideration petition to the director has been denied shall have the right to a final hearing before the CLMSD board upon making written demand to the director within thirty days of receipt of the reconsideration petition denial. The written demand shall identify the specific enforcement action issues to be contested and any additional information that should be considered.

2. Unless such written demand is made within the time specified herein, the action of the director shall be final and binding.

3. The CLMSD board shall conduct the hearing and make a final decision on the enforcement action within fifteen days of the hearing. The user shall be notified of the decision by certified mail.

4. The decision of the CLMSD board shall be considered the final administrative action for purposes of judicial review.

F. Appeal of FOG Article. Any user may appeal a fine that has been assessed for failure to comply with this article. The user must submit a written request, identifying the specific issues to be contested, to the director within thirty days following receipt of the bill, assessment of fine, or notice of violation. Unless such written request is made within the time frame specified, the fine subject to appeal shall be final and binding. The director shall evaluate the information and shall make a written decision within fifteen days of receipt of the appeal request. Failure to make a written demand within the specified time herein shall bar further appeal. The director shall make a decision on the appeal within ninety days of the date that the appeal was filed.

G. Mailing Address for All FOG Appeals.

1. Address the letter according to the type of appeal and body. For example: "Attn: Variance for Cause Request, to CLMSD Director."

2. After addressing your letter and envelope, mail all correspondence to:

City of Lakeport Corporation Yard

591 Martin Street

Lakeport, CA

95453

(Ord. 872 §9.6, 2008)

ARTICLE IX. SPECIAL PURPOSE DISCHARGE PERMIT

13.20.660 Special purpose discharge permit application.

Special purpose discharge permits shall be expressly subject to all provisions of this chapter and all other regulations, charges for use, and fees established by the CLMSD. The conditions of special purpose discharge permits will be enforced by the CLMSD in accordance with this chapter and applicable state and federal regulations, sludge management criteria, or the reuse potential of the water by the CLMSD.

- A. Users seeking a special purpose discharge permit shall complete and file with the CLMSD, prior to commencing discharge, an application in the form prescribed by the CLMSD. This application shall be accompanied by any applicable fees, plumbing plans, a detailed analysis of the alternatives for water disposal, or other data as needed by the CLMSD for review.
- B. After evaluation of the data furnished, the CLMSD may issue a special purpose discharge permit when no alternative method of disposal is reasonably available, or to mitigate an environmental risk or health hazard.
- C. The permit application may be denied when the applicant has failed to establish to the CLMSD's satisfaction that adequate pretreatment equipment is included within the applicant's plans to ensure that the discharge limits will be met or if the applicant has, in the past, demonstrated an inability to comply with applicable discharge limits. (Ord. 872 §10.1, 2008)

13.20.670 Conditions and limitations.

- A. Monitoring requirements resulting from a special purpose discharge permit shall be for those noncompatible pollutants known to exist in the discharge. At least one analysis prior to sewer discharge shall be performed for all constituents contained in the most current Environmental Protection Agency (EPA) priority pollutant list.
- B. The CLMSD may specify and make part of each special purpose discharge permit specific pretreatment requirements or other terms and conditions determined by the CLMSD director to be appropriate to protect the CLMSD facilities, to comply with regulatory agencies' requirements, to ensure compliance with this chapter, and to assess user charges. (Ord. 872 §10.2, 2008)

13.20.680 Permit fee.

The special purpose discharge permit fee shall be paid by the applicant in an amount adopted by resolution of the CLMSD board. Payment of permit fees must be received by the CLMSD prior to issuance of either a new permit or a renewed permit. Each permittee shall also pay delinquent invoices in full prior to permit renewal. See Appendix B to the ordinance codified in this chapter. (Ord. 872 §10.3, 2008)

13.20.690 Permit modifications of terms and conditions.

- A. The terms and conditions of an issued special purpose discharge permit may be subject to modification and change in the sole determination by the CLMSD during the life of the permit based on:
 - 1. The user's current or anticipated operating data;
 - 2. The CLMSD's current or anticipated operating data;

3. Changes in the requirements of regulatory agencies;
4. A determination by the CLMSD director that such modification is appropriate to further the objectives of this chapter.

B. A permittee may request a modification to the terms and conditions of an issued permit. The request shall be in writing stating the requested change, and the reasons for the change. The CLMSD will review the request, make a determination on the request, and respond in writing.

C. A permittee will be informed of any changes in the permit at least forty-five days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance. (Ord. 872 §10.4, 2008)

13.20.700 Permit duration.

Special purpose discharge permits will be issued for a period not to exceed one year, but may be renewed as determined by the CLMSD director. Users seeking permit renewal shall comply with all provisions of this article. (Ord. 872 §10.5, 2008)

13.20.710 Discharge fees.

A charge for use to cover all costs of the CLMSD for providing sewerage service and monitoring will be established by the CLMSD director. A deposit determined by the CLMSD director to be sufficient to pay the estimated charges for use shall accompany the special purpose discharge permit application, and said deposit shall be applied to the charges for use. (Ord. 872 §10.6, 2008)

RESOLUTION NO. 2315 (2008)

RESOLUTION OF THE BOARD OF THE CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT ESTABLISHING FINES FOR VIOLATION OF THE FATS, OILS, AND GREASE PROGRAM

WHEREAS, pursuant to CLMSD Sewer Use and Pretreatment Ordinance Section 9.5 fines for violation of the Fats, Oils, and Grease Program must be adopted by the CLMSD Board by resolution; and

WHEREAS, the following requested fines will recover the costs for the services provided to administer the Program as well as provide a deterrent for future offense.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors of the City of Lakeport Municipal Sewer District does determine and order that the following fines be adopted for violations of the Fats, Oils and Grease Program:

1. Minor Violation	1 st Offense:	
	Failure to submit records:	\$ 50
	Inspection hindrance (equipment related)	\$ 50
	Failure to maintain on site records	\$ 50
	Failure to pump Grease & submit records	\$ 150
	2 nd Offense:	
	Failure to submit records:	\$ 100
	Inspection hindrance (equipment related)	\$ 100
	Failure to maintain on site records	\$ 100
	Failure to pump Grease & submit records	\$ 300
	3 rd Offense:	
	Failure to submit records:	\$ 150
	Inspection hindrance (equipment related)	\$ 150
	Failure to maintain on site records	\$ 150
	Failure to pump Grease & submit records	450
	4 th Offense & Up:	
Failure to submit records:	\$ 300	
Inspection hindrance (equipment related)	\$ 300	
Failure to maintain on site records	\$ 300	
Failure to pump Grease & submit records	\$ 1,000	
2. Intermediate Violation	Failure to maintain necessary equipment (T's, grease trap not watertight, baffles, etc.)	
	1 st Offense	\$ 150
	2 nd Offense	\$ 300
	3 rd Offense	\$ 500
	4 th Offense & Up	\$ 1,000

3. Major Violation	Source of sewer blockage (minimum)	\$ 500
	Source of sewer blockage (maximum)	\$25,000
	Source of sanitary sewer overflow (minimum)	\$ 1,000
	Source of sanitary sewer overflow (maximum)	\$ 25,000
	Falsification of maintenance records	\$ 1,000

DULY AND REGULARLY ADOPTED this 5th day of February, 2008, by the following vote:

AYES: Council Members Parmentier, Rumpfelt, Irwin, and Bertsch, and Mayor Bruns
 NOES: None
 ABSTAINING: None
 ABSENT: None


 WILLIS H. BRUNS, Mayor

ATTEST:

APPROVED AS TO FORM:


 JANEL M. CHAPMAN, City Clerk


 STEVEN J. BROOKES, City Attorney



CITY OF LAKEPORT
UTILITIES DIVISION POLICY

Subject: SEWER LATERAL CERTIFICATION PROGRAM	Policy Number: U-3	
	Date Adopted: 9/22/2008	Date Revised: 1/24/18

- Scope:** Applies to all personnel that are responsible for administering the permitting and/or inspection of private sewer laterals connected to the CLMSD system that are repaired, replaced or relined.
- Purpose:** Establish the roles and responsibilities of City staff regarding the issuance of Sewer Lateral Certificates of Compliance required by the Lakeport Municipal Code.
- Responsibility:** The Community Development Department shall be responsible for ensuring the Sewer Lateral Certificate of Compliance program is adhered to. Program success is also dependent on ongoing communication with the City's Utilities Division.

The Compliance Officer, Utilities Superintendent and/or Community Development Director shall be responsible for any future revisions to this policy.
- Reference:** City of Lakeport Utilities Division Policies. Yardshare Network location: <Y:\Utilities\Policies\Current Policies>

BACKGROUND:

City Ordinance No. 872 was adopted in 2008 and established minimum standards for private sewer lateral repair and replacement. The regulations were codified in Chapter 13.20 (Sewer Use and Pretreatment) of the Lakeport Municipal Code (LMC).

The goal of the regulations is to ensure the City's sanitary sewer system is adequately maintained, including programs designed to reduce the inflow and infiltration of groundwater and stormwater into the City's sewer/wastewater flows.

This policy is written to accomplish the following:

1. Establish roles and responsibilities for the administration of the Sewer Lateral Certification Program ("Program").
2. Provide guidelines for the effective administration of Program certificates and the cleaning, inspection, and testing of private sewer laterals.

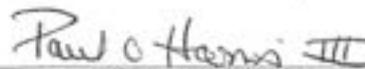
POLICY:

1. The Building Official or designee is responsible for administering the Sewer Lateral Certification Program for privately owned portions of sewer laterals that are connected to the CLMSD sanitary sewer collection system.
2. Any building or plumbing permit application for a remodel of, or improvement to, a structure being served by a private sewer lateral(s) in excess of \$57,446 or other inflation-adjusted amount as determined by the City, whichever is greater; any change of use of a property; or any other "property events" stipulated in LMC Section 13.20.320 F.1 shall be subject to cleaning, inspection, and testing of the private sewer lateral(s) and the issuance of a Sewer Lateral Certificate.
3. The Building Official or Utilities Superintendent may require the cleaning, inspection, and testing of a private sewer lateral if such action is deemed by that individual to be for the protection of the public health, safety, or welfare.
4. Private sewer laterals that are found to be in need of repair or replacement by the City must be cured before a building or plumbing permit for the property owner ("User") expires.
5. The Building Official or Utilities Superintendent may grant an exemption to the testing and inspection provisions of the Ordinance, pursuant to LMC Section 13.20.320 F. 4.
6. Residential private sewer laterals that fail inspection and testing must be repaired or replaced by the User within 180 days of notice. Nonresidential private sewer laterals (i.e. commercial, industrial, etc.) must be repaired or replaced within sixty (60) days of notice or sooner, if determined necessary by the Building Official or Utilities Superintendent.
7. The Building Official shall not commission inspection and/or testing on a private sewer lateral without receipt of the current inspection and testing fee by the User. Inspections and tests performed as a result of "property events" not described in LMC Section 13.20.320 F.1 are exempt from the fee.
8. Any User may ask the Department to have their private lateral to be inspected and tested by the City. Such inspections shall be coordinated with the Utilities Division and completed within thirty (30) days from receipt of the inspection and testing fee.

PROCEDURE:

1. In addition to any other required fees, a Sewer Lateral Testing Permit fee will be collected from applicants submitting a building or plumbing permit application.
2. The permit fee shall also be collected at the time an application is received for a new connection to the sewer system or to recognize a change in the use of a property.
3. Upon receipt of a building or plumbing permit application triggering the need for a Sewer Lateral Certificate, the Building Official shall notify the Utilities Division and shall commission an inspection of the associated private sewer lateral(s) or grant an exemption.
4. Pursuant to LMC Section 13.20.320 F., private sewer laterals that pass inspection and testing shall be certified for ten (10) years or twenty-five (25) years by the City. The City shall execute a Sewer Lateral Certificate of Compliance to the User and file a copy with the Community Development Department and the Utilities Division, and recorded with the Lake County Recorder.
5. The Building Official or designee shall notify the property owner of the results of the sewer lateral inspection.
6. The Community Development Department shall retain a copy of the completed Inspection and Testing Report Form, attached hereto as Attachment A.

Policy reviewed and approved by:



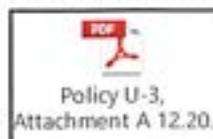
Paul Harris
Utilities Superintendent

Date 1/29/18

**ATTACHMENT A
UTILITIES DIVISION POLICY U-3
SEWER LATERAL CERTIFICATION PROGRAM**

Inspection and Testing Report Form

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Attachment A will be attached on following pages.



City of Lakeport Municipal Sewer District

SEWER LATERAL INSPECTION AND TESTING REPORT FORM

PROPERTY INFORMATION			
Address:			
Property use:	Residential	Commercial	Industrial
Owner name:			
Mailing address:			
Phone:	Street	City	State/Zip

INSPECTION AND TESTING DETAIL
Inspection date:
Structural Diagram:

Property Address: _____

[Empty rectangular box for drawing or notes]

Inspection
type:

Testing
details:

Comments:

Property Address: _____

Test results: Pass Fail Inconclusive

Review

Inspected and tested by: _____

Name (printed): _____

Date: _____

City Review: _____ Date: _____



CITY OF LAKEPORT
UTILITIES DIVISION POLICY

Subject: FOG PROGRAM: VARIANCES	Policy Number: U-4	
	Date Adopted: 9/22/2008	Date Revised: 1/25/18

- Scope:** Applies to all personnel that are responsible for administering the provisions of the City’s Fats, Oils and Grease (FOG) Program (LMC Sections [13.20.600](#) et seq.).
- Purpose:** Establish guidelines and procedures to be followed during the processing and review of requests for Variances of the FOG requirements set forth in the Lakeport Municipal Code.
- Responsibility:** The Utilities Division shall be primarily responsible for the review and final determination of requests for Variances of the FOG requirements. Initial Variance application and fee intake and review will likely be the responsibility of the Community Development Department due to preexisting contact with Food Service Establishments.

The Compliance Officer, Utilities Superintendent and/or Community Development Director shall be responsible for any future revisions to this policy.
- Reference:** City of Lakeport Utilities Division Policies. Yardshare Network location: [Y:\Utilities\Policies\Current Policies](#)

BACKGROUND:

[Lakeport Municipal Code \(LMC\) Section 13.20.610](#) requires all food service establishments (“FSEs”) within the City of Lakeport Municipal Sewer District to take measures to prevent the discharge of materials that can inhibit the function of, or cause damage to, the sanitary sewer system. Such measures include the installation and maintenance of a grease interceptor to prevent the discharge of fats, oil and grease into the sanitary sewer system. These requirements are components of the City’s FOG Program.

FSE owners or authorized representatives (“Users”) may submit a Variance for Cause request to the City if they feel their situation warrants exception to the requirements. Full details regarding the FOG variance process (applications, review, approval/denial, revocation, appeals, etc.) are set forth in [LMC Section 13.20.650](#).

This policy is written to accomplish the following:

1. Establish guidelines for the review and judgment of a Variance for Cause to vary from the requirements LMC Section 13.20.610; and
2. Establish guidelines for the review and judgment of a Variance for Cause request for grease interceptor installation as set forth in LMC Section 13.20.650
3. Establish procedures which the Department and the public should follow when requesting a variance.

POLICY:

1. The Utilities Superintendent (“Superintendent”), or his/her designee, shall make judgment on any Variance Study, resulting from a Variance for Cause request by an entity subject to the Fog Program.
2. The Superintendent may approve or deny a Variance for Cause request at his/her discretion.
3. The Superintendent or designee shall be available by appointment to speak with any affected User about issues related to the FOG Program.
4. From date of approval of a Variance for Cause request, and receipt of the \$500.00 Variance Study fee, the City shall make every reasonable effort to complete a Variance Study and make a judgment on the necessity or feasibility of complying with any part of LMC Section 13.20.610 within ninety (90) days.
5. A Variance Study may be terminated at any time if it is determined that continuation of the Study adversely affects the sanitary sewer collection system or treatment works (LMC Section 13.20.650 A. 2.).
6. Per District Resolution No. 2316 (2008), the \$500.00 Variance Study fee is non-refundable.
7. Unless sufficient evidence can be found that the FOG Program requirements create an unreasonable hardship, the Superintendent may deny a Variance for Cause request at his discretion.
8. The Superintendent or designee is responsible to commission and complete variance studies.
9. The Superintendent or designee may approve any variance at his/her discretion based on the results of the Variance Study.

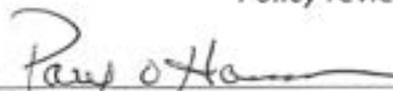
10. Users requesting a variance from the FOG Program must submit a Variance for Cause Request Form within six (6) months of receipt of notice to install a grease interceptor. If a variance is not granted by the Superintendent or his/her designee, the FSE shall have six (6) months from the date of the variance denial notice to comply with the FOG requirements.
11. Users may petition the Superintendent, or his/her designee, to reconsider a decision by the Compliance Officer to deny a variance, if submitted in writing within thirty (30) days of the notice of variance denial.
12. The Superintendent, or his designee, may deny a petition to reconsider a variance decision by not acting on the petition (LMC Section 13.20.650 D. 4.).
13. Granted variances are effective in perpetuity from the date granted by the Superintendent or his/her designee.
14. Any granted variance may be revoked by the Utilities Superintendent at the recommendation of the Compliance Officer, based on one or more of the criteria detailed in LMC Section 13.20.650 C.

PROCEDURE:

1. Variance for Cause requests must be submitted to the City in writing using the Variance for Cause Request Form, attached hereto as Attachment A. The form shall be made available at the Community Development Department at City Hall.
2. Upon receipt of a Variance for Cause Request Form, it shall be date-stamped immediately, entered into the appropriate tracking software application, and submitted to the Utilities Superintendent for review. The Superintendent, or designee, shall have thirty (30) days from receipt of the Form to approve or deny the request.
3. Following approval or denial of a Variance for Cause request, the requesting party shall be notified of the decision in writing by the Utilities Division. If the request is approved, a Consent to a Variance Study Form, attached hereto as Attachment B, will be included with the notice. It must be signed and returned to the Superintendent by the User with the \$500.00 Variance Study fee before the Study is commissioned. If the request is denied, an explanation must be included in the notice.
4. Per District Resolution No. 2316 (2008), a fee of \$500.00 must be collected from the User before a Variance Study is commissioned.
5. Upon receipt by the Utilities Division of a Consent to a Variance Study Form, and the \$500.00 Variance Study fee, it shall be date-stamped immediately and submitted to the Utilities Superintendent for review. The Superintendent or designee shall commission the study, assign a study number, and is responsible for its completion.
6. A Variance Study shall consist of the completion of a Variance Study Report Form, attached hereto as Attachment C. The Report requires comments from the Compliance Officer, City Building Inspector, and a County Health Inspector or representative from the Lake County Environmental Health Department. Additional comments may be required at the discretion of the Superintendent. Unless justified, a granted variance will require the approval of the Utilities Superintendent, City Building Inspector, and County Environmental Health official.

7. In the event that the Utilities Superintendent, Building Inspector, or County Environmental Health official is unable to complete their component of a Variance Study, the Superintendent may waive that component or assign it to another reviewer for comment.
8. The Utilities Superintendent shall be responsible for conducting Variance Studies and passing judgment no later than sixty (60) days after the Department receives the Consent to a Variance Study Form and \$500.00 Variance Study Fee.
9. Variance Studies submitted to the Superintendent, or his designee, for review may include a staff report detailing the background and condition of the case in question.
10. The Utilities Superintendent, or his/her designee, shall make judgment on a Variance for Cause request no later than thirty (30) days from receipt of a fully completed Variance Study.
11. A notice shall be sent to the User from the Utilities Division indicating the decision whether to grant or deny a variance, the results of the variance study, and the reasons why a variance was granted or denied.
12. If denied a variance, a User may petition the Superintendent, or his designee, to reconsider the variance decision. A "Petition for Reconsideration of Determination or Enforcement Action" form, attached hereto as Attachment D, must be submitted to the Utilities Division within thirty (30) days of the notice of variance denial. The Form should be date-stamped immediately, entered into the appropriate tracking software application, and submitted to the Superintendent for review.

Policy reviewed and approved by:



Paul Harris
Utilities Superintendent

Date 1/29/18

**ATTACHMENTS A through D
UTILITIES DIVISION POLICY U-4
FOG Program Variances**

MS Word Document: Double-click the area below to open .PDF file.



.PDF File: Attachments A through D will be attached on following pages.



CITY OF LAKEPORT
UTILITIES DIVISION POLICY

Subject: SEWER USAGE: NOTICES, PENALTIES, FINES AND FEES	Policy Number: U-6	
	Date Adopted: 3/15/2010	Date Revised: 1/25/2018

- Scope:** Applies to all personnel that are responsible for administering and enforcing the provisions of Lakeport Municipal Code (LMC) Chapter 13.20 (Sewer Use and Pretreatment).
- Purpose:** Establish guidelines and procedures for the imposition of enforcement actions related to LMC Chapter 13.20.
Establish the roles and responsibilities of City staff involved in enforcement actions.
- Responsibility:** The Utilities Division shall be primarily responsible coordinating enforcement actions associated with violations of LMC Chapter 13.20.
The Compliance Officer and/or Utilities Superintendent shall be responsible for any future revisions to this policy.
- Reference:** City of Lakeport Utilities Division Policies. Yardshare Network location: <Y:\Utilities\Policies\Current Policies>

BACKGROUND:

City Ordinance No. 872 was adopted in 2008 and established a variety of regulations associated with the use of the City's sanitary sewer system. The regulations were codified in Chapter 13.20 (Sewer Use and Pretreatment) of the Lakeport Municipal Code (LMC).

The goal of the regulations is to ensure the City's sanitary sewer system is adequately maintained, including enforcement programs designed to correct and penalize system Users who do not comply with the adopted provisions. This policy is written to accomplish the following:

1. Establish guidelines and procedures for the imposition of enforcement actions related to LMC Chapter 13.20.
2. Establish the roles and responsibilities of City staff involved in enforcement actions.

POLICY:

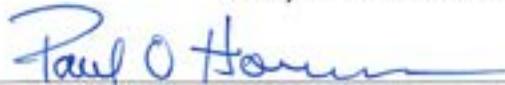
1. All penalties, fines, and fees imposed on any User are due and payable upon receipt of written notice by the City. Such amounts will be delinquent thirty (30) days after the date of the notice (LMC 13.20.560 A.).
2. Fines related to the City's FOG Program shall be in accordance with the current applicable City Council Fee Resolution, attached hereto as Attachment A.
3. The Utilities Superintendent shall be responsible for the imposition of notices, penalties, fines, and fees in accordance with LMC Chapter 13.20.
4. In response to identified violations of LMC Chapter 13.20 by any User, the enforcement mechanisms available to the Utilities Superintendent shall typically be applied in the following order:
 - a. Informal administrative action (including Notices of Violation and Warning Notices).
 - b. Administrative orders, compliance schedules, and other reports.
 - c. Imposition of fines and fees for noncompliance with LMC provisions.
 - d. Imposition of penalties for noncompliance with administrative orders.
 - e. Assessment of charges for obstruction or damage to City facilities or operations.
 - f. Suspension or termination of services.
 - g. Civil action.
 - h. Criminal action.
5. The Utilities Superintendent may apply the enforcement mechanisms available in the LMC in any order, as circumstances warrant.
6. The City will charge any User for the cost of repair of City facilities that are damaged as a result of a User's noncompliance with the provisions of LMC Chapter 13.20.
7. Any User may petition the Utilities Superintendent to reconsider any enforcement action detailed herein or in LMC Chapter 13.20.
8. The Utilities Superintendent shall reconsider an enforcement action only once per instance of non-compliance per property. A User shall not be permitted to appeal, or file a

petition for reconsideration of, every enforcement action levied against them for each instance of non-compliance in an attempt to delay or diminish the City's ability to enforce the provisions of LMC Chapter 13.20.

PROCEDURE:

1. Within seven (7) days of identifying a violation of LMC Chapter 13.20, the Utilities Superintendent or designee shall issue a Warning Notice to the User, instructing them of their responsibility to correct the issue(s) causing the violation.
2. If curative action has not been taken by the User, or if the Utilities Superintendent has not received notice from the User of their intention to address the violation within thirty (30) days of receipt of the Warning Notice, the Utilities Superintendent or designee shall issue a Notice of Violation ("NOV") to the User.
3. If the User has not taken curative action within thirty (30) days of receipt of an NOV, the Utilities Superintendent or designee shall issue an Administrative Order to the User, which shall contain a compliance schedule for curative action and any other requirements deemed appropriate by City staff.
4. If the User has not completed curative action (as outlined in the compliance schedule of the NOV) within the time period described therein, the Compliance Officer shall assess fees, fines, and penalties, pursuant to LMC Chapter 13.20. Such assessment will include a written notice stating the nature of the enforcement action being taken.
5. Any fees, fines, or penalties that remain outstanding after ninety (90) days will be cause for the suspension or termination of services, at the discretion of the Utilities Superintendent.
6. If the User is unresponsive to the aforementioned enforcement action, the Utilities Superintendent shall recommend to the Public Works Director or City Manager that civil and/or criminal action be taken.
7. In the event that a User petitions the Utilities Superintendent for reconsideration of a decision or enforcement action, the User must submit such a request to the Utilities Division in writing, using the "Petition for Reconsideration of Determination or Enforcement Action" form, attached hereto as Attachment B, within fifteen (15) days of notice of said decision or enforcement action. The Utilities Superintendent or designee shall review the petition and render a decision within fifteen (15) days of its receipt. The User may appeal the decision to the CLMSD Board of Directors within ten (10) days of subsequent notification, if the User has followed the appeal protocols outlined herein.
8. City staff shall agendize properly filed appeal requests to the CLMSD Board of Directors within forty-five (45) days of the date the request was filed. The Board will have fifteen (15) days from the date of the subsequent hearing to render a decision.

Policy reviewed and approved by:



Paul Harris
Utilities Superintendent

Date 4/29/18

ATTACHMENT A
UTILITIES DIVISION POLICY U-6
Sewer Usage: Notices, Penalties, etc.

City Council Resolution No. 2315 (2008)

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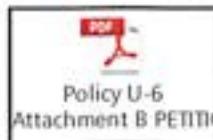


.PDF File/hard copy: Attachment A will be attached on following pages.

ATTACHMENT B
UTILITIES DIVISION POLICY U-6
Sewer Usage: Notices, Penalties, etc.

Petition for Reconsideration of Determination or Enforcement Action

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Attachment B will be attached on following pages.

ATTACHMENT A

RESOLUTION NO. 2315 (2008)

RESOLUTION OF THE BOARD OF THE CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT ESTABLISHING FINES FOR VIOLATION OF THE FATS, OILS, AND GREASE PROGRAM

WHEREAS, pursuant to CLMSD Sewer Use and Pretreatment Ordinance Section 9.5 fines for violation of the Fats, Oils, and Grease Program must be adopted by the CLMSD Board by resolution; and

WHEREAS, the following requested fines will recover the costs for the services provided to administer the Program as well as provide a deterrent for future offense.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors of the City of Lakeport Municipal Sewer District does determine and order that the following fines be adopted for violations of the Fats, Oils and Grease Program:

1. Minor Violation

1st Offense:

Failure to submit records:	\$ 50
Inspection hindrance (equipment related)	\$ 50
Failure to maintain on site records	\$ 50
Failure to pump Grease & submit records	\$ 150

2nd Offense:

Failure to submit records:	\$ 100
Inspection hindrance (equipment related)	\$ 100
Failure to maintain on site records	\$ 100
Failure to pump Grease & submit records	\$ 300

3rd Offense:

Failure to submit records:	\$ 150
Inspection hindrance (equipment related)	\$ 150
Failure to maintain on site records	\$ 150
Failure to pump Grease & submit records	450

4th Offense & Up:

Failure to submit records:	\$ 300
Inspection hindrance (equipment related)	\$ 300
Failure to maintain on site records	\$ 300
Failure to pump Grease & submit records	\$ 1,000

2. Intermediate Violation

Failure to maintain necessary equipment
(T's, grease trap not watertight, baffles, etc.)

1 st Offense	\$ 150
2 nd Offense	\$ 300
3 rd Offense	\$ 500
4 th Offense & Up	\$ 1,000

ATTACHMENT A

3. Major Violation	Source of sewer blockage (minimum)	\$ 500
	Source of sewer blockage (maximum)	\$25,000
	Source of sanitary sewer overflow (minimum)	\$ 1,000
	Source of sanitary sewer overflow (maximum)	\$ 25,000
	Falsification of maintenance records	\$ 1,000

DULY AND REGULARLY ADOPTED this 5th day of February, 2008, by the following vote:

AYES: Council Members Parmentier, Rumfelt, Irwin, and Bertsch, and Mayor Bruns
NOES: None
ABSTAINING: None
ABSENT: None


WILLIS H. BRUNS, Mayor

ATTEST:


JANEL M. CHAPMAN, City Clerk

APPROVED AS TO FORM:


STEVEN J. BROOKES, City Attorney



City of Lakeport Municipal Sewer District

PETITION FOR RECONSIDERATION OF DETERMINATION OR ENFORCEMENT ACTION

PLEASE COMPLETE CONTACT AND PROPERTY INFORMATION IN THEIR ENTIRETY. IF YOU DO NOT RECEIVE A RESPONSE TO THIS PETITION WITHIN 15 DAYS, PLEASE CONSIDER THE PETITION DENIED.

Contact Information	
Name: _____	Phone: _____
Street: _____	Mobile Phone: _____
City: _____	Email: _____
State: _____	
Zip: _____	

Facility/Property Information	
Residential	Commercial
Address: _____	Name of Restaurant/Food Service Establishment: _____
Owner 1: _____	Address: _____
Owner 2: _____	Owner: _____
	Manager: _____

Enforcement Information (to be completed by Department staff)
Case Number: _____
Variance Study Number: _____
Incident Description:
Enforcement Action Taken:

Property Address: _____

Justification for Reconsideration:

Property Address: _____

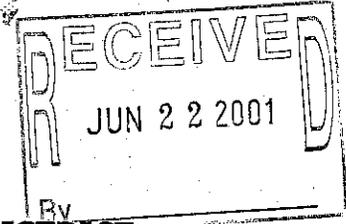
FOR DEPARTMENT USE ONLY	
Received By:	DATE STAMP HERE

DEPARTMENT APPROVAL			
Approved	<input type="checkbox"/>		
Modified	<input type="checkbox"/>	(see directive below, if box is checked)	
Denied	<input type="checkbox"/>		
	Date	Signature	Title

Comments/Directive:

AMENDMENT NO. 3

to
AGREEMENT
between



CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT
and
LAKE COUNTY SANITATION DISTRICT

This Amendment No. 3 dated June 5, 2001 modifies that Agreement dated September 12, 1995 by and between CLMSD and LACOSAN regarding mutually provided sewer service for the North Lakeport area and Unincorporated South Lakeport Area.

WHEREAS, CLMSD and LACOSAN have previously executed the above referenced Agreement and Amendments 1 and 2 to that Agreement which provides for the acceptance and treatment of sewage flows from Assessment Districts 9-1, 9-3 and certain Big Valley Indian Rancheria Lands, and

WHEREAS, LACOSAN desires to provide additional sewer service to certain Big Valley Indian Rancheria Lands for a noncommercial community center building as shown on Exhibit "H", and

WHEREAS, CLMSD is willing to accept and treat sewage flows from the Rancheria Lands shown on Exhibit "H" subject to certain conditions.

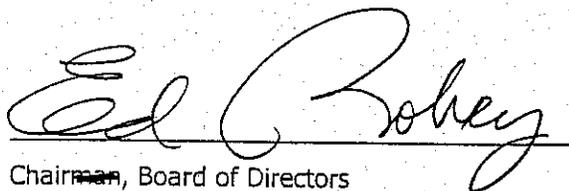
NOW, THEREFORE, based on the above recitals, CLMSD and LACOSAN agree as follows:

1. Add to the End of Section 1 of the Agreement Dated September 12, 1995, the Following Conditions:

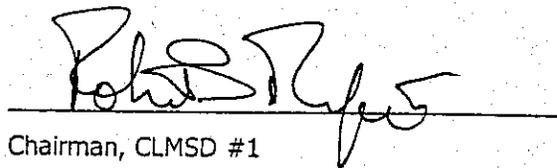
- 11. CLMSD agrees to accept and treat sewage flows from the single parcel of the Big Valley Indian Rancheria as shown on Exhibit "H" which is attached hereto and made a part of this Agreement.
- 12. LACOSAN agrees that no sewage connections will be made to the parcel until capacity expansion fees in the amount of \$15,500 have been paid to CLMSD.
- 13. LACOSAN agrees to monitor and to take steps necessary to insure that the sewage flow from APN 08-006-02 as shown on Exhibit "H" does not exceed an average of 500 gallons per day in any single month and, that the character of the sewage from

the parcel shall be equivalent to that from 2.5 type single family dwellings in CLMSD.

IN WITNESS WHEREOF, the parties hereto have executed this agreement on the day and year first above written.



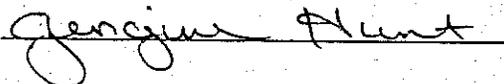
Chairman, Board of Directors
LACOSAN

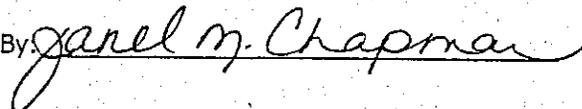


Chairman, CLMSD #1

ATTEST: Kelly F. Cox
Clerk to the Board of Supervisors

ATTEST: Janel M. Chapman
City Clerk

By: 

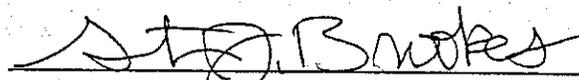
By: 

APPROVED AS TO FORM:

APPROVED AS TO FORM:



CAMERON L. REEVES
County Counsel



STEVEN J. BROOKES
City Attorney

Attachment - Exhibit "H"



File

SECOND AMENDMENT TO AGREEMENT BETWEEN THE LAKE COUNTY
SANITATION DISTRICT AND THE CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT

This amendment to the AGREEMENT is made and entered into this
5th day of June, 2001, between Lake County Sanitation
District, hereinafter referred to as "LACOSAN", and The City of Lakeport Municipal Sewer
District, hereinafter referred to as "CLMSD".

WHEREAS, the parties hereto have previously entered into an Agreement
dated September 12, 1995 for the purposes of providing mutual sewage treatment and
disposal services, and

WHEREAS, the Agreement dated September 12, 1995 was modified by
Amendment 1 approved by LACOSAN and CLMSD in October 1995 to adjust the
boundary of lands served by LACOSAN to include those lands shown in Exhibit "G" of
said Amendment 1; and

WHEREAS, the LACOSAN Northwest Regional Wastewater Treatment
system is currently under a Cease and Desist Order issued by the Central Valley
Regional Water Quality Control Board in 1994, amended in 1996, to correct treatment,
storage, and disposal capacity; and

WHEREAS, said existing Agreement identifies the construction of new
facilities for expansion/additional capacity; and

WHEREAS, LACOSAN has completed the environmental review, finalized
plans and obtained bids for the facility expansion to correct capacity deficiencies and to
accept the sewage flows from the northern portion of CLMSD, and

WHEREAS, LACOSAN has received approval for a six million dollar (\$6,000,000) State Water Resources Control Board (SWRCB) loan to finance the construction of the facility expansion improvements (Basin 2000 Project); and

WHEREAS, the SWRCB loan requires an identified revenue source to demonstrate that the loan can be repaid, and

NOW, THEREFORE, it is mutually agreed by the parties hereto that the September 12, 1995 Agreement is amended as follows:

1. Add to the End of Section II of the Agreement Dated September 12, 1995, the Following Conditions:

12. CLMSD agrees to pay LACOSAN a fee of \$2.00 each month for a replacement fund contribution for each RUE that CLMSD has in the area shown in Exhibit "E" (of the 9/12/95 Agreement), including existing and future accounts. The fee shall be paid to LACOSAN by CLMSD quarterly.

13. CLMSD agrees to pay to LACOSAN a fee of \$7.50 each month for the pro-rata repayment of the \$6,000,000 SWRCB loan for the Basin 2000 Project cost for each RUE that CLMSD has in the area shown in Exhibit "E", including existing and future accounts. The fee shall be paid to LACOSAN by CLMSD quarterly.

14. CLMSD and LACOSAN agree that the schedule for payment of the fees described in numbers 12. and 13. above in this Section shall commence on the following dates:

- A. For the RUEs located in the area shown in Exhibit "E" that are currently flowing by gravity to LACOSAN, payment by CLMSD to LACOSAN shall begin immediately after adoption of the proposed CLMSD rate increase which provides for those fees.
 - B. For the remaining CLMSD RUEs located in the area shown in Exhibit "E", whose sewer flow is currently being pumped south to the CLMSD treatment facilities, payment by CLMSD to LACOSAN shall begin after the Basin 2000 Project is completed, becomes fully operational, and, in addition, after the adoption of the proposed CLMSD rate increase which provides for those fees.
15. CLMSD and LACOSAN agree that the loan repayment fee shall continue until the \$6,000,000 SWRCB loan is paid off. For RUEs described in 14.A. and 14.B. above CLMSD agrees that the total number of payments to be made shall be equal to the number of payments made for similar accounts in the LACOSAN service area.
16. LACOSAN agrees that the \$7.50/mo. loan repayment fee shall discontinue when the \$6,000,000 SWRCB loan is repaid. The estimated time that the loan repayment fee will be in place is approximately 20 years.
17. LACOSAN agrees that any additional funding obtained by LACOSAN to help pay for the \$6,000,000 SWRCB loan for the Basin 2000 Project shall be used to uniformly reduce the loan repayment amount for both LACOSAN and CLMSD customers.

18. CLMSD agrees that an audit shall be prepared by CLMSD each quarter and submitted to LACOSAN that provides and certifies the following information:

- A. The average number of total RUEs in the area shown in Exhibit "E" for which the \$9.50/mo. is collected.
- B. The total amount collected for the quarter in the area shown in Exhibit "E" for the purposes of repaying the loan.
- C. The total amount collected for the quarter in the area shown in Exhibit "E" for the purposes of contributing to the LACOSAN replacement fund.
- D. The total amount to be paid to LACOSAN for both loan repayment and the replacement fund for the quarter.

19. LACOSAN agrees that an audit shall be prepared by LACOSAN each quarter and submitted to CLMSD that provides and certifies the following information:

- A. The average number of RUEs in the LACOSAN service area (not counting those located in the area delineated in Exhibit "E") served by the Basin 2000 Project for which the loan repayment amount is collected.
- B. The total amount collected from the LACOSAN customers (excluding those located in the area delineated in Exhibit "E") for the purpose of the \$6,000,000 SWRCB loan repayment.

C. The total amount to be paid to the SWRCB (including the contribution from those located in the area delineated in Exhibit "E") for the repayment of the \$6,000,000 SWRCB loan.

20. LACOSAN agrees that all loan repayment revenues received from existing and new services shall be used for the sole purpose of retiring the loan.

2. Delete Section III.2. of the Agreement Dated September 12, 1995, and Replace it With the Following:

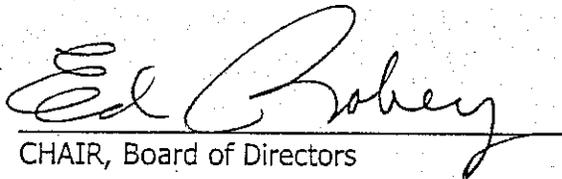
~~2. The term of this Agreement shall be twenty-five (25) years from the date of execution of this Amendment 2 by both parties.~~

Ends 6/6/2026

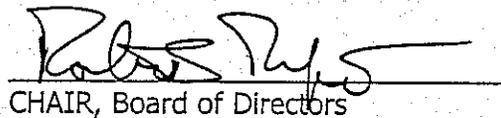
Except as specifically modified herein, all other terms and conditions of the September 12, 1995 Agreement and Amendment 1 thereto shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

LAKE COUNTY SANITATION DISTRICT

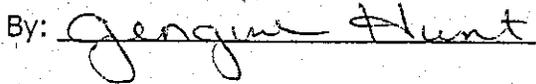

CHAIR, Board of Directors

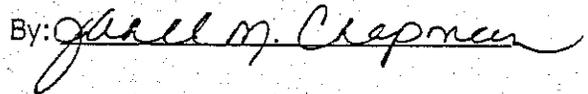
CITY OF LAKEPORT MUNICIPAL
SEWER DISTRICT


CHAIR, Board of Directors

ATTEST: Kelly F. Cox
Clerk of the Board of Supervisors

ATTEST: Janel M. Chapman
City Clerk

By: 

By: 

APPROVED AS TO FORM
Cameron L. Reeves, County Counsel



APPROVED AS TO FORM
Steven J. Brookes, City Attorney

By: 



**AMENDMENT NO. 1
TO
AGREEMENT
Between
CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT
and
LAKE COUNTY SANITATION DISTRICT**

This Amendment No. 1 modifies that Agreement dated September 12, 1995 by and between CLMSD and LACOSAN regarding mutually provided sewer service for the North Lakeport area and Unincorporated South Lakeport Area.

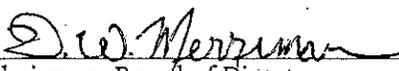
WHEREAS, CLMSD and LACOSAN have previously executed the above referenced Agreement which included Exhibit "E" describing the boundaries for CLMSD and LACOSAN's modified North Lakeport service areas; and

WHEREAS the service area to be detached from CLMSD and annexed to LACOSAN is depicted on Exhibit "F" inadvertently excluded an area that should have been depicted on Exhibit F; and

WHEREAS, the parties desire to correctly depict the additional CLMSD service area which is to be detached from CLMSD and served by LACOSAN under the terms of the September 12, 1995 Agreement.

NOW, THEREFORE, based on the above recitals, CLMSD and LACOSAN agree that Exhibit "G" is hereby added to the above referenced Agreement to correctly depict the land areas referred to in the original Exhibits E & F and the contractual terms are fully applicable to same, just as if said Exhibit "G" had been originally made a part of the September 12, 1995 Agreement.

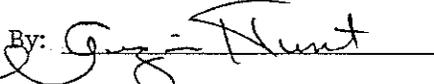
IN WITNESS WHEREOF, the parties hereto have executed this agreement on the day and year first above written.

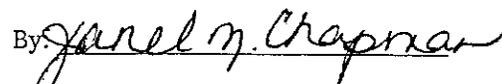

Chairman, Board of Directors
LACOSAN


Chairman, CLMSD #1

ATTEST: Kelly F. Cox
Clerk to the Board
of Supervisors

ATTEST: Janel M. Chapman
City Clerk

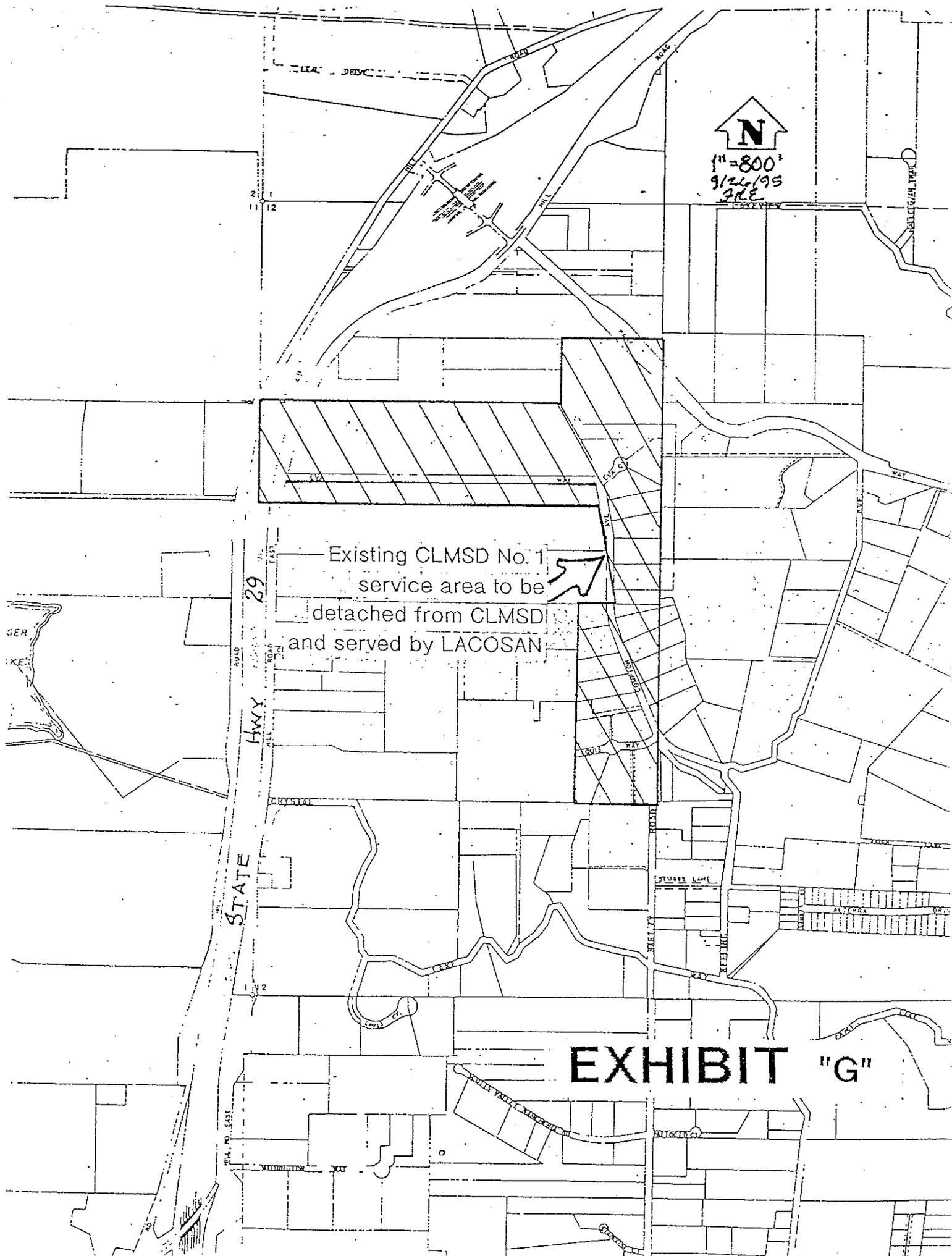
By: 
APPROVED AS TO FORM:

By: 
APPROVED AS TO FORM:


CAMERON L. REEVES
County Counsel


STEVEN J. BROOKES
City Attorney





N
1" = 800'
9/26/95
JRE

Existing CLMSD No. 1
service area to be
detached from CLMSD
and served by LACOSAN

29

HWY

STATE

EXHIBIT "G"

THE WITHIN INSTRUMENT IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE.

ATTEST: *Barbara A. Sarat, Deputy*

CITY CLERK AND EX OFFICIO CLERK OF THE CITY COUNCIL OF THE CITY OF LAKEPORT STATE OF CALIFORNIA.

**AGREEMENT
Between**

**CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT
and
LAKE COUNTY SANITATION DISTRICT
REGARDING MUTUALLY PROVIDED SEWER SERVICES
FOR THE NORTH LAKEPORT AREA
AND THE UNINCORPORATED SOUTH LAKEPORT AREA**

THIS Agreement is entered into on this 12th day of September, 1995 by and between the CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT, hereinafter referred to as 'CLMSD' and the LAKE COUNTY SANITATION DISTRICT, hereinafter referred to as 'LACOSAN'.

WITNESSETH

WHEREAS, LACOSAN owns and operates a regional sewage collection, transport, treatment, storage and disposal facility known as the Northwest Regional facility; and

WHEREAS, CLMSD owns and operates a regional sewage collection, transport, treatment, storage and disposal facility known as the City of Lakeport Regional Facility; and

WHEREAS, LACOSAN has been accepting and treating sewage flows from the northern portion of CLMSD since about January 1978; and

WHEREAS, CLMSD desires to have LACOSAN continue to receive and treat sewage flows from a northern portion of its service area; and

WHEREAS, CLMSD owns sewage collection and transport facilities that serve the Unincorporated South Lakeport Area including Assessment District 9-1, Assessment District 9-3 and 16 parcels of land on the Big Valley Indian Rancheria; and

WHEREAS, CLMSD has been accepting and treating sewage flows from the Unincorporated South Lakeport Area since about December 1985; and

WHEREAS, previous Agreements between CLMSD and LACOSAN dated December 11, 1984, February 3, 1986, and December 11, 1975 provide for the mutual acceptance and treatment of sewage flows to/from CLMSD and LACOSAN.

WHEREAS, LACOSAN desires to have CLMSD continue to receive and treat sewage flows from the Unincorporated South Lakeport Area.

NOW, THEREFORE, BASED ON THE ABOVE RECITALS, CLMSD AND LACOSAN AGREE AS FOLLOWS:

I. IN REGARD TO THE LACOSAN SEWAGE FLOWS COMING FROM THE UNINCORPORATED SOUTH LAKEPORT AREA GOING TO CLMSD:

1. CLMSD agrees to accept and treat sewage flows from Assessment District 9-1, Assessment District 9-3 and the 16 parcels on the Big Valley Indian Rancheria as shown on Exhibits "A" "B" and "C" respectively and which are attached hereto and made a part of this agreement. LACOSAN agrees that no sewage connections will be made to any parcels referred to above until all applicable capacity expansion fees have been paid.
2. LACOSAN agrees to furnish and install, at a mutually acceptable location, a flow measuring and recording device to accurately measure and record the sewage flows originating in the LACOSAN service areas. The flow measuring and recording device shall be operated and maintained by LACOSAN.

A portion of LACOSAN'S service area contributes flow in the area served by CLMSD. An estimate of LACOSAN'S flows entering CLMSD'S service area downstream from the LACOSAN flow measurement and recording device will be estimated and the quantity agreed upon between LACOSAN and CLMSD. Downstream flow measuring and recording devices located in the CLMSD service area shall be operated and maintained by CLMSD.

The measurement of the sewage flow rates and volumes shall be by methods, and at locations, mutually acceptable to both parties.

3. It is agreed that in the event of CLMSD'S annexation of any portion of the LACOSAN'S service area, that CLMSD shall relocate, at its expense, the flow measuring and recording device to the new interface between CLMSD and LACOSAN service areas. Said device shall be placed at a mutually agreeable location.
4. LACOSAN agrees to monitor and take steps to insure the sewage flows from each of the 16 Rancheria parcels shown on Exhibit "C" do not exceed the flows from an average single family dwelling. The sewage flow from an average single family dwelling is established as 210 gallons per day for the purposes of this Agreement.
5. LACOSAN agrees to pay CLMSD the proportionate costs of operation, replacement and maintenance of that portion of the CLMSD collection system, force mains, pump stations, treatment and disposal facilities as shown below.

<u>Facility</u>	<u>Basis for LACOSAN Share of Total Operation, Maintenance and Replacement Costs</u>
Lakeport Boulevard Pump Station	Prorata percentage based on flow measurements
Larrecou Lane Pump Station	Prorata percentage based on flow measurements
Linda Lane Pump Station	Prorata percentage based on flow measurements
Collection System and Force Mains That Carry LACOSAN Flows	Prorata percentage based on flow measurements
Treatment and Disposal Facility	Prorata percentage based on flow measurements

The proportionate costs shall be based on the percentage of flows from LACOSAN and said payment shall be made on a quarterly basis.

All one time expenditures which amount to a total aggregate cost of more than \$5000.00 to LACOSAN in any single budget year shall require prior approval by LACOSAN.

6. LACOSAN agrees to pay CLMSD the proportionate share of CLMSD'S administrative costs (less costs of customer billing) for the sewage transport, treatment and disposal facilities on the basis of LACOSAN flow compared to the total CLMSD flows and said payment shall be made on a quarterly basis.
7. LACOSAN agrees to collect and pay to CLMSD the CLMSD capacity Expansion Fees as the services in the south Lakeport area, as shown on Exhibits "A", "B" and "C", are connected to the sewage collection system. Said fees shall be paid to CLMSD at the end of the quarter in which the expansion fees are collected.
8. LACOSAN'S average dry weather sewage flows from the South Lakeport area as shown on exhibits "A", "B" and "C" shall not exceed 99,000 gpd during the term of this Agreement.
9. LACOSAN agrees that it will discharge only "domestic sewage" into CLMSD'S facility and such sewage shall have an organic strength of no more than 300 mg/L of biochemical oxygen demand (B.O.D.); except, that industrial sewage may be discharged at increased rates to be established by negotiation and agreement between the parties hereto.

10. This agreement supersedes all previous agreements regarding the acceptance, treatment and disposal of sewage flows from LACOSAN by the CLMSD facilities. Those agreements dated December 11, 1984 and February 3, 1986 and all amendments thereto and any previous practice or understanding between the parties shall be null and void.

II. IN REGARD TO THE CLMSD FLOWS FROM THE NORTH LAKEPORT AREA GOING TO LACOSAN;

1. LACOSAN agrees to accept and treat CLMSD sewage flows from the portion of CLMSD shown in Exhibit "D", or as amended in the future.
2. CLMSD agrees to continue to divert sewage flows to the south from the Ashe Street pump station in accordance with the Amended Agreement between CLMSD and LACOSAN dated March 8, 1994, until such time that the agreement is no longer in effect. The allocation of new connections approved by the Central Valley Regional Water Quality Control Board shall be as specified in the Memorandum of Understanding between CLMSD and LACOSAN executed on March 22, 1994 with the understanding that HECs (RUEs) assigned to CLMSD in that MOU shall be assigned to the area shown in Exhibit "D" for distribution between CLMSD and LACOSAN in the manner described below.

After this Agreement is executed, the available RUEs remaining for the area, shown in Exhibit "D" shall be split on a 50 percent for CLMSD and 50 percent for LACOSAN basis. 50 percent shall be available for the CLMSD service area shown on Exhibit "E" and 50 percent shall be available for the new LACOSAN service area shown on Exhibit "F". LACOSAN and CLMSD agree that, in the event that either agency exhausts the RUEs made available by the Regional Water Quality Control Board and by the CLMSD/LACOSAN MOU, either of the agencies having available RUEs shall share them on an as needed basis with the other agency. The limit of such sharing by the donor agency shall be no more than 50% of the RUEs available at the time the receiving agency has exhausted its RUE allocation except that the donor agency may agree to share additional RUEs at its sole discretion.

3. Capacity expansion fees collected within the CLMSD area served by LACOSAN shall be paid to LACOSAN at the end of the quarter in which the expansion fees are collected; the sewage capacity expansion fees in the CLMSD area served by LACOSAN shall be an amount equivalent to the expansion fees in the other areas served by the LACOSAN Northwest facilities.
4. CLMSD agrees to furnish and install, at a mutually acceptable location, a flow measuring and recording device to accurately measure and record the sewage flows originating in the CLMSD north service area. The flow measuring and recording device shall be operated and maintained by CLMSD.

A portion of CLMSD'S flows enter the sewer main downstream from the flow measurement and recording device and will be estimated and the quantity agreed upon between LACOSAN and CLMSD. Downstream flow measuring and recording devices located in the LACOSAN service area shall be operated and maintained by LACOSAN.

The measurement of sewage flow rates and volumes shall be by methods, and at locations, mutually acceptable to both parties.

5. CLMSD agrees to pay LACOSAN the proportionate costs for the operation, replacement and maintenance of that portion of the LACOSAN collection system, force mains, pump stations, treatment facilities and disposal facilities as shown below:

<u>Facility</u>	<u>Basis for CLMSD share of Total Operation Maintenance and Replacement Costs</u>
Crystal Lake Way Pump Station	Prorata percentage based on flow measurements
Parkway Pump Station (PS#2)	Prorata percentage based on flow measurements
Rocky Point Pump Station	Prorata percentage based on flow measurements
Lafferty Lane Pump Station	Prorata percentage based on flow measurements
Collection System and Force Mains That Carry CLMSD Flows	Prorata percentage based on flow measurements
Treatment and Disposal Facility	Prorata percentage based on flow measurements

The proportionate costs shall be based on the percentage of flows from CLMSD and said payment shall be made on a quarterly basis.

All one time expenditures which amount to a total aggregate cost of more than \$5000.00 to CLMSD in any single budget year shall require prior approval by CLMSD.

6. CLMSD agrees to pay LACOSAN the proportionate share of LACOSAN'S administrative costs (less costs of customer billing) for the sewage transport, treatment and disposal facilities on the basis of CLMSD flow compared to the total LACOSAN flows and said payment shall be made on a quarterly basis.
7. CLMSD and LACOSAN agree to modify their respective North Lakeport service areas to the new boundaries shown in Exhibit "E". At such time

that said boundaries are modified, all the applicable provisions of this agreement shall remain in full force and effect. Any annexation/detachment (reorganization) costs required for said boundary adjustment shall be paid by CLMSD. At such time as the annexation/detachment (reorganization) is complete, LACOSAN shall bill for, and retain the revenues from, sewer service charges collected within the new service area annexed by LACOSAN as shown in Exhibit "F".

8. CLMSD agrees to reimburse LACOSAN for a portion of the sewer expansion fees previously collected by CLMSD in the area shown in Exhibit "F". Said reimbursement shall be in the amount of One Hundred Ninety Five Thousand Dollars (\$195,000). Said \$195,000 shall be paid within ninety (90) days of the date of execution of this Agreement.
9. This agreement supersedes all previous agreements regarding the acceptance, treatment and disposal of sewage flows from CLMSD by the LACOSAN Northwest facilities. That Agreement dated December 11, 1975, all amendments thereto and any previous practices or understanding between the parties shall be null and void.
10. CLMSD's average dry weather flow from the area shown on Exhibit "E" shall not exceed 312,000 gpd during the term of this agreement.
11. CLMSD agrees that it will discharge only "domestic sewage" into LACOSAN's facility and such sewage shall have an organic strength of no more than 300 mg/l of biochemical oxygen demand (B.O.D.); except that industrial sewage may be discharged at increased rates to be established by negotiation and agreement between the parties hereto.

III. PROVISIONS COMMON TO BOTH AREAS AND BOTH PARTIES

1. CLMSD and LACOSAN agree that the financial responsibility for the construction, repair and/or replacement of facilities within LACOSAN and CLMSD service areas shall be as follows:
 - A. Construction of new facilities for expansion/additional capacity.
 1. Both CLMSD and LACOSAN shall be financially responsible for prorata shares of the costs of facilities needed to provide additional capacity for sewage flows that will originate in their respective service areas. Payment for said costs shall be provided by a method suitable to both parties.
 - B. Maintenance, Replacement and Repair of existing facilities.
 1. Within the LACOSAN service area, CLMSD shall pay a prorata share of the maintenance, replacement and repair costs for facilities that accommodate flows from CLMSD.

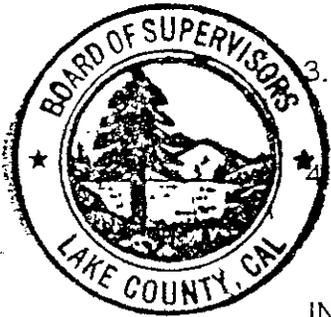
2. Within the CLMSD service area, LACOSAN shall pay a prorata share of the maintenance, repair and replacement costs for facilities that accommodate flows from LACOSAN.

Prior to expending any monies for expansion, maintenance, replacement or repair projects which would require reimbursement from the other party in an aggregate amount in excess of \$5,000 in any single budget year, both parties agree to reconcile the amount of said reimbursement, to establish the method of payment, and to establish a schedule to identify the anticipated expenditure of funds.

2. The term of this agreement shall be twenty-five (25) years from the date of execution by both parties.

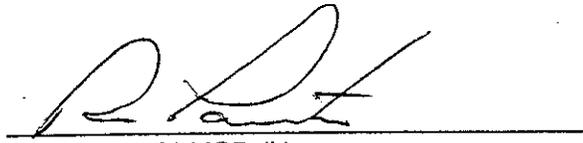
3. This Agreement shall inure to the benefit of, and be binding upon the successors and assigns of, the respective parties hereto.

This Agreement shall not be modified, changed or terminated unilaterally by the LACOSAN or the CLMSD; any changes of any type shall require the written consent and agreement of both parties.



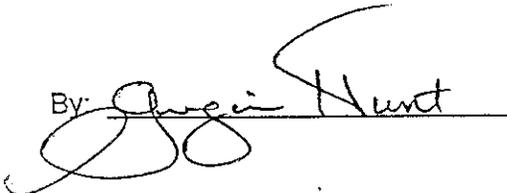
IN WITNESS WHEREOF, the parties hereto have executed this agreement on the day and year first above written.


Chairman, Board of Directors
LACOSAN


Chairman, CLMSD #1

ATTEST: KELLY F. COX
Clerk to the Board of
Supervisors

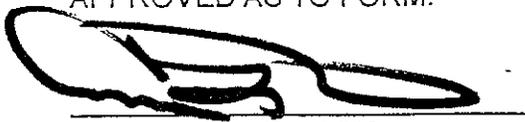
ATTEST: JANEL M. CHAPMAN
City Clerk

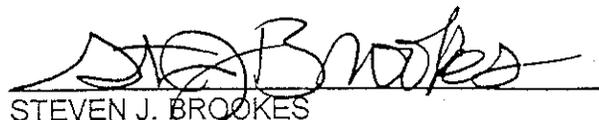
By: 

By: 

APPROVED AS TO FORM:

APPROVED AS TO FORM:


CAMERON L. REEVES
County Counsel


STEVEN J. BROOKES
City Attorney

AN ASSESSMENT WAS LEVIED BY THE BOARD OF DIRECTORS OF LAKE COUNTY SANITATION DISTRICT, LAKE COUNTY, CALIFORNIA, ON THE LOTS, PIECES AND PARCELS OF LAND SHOWN ON THIS ASSESSMENT DIAGRAM. SAID ASSESSMENT WAS LEVIED ON THE 30th DAY OF OCTOBER, 1984. REFERENCE IS MADE TO THE ASSESSMENT ROLL RECORDED IN THE OFFICE OF THE DISTRICT ENGINEER FOR THE EXACT AMOUNT OF EACH ASSESSMENT LEVIED AGAINST EACH PARCEL OF LAND SHOWN ON THIS ASSESSMENT DIAGRAM.

Lois R. Hesterberg
 CLERK OF THE BOARD OF DIRECTORS
 LAKE COUNTY SANITATION DISTRICT
 LAKE COUNTY, CALIFORNIA

FILED IN THE OFFICE OF THE CLERK OF THE BOARD OF DIRECTORS OF THE LAKE COUNTY SANITATION DISTRICT, LAKE COUNTY CALIFORNIA THIS 18th DAY OF SEPTEMBER, 1984.

Lois R. Hesterberg
 CLERK OF THE BOARD OF DIRECTORS
 LAKE COUNTY SANITATION DISTRICT
 LAKE COUNTY, CALIFORNIA

FILED IN THE OFFICE OF THE COUNTY SURVEYOR THIS 2nd DAY OF NOVEMBER, 1984.

EUGENE P. COLLINS
 COUNTY SURVEYOR
 BY: Carl W. Hurd
 DEPUTY

RECORDED IN THE OFFICE OF THE DISTRICT ENGINEER OF THE COUNTY OF LAKE, STATE OF CALIFORNIA, THIS 2nd DAY OF NOVEMBER, 1984.

G.R.S.W.
 DISTRICT ENGINEER
 LAKE COUNTY, CALIFORNIA

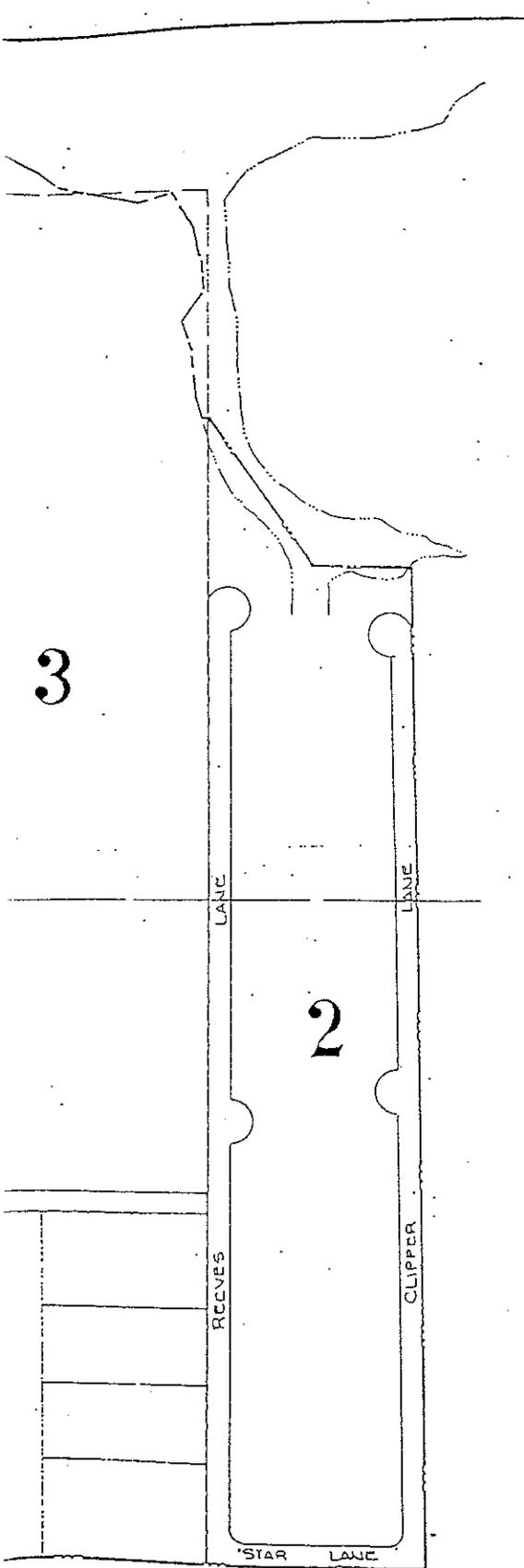
FILED THIS 2nd DAY OF NOVEMBER, 1984, AT THE HOUR OF 2:34 O'CLOCK P.M. IN BOOK 11 OF MAPS OF ASSESSMENT DISTRICTS AT PAGE(S) 23-27 IN 4, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF LAKE, STATE OF CALIFORNIA.

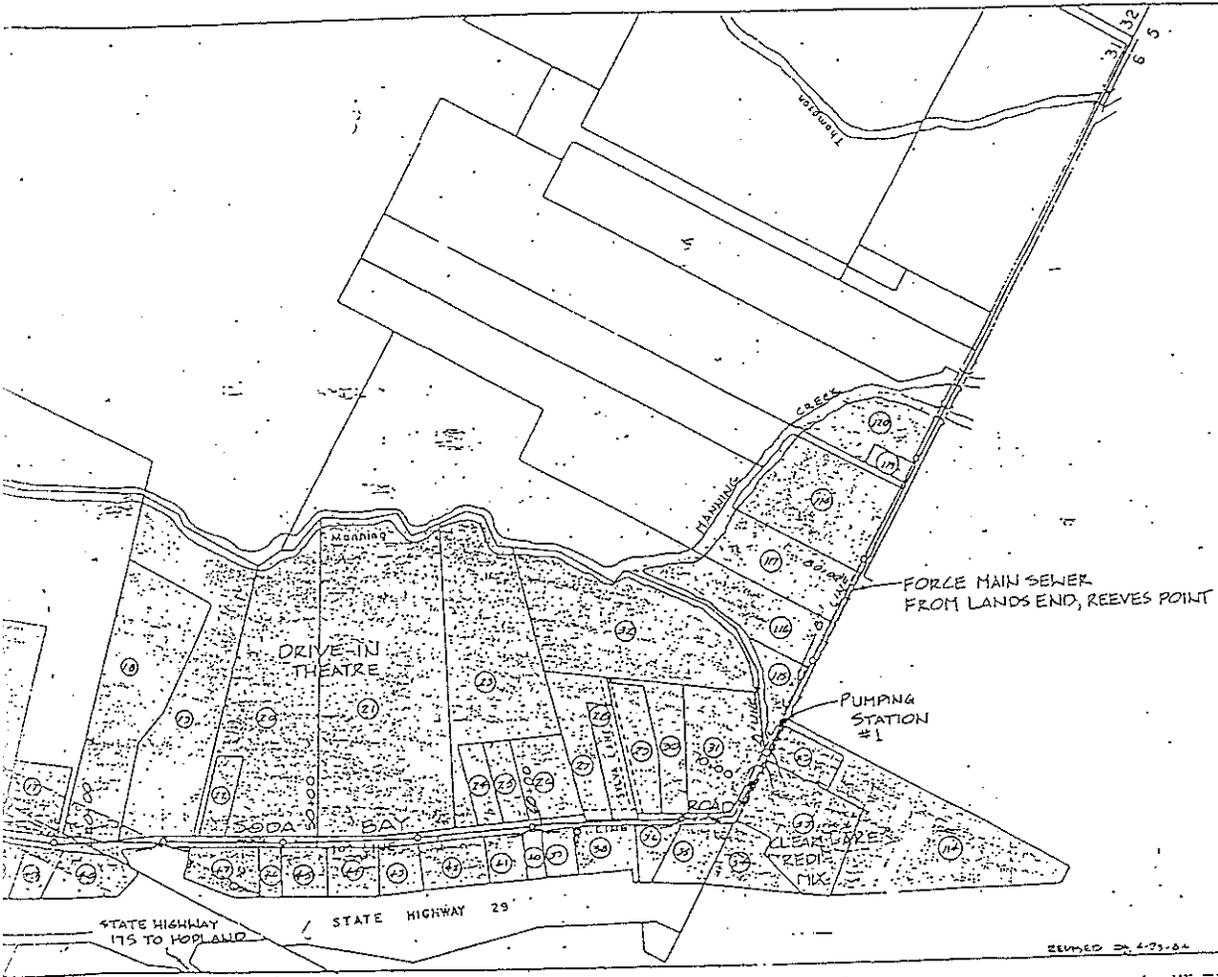
FILE NO.: 17549
 FEE: No Fee

LOIS R. HESTERBERG
 COUNTY RECORDER
 LAKE COUNTY, CALIFORNIA
 BY: Dandis R. Thompson
 DEPUTY

ASSESSMENT DIAGRAM
 OF
 ASSESSMENT DISTRICT NO. 9-1
 LAKE-COUNTY SANITATION DISTRICT
 COUNTY OF LAKE STATE OF CALIFORNIA
 GILLETT-HARRIS-DURANCEAU & ASSOCIATES
 YUBA CITY, CALIFORNIA

EXHIBIT "A"





- LEGEND**
- ⊙ OWNER REFERENCE NUMBER
 - NEW SANITARY SEWER
 - - - EXISTING SANITARY SEWER
 - MANHOLE
 - CLEANOUT
 - ⊞ PUMP STATION
 - ASSESSMENT DISTRICT 9-3

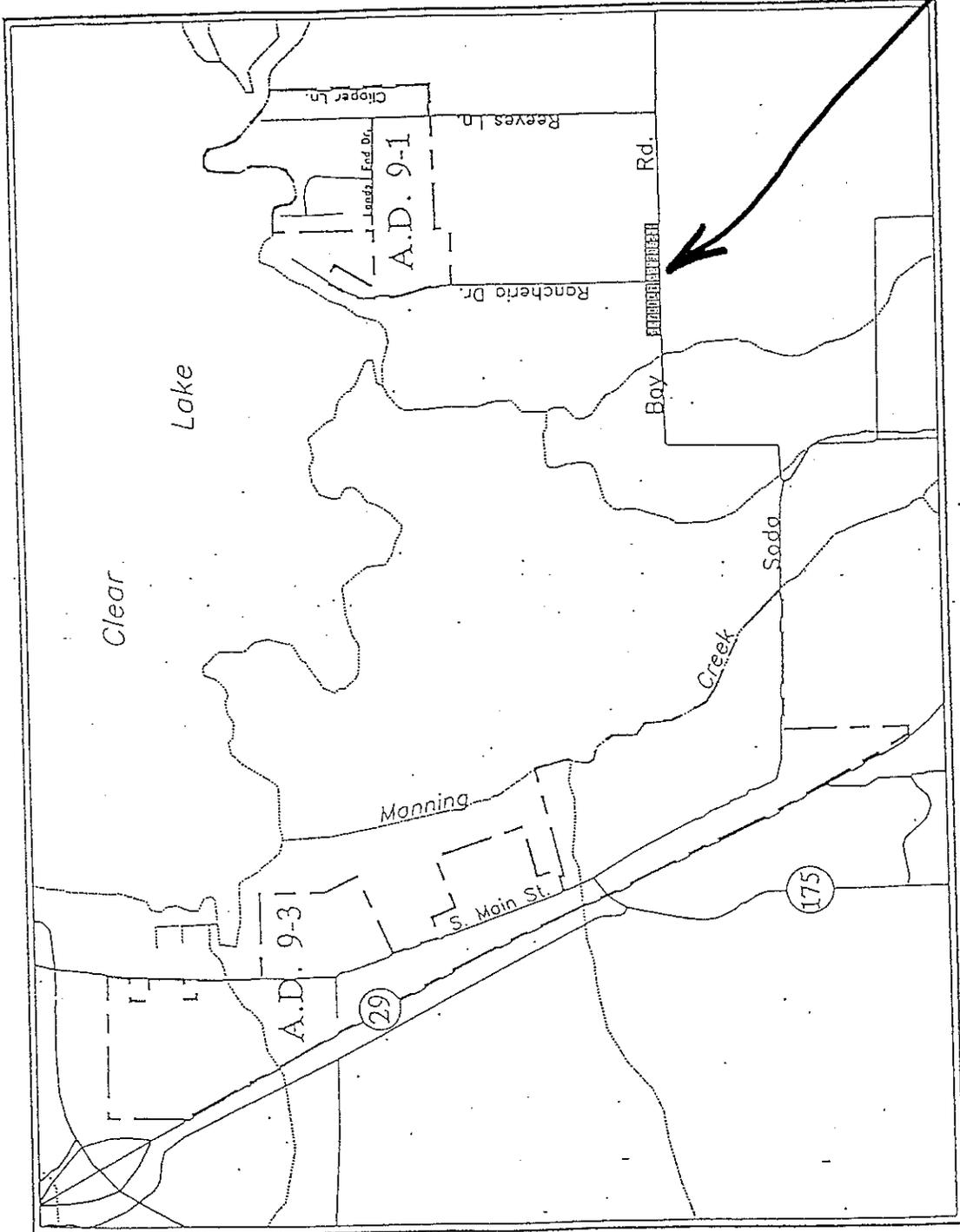
ASSESSMENT DISTRICT 9-3

EXHIBIT Y
PLATE 1

25-1581

EXHIBIT "C"

16 RANCHERIA PARCELS



11	157.00	44-422-11
10	157.00	44-422-10
9	157.00	44-422-09
8	157.00	44-422-08
7	157.00	44-422-07
6	157.00	44-422-06
5	157.00	44-422-05
4	157.00	44-422-04
3	157.00	44-422-03
9	157.00	44-421-09
8	157.00	44-421-08
7	157.00	44-421-07
6	157.00	44-421-06
5	157.00	44-421-05
4	157.00	44-421-04
3	157.00	44-421-03

SODA BAY RD.

APPENDIX 4

Appendix 4.A: Collection System Map



Appendix 4.B: 2008 Master Sewer Plan

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Due to the document size (approx. 140 pages), only the Cover Pages, Table of Contents and Summary and Recommendations sections of Appendix 4.B (2008 Master Sewer Plan) is attached to hard copies of the SSMP document. See City's website for electronic copy of the entire document: [Link to 2008 Master Sewer Plan](#)



CITY OF LAKEPORT

2008 MASTER SEWER PLAN

FOR

CITY OF LAKEPORT

**225 Park Street
Lakeport, CA 95453**

JUNE 2008

Job No. 523.23

PACE 
CIVIL, INC.
REDDING, CALIFORNIA

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2 Treatment Plant and Disposal System Improvements.....	<u>END OF TEST</u>
3 Treatment Plant Dry Weather Flow Analysis	<u>END OF TEST</u>
4 Collection System Diurnal Curve	<u>END OF TEST</u>
5 Estimated Plant Flow March-April 2000	<u>END OF TEST</u>
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13 Infiltration and Inflow Reduction Program.....	<u>END OF TEXT</u>
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APPENDICES **FOLLOWING TEXT**

PLATES **FOLLOWING TEXT**

SUMMARY AND RECOMMENDATIONS

SUMMARY

Development of this Master Plan consisted of an engineering analysis of the Lakeport wastewater trunk system, lift stations, and treatment plant and what effects, current and future, wastewater flow conditions would have on each of these components. The wastewater collection system was analyzed using the H₂OMAP Sewer by MWHSoft computer program for wastewater flow determination and pipeline sizing. The analysis of the sewer system and treatment plant was accomplished with the cooperation and review of the City's Planners and Public Work's personnel.

Wastewater Collection System: The existing City of Lakeport wastewater collection system is shown on Plate 1. The City collection system consists of about 135,400 feet of collector sewer mains and 13,500 feet of interceptor sewers.

Based on current estimated peak wet weather conditions, it appears that the majority of the existing collection system has, in general, adequate capacity. However, several sewer segments within the existing collection system currently show some signs of moderate to severe surcharging during peak rain events and require further consideration for corrective action in order to increase sewer capacity (i.e., Main Street Sewer, 10th Street Sewer, etc.).

Portions of the existing City sewers are up to 60 years old and some of the collection system is made from clay pipe with cement mortar joints. Although the City has done significant infiltration and inflow (I&I) mitigation (i.e., video inspections, grout sealing, and replacement etc.) over the last 10 to 15 years, flows at the treatment plant can increase by seven times the average dry weather flows (ADWF) during peak rain events. Consequently, there is a significant I&I flow component that increases the wastewater flows at the City's treatment plant from an ADWF of about 0.38-million-gallons per day (MGD) during the summer to peak wet weather flows (PWWF) in excess of 2.8 MGD.

Sewage Lift Stations: There are presently nine public operated sewage lift stations in the City: Martin Street, Clearlake Avenue, Lakeshore Boulevard, Rose Street, C Street, Lakeport Boulevard, Lake County Lift Station No. 12, Lerrecou Lane, and Linda Lane Lift Stations. The Lake County Lift Station No. 12 is operated by the Lake County Sanitary District, but it discharges into the Lakeport collection system. The Lakeshore Boulevard Lift Station is the City's newest lift station and it discharges sewage into the Lake County Sanitary District collection system for treatment at the county treatment facilities.

The Clearlake Avenue Lift Station is a small lift station that is located within the flood plain of Clearlake. The small size of this lift station makes it difficult to access and it appears that some of the concrete manhole walls are showing signs of degradation (i.e., exposed aggregate) The station's wet well sits in the middle of Clearlake Avenue and is difficult to enter by City Utility Operators during routine maintenance. Additionally, the station's pumps and piping are antiquated and in need of replacement.

The Martin Street Lift Station wet well hatch needs rehabilitation due to corrosion. In addition, the hydraulic analysis suggests that the effective capacity (i.e., one sewage pump not operating) of this lift station may be deficient in the future due to estimated peak sewage flows.

Intermittent odor issues at the Linda Lane lift station have been noted by City personnel in the past and anticipated growth near this lift station in the future may exasperate this problem.

Effective monitoring and control of the major lift stations within the Lakeport collection system have been limited by the existing phone based communication alarm system and the lack of remote data acquisition.

Wastewater Treatment Plant: Based on the treatment plant water balance that was calculated for this Master Plan, it appears that the current Lakeport Wastewater Treatment Plant has an existing ADWF capacity of approximately 0.51 MGD. The design PWWF capacity of the plant is estimated at 3.0 MGD. The ADWF capacity is based on the treatment plants ability to store

and dispose of the annual effluent volume generated by Lakeport. Over the last 4 to 5 years, the summer ADWF has been estimated to be about 0.38 MGD. This is estimated to be about 75 percent of the current 100-year annual capacity of the effluent irrigation and storage facilities at the plant. Based on recent historical plant flows and the City's ongoing I&I reduction program, the estimated peak flow at the plant is roughly 2.8 MGD.

FUTURE SEWAGE FLOWS

The number of residential unit equivalents (RUEs) within the Master Plan study area is estimated to approximately 2,600. Based on the City's current general plan and proposed developments submitted to the City's planning department, it is estimated that over the next 20 years there will be a 1.1 percent growth rate equating to approximately 630 RUEs added to the City's wastewater collection system. Of these future RUEs, about 520 RUEs would be added to the City's main sewer area that is currently being served by the Lakeport treatment plant. This would result in an ADWF at the treatment plant of roughly 0.48 MGD at year 2028.

Existing and future I&I allowances were determined from analysis of recent flow-monitoring data and treatment plant wet weather flows. Although every effort has been made to assign reasonable I&I allowance values within the wastewater system, the flow-monitoring data was limited to only two negligible rain events in January 2008. **It is imperative that the City continue its flow-monitoring program in order to confirm that these estimated I&I allowances are valid.**

ANALYSIS AND RECOMMENDED IMPROVEMENTS

After reviewing the existing wastewater system deficiencies under current conditions, the wastewater collection system was analyzed under 2028 conditions. The primary improvement requirements defined by this analysis are as follows:

1. The City should focus its comprehensive I&I reduction program within the I&I target areas that was defined during wet weather monitoring in January 2008. The first stage of the program would involve having City crews continue to investigate and identify I&I sources within these target area. The second stage would involve rehabilitation and repair. The City's I&I staff should continue the flow-monitoring program that was developed as part of this Master Plan study in order to provide reliable data for verification of the estimated flows, as well as provide flow information needed for evaluating the ongoing I&I reduction program.
2. Parallel or replace existing sewers in order to relieve current or impending surcharging and possible blockages and; provide sufficient sewer capacity for the projected 20-year conditions. In some areas where I&I flows are extremely high or the sewers are in poor condition or where there is not enough room to install parallel sewers, it may be necessary to replace existing sections of sewer instead of adding a parallel relief sewer.
3. Renovate existing lift stations that are inefficient and are considered to have operational deficiencies.
4. Modify and improve the City's Wastewater Treatment Plant facilities in order to increase PWWF capacity of the chlorine contact pipeline to 3.4 MGD. Repair the aeration basin dikes and remove sludge to restore capacity. Replace the gas chlorine system with a hypochlorite system to increase safety at the plant and the surrounding areas.

Infiltration and Inflow Control: The proposed Master Plan assumes future I&I reductions will be made in the next 10 to 20 years. The flow projections developed for this Master Plan are based on the City achieving a net decrease in current I&I of about 0.94 MGD over the next

20 years. Phase 1 of this reduction program would be a continuation of the City's I&I reduction efforts focused within the I&I Target Areas shown on Plate 2. It would involve video inspection of sewers, mains, and laterals, as well as manhole inspections and inventory, smoke testing, and analysis of collected data. Emphasis should be placed on those areas nearest to the lake where flooding occurs over the public and private collection system. Once sewer defects are identified within the system, the repair and rehabilitation stage would be implemented. The repair and rehabilitation stage would involve such things as grout sealing, lining, and replacement of leaking sewers and laterals, and manhole repair or replacement. The estimated cost for addressing I&I in the Target Areas is approximately \$1,976,000 and would have the potential for reducing about 0.9 MGD of existing I&I from the sewer system.

Sewer System Improvements: Analysis of the existing sewer trunk system indicates that the majority of the system has adequate capacity for the next 20 years, given the City's growth rate of 1.1 percent and provided that the City's I&I mitigation efforts continue. However, the analysis and past observations by City staff show that some sewer segments of the existing sewer along Main Street from 10th Street to C Street are at capacity during peak wet weather conditions. It is recommended that some of these Main Street sewer segments be replaced or paralleled with new sewer segments within the next 5 to 10 years starting with the 8-inch sewer between 6th Street and 10th Street. The analysis also suggests that existing segments of 8-inch sewers along 10th Street and Lakeshore Boulevard (see Plate 2) may also reach capacity during peak wet weather conditions and may experience surcharging. The analysis recommends that these segments be paralleled with 8-inch sewers.

Existing sewers along Martin Street, Russell Street, and Berry Street appear to have moderate surcharging during current peak flows. The City's I&I reduction efforts should reduce flows through these sewers and diminish surcharging. It is recommended that the City perform further wet weather monitoring of these sewers. If it is determined that significant surcharging is occurring in these sewers, paralleling of these pipelines needs to be performed over the next 20 years. Other improvements include the replacement of the Clearlake Avenue Lift Station and improving the lift stations communication data acquisition systems.

Potential As Developed (AD) trunk sewers and lift stations are also shown on Plate 2 for the currently undeveloped Southern Development Area (SDA). The SDA is a speculative development that may involve the construction of over 1,500 single family households. A significant portion of the SDA encompasses converting the City's existing treatment plant into a golf course. These AD sewers are not included in the general sewer improvement category because they would normally be constructed as development occurs.

Wastewater Treatment Plant: The water balance that was created for this Master Plan suggests that the current effluent reservoir and irrigation disposal system at the treatment plant has an effective capacity to treat 0.51 MGD ADWF during a 100-year annual rain event. Based on this, the City's continued I&I reduction efforts, and a 1.1 percent growth rate, it appears the effluent reservoir and disposal facilities at the treatment plant have capacity for at least the next 20 years.

Recommended Improvements at the treatment plant would include the repair of the aeration basin slopes over the next 10 years. This repair is meant to correct erosion of the aeration basin earthen slopes and will require that during alternate years, each aeration basin be taken out of service and dried so that additional slope protection can be installed. Concurrently, it is recommended that while the aeration basins are out of service the City remove the accumulated sludge that has been collecting at the bottom of the ponds. This sludge, estimated at between 12 and 24 inches deep, diminishes the effective volume of these basins. It is suggested that this sludge could be dried on site; and then either applied on City land, or disposed of at an approved landfill.

The existing 16- to 48-inch chlorine contact pipe has a peak contact time of around 30 minutes at 3.0 MGD. Currently, it is estimated that peak flows at the plant are roughly 2.8 MGD however, growth over the next 20 years will probably increase peak flows to 3.3 to 3.4 MGD based on the City continuing to implement an aggressive I&I reduction program. Therefore, in order to re-establish the maximum volume within the chlorine contact pipe, the City should have the pipeline inspected and if it is determined that significant sediment has collected, have the pipeline cleaned. Ultimately, additional capacity will be needed in the chlorine contact pipeline

and it is proposed that a parallel 20-inch pipeline be constructed within the next 10 to 20 years to keep up with future peak flows.

Finally, the California Accidental Release Prevention Program (CALARP) has been implemented by the Lake County Environmental Health Department, requiring that the City prepare and submit a Risk Management Plan for all City facilities that use chlorine gas for disinfection. The CALARP Program was established in California to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and the environment. Although the City has had an excellent safety record in handling chlorine gas at their treatment plant, it is evident that the use of large quantities of chlorine gas near residential developments is coming under closer scrutiny at the County, State, and Federal level. Given this increased level of County involvement, and the safety of City workers and the public, Lake County Environmental Health Department has requested that the City evaluate its chlorine handling processes at the treatment plant and consider replacing the gas disinfection processes, in the near future, with a safer method of disinfection (e.g., sodium hypochlorite). In order to accommodate this goal, it is recommended that within the next 5 years the City consider switching from chlorine gas to a hypochlorite system at the treatment plant.

Master Plan Key Elements and Costs: The total cost for all sewer system general improvements (i.e., I&I Reduction Programs, upgrading existing collection system and lift stations, and future treatment plant improvements) is approximately \$5,006,000 of which about \$1,087,000 is needed in the next 5 years. The Master Plan of Improvements needed to correct existing sewer system deficiencies and to provide anticipated future capacity for 20-year development is shown on Plate 2 and Figure 2 at the end of this report. Plate 2 includes the sizes of future AD sewers needed to serve the outlying areas. A summary of the costs and recommended staging of sewer system and treatment plant improvements is shown in Table 14.

Table 14 along with Plate 2 and Figure 2 are in essence, the 2008 Master Sewer Plan. The sewer improvements shown in this Master Plan, and their proposed construction periods, are based on the computer model developed for the trunk sewer system and observed sewer deficiencies. As indicated hereinbefore, the I&I rates used in this model are based on limited flow-monitoring

information. Consequently, it is recommended that the City continue to pursue wet weather I&I monitoring before major expenditures are made on sewer capacity increases. The future improvement design process should include additional wet weather studies to confirm upstream I&I rates. In general, no inadequately sized sewer should be replaced or paralleled with a new relief sewer until it is either demonstrated that overflows or lateral flooding is imminent under very wet weather conditions or the sewer is shown to be poorly constructed and there is a potential for sewer blockage. Since the computer model only flags trunk sewers that are inadequately sized by normal standards with moderate surcharge taken into account, it is quite possible that some of the proposed sewer construction can be postponed by allowing greater surcharges to occur. Such sewers will require more constant monitoring during wet weather periods. Also, it is possible that subsequent flow measurements during very wet weather periods will show that some of the sewers improvements flagged for construction may be unnecessary if future I&I rates are actually lower than these Master Plan estimates. Because of the potential for postponement of some sewer construction and elimination of others shown in the Master Plan, it is likely that the construction costs in the long term may be lower than listed in the expenditure forecast.

The projected improvement costs for the Master Plan are as follows:

Time Period	I&I Reduction Program	General Gravity Sewer System Improvements	Wastewater Treatment Plant Improvements	Total
2008-2013 Near Term	\$450,000	\$262,000	\$405,000	\$1,117,000
2013 -2018 Intermediate Term	\$564,000	\$1,660,000	\$200,000	\$2,424,000
2018 -2028 to Long Term	\$962,000	\$333,000	\$170,000	\$1,465,000
GRAND TOTAL				\$5,006,000

These figures are based on June 2008 dollars and do not include any allowance for inflation or financing costs.

The conceptual location and size of the new trunk sewers that will be needed to serve future developments are also shown on Plate 2, although they are not listed in Table 14 as general improvements. The City may want to consider contributing to the cost of oversizing sewers in

new developments, where such sewers are necessary for service to an area larger than just that development. This policy could lead to an orderly expansion of the sewer system in the future.

It is recommended that the City review this Master Plan report carefully, and if in agreement, that it be adopted as the City of Lakeport Master Sewer Plan, with any corrections or supplements as may be applicable.

Appendix 4.C: Equipment Inventory List

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 4.C is attached on the following page.



City of Lakeport Sewer Division Tools and Equipment Inventory List

Description	Number	Comments
Vacuum Trucks	2	Newest Vactor truck purchased 2015
Rodding Truck	1	
Service Vehicles	3	
Emergency Trailer	1	
Shoring Trailer	1	Used for deep trenches
Dump Truck 5 yard	2	
Dump Truck 10 yard	1	
Backhoe	1	
Sewer Van	1	Carries sewer snake and video equipment capable of inspecting lines from 4" to 24"
Video Camera	2	Used for laterals
6" pump	1	Corporation Yard
2" Pump	2	Corporation Yard
1 ½ " Pump	1	Corporation Yard
Generators	3	Corporation Yard
Snake Machine	2	Standby vehicle
Smoke Machine	1	Corporation Yard
Spill Control Rubber Dam	10	Placed inside service van and sewer vehicles
Spill Control Rubber Mat	10	Placed inside service van and sewer vehicles
Gas Detector	2	Corporation Yard/Sewer Office
Confined Space Equipment		Tripod, winches, harnesses @ Utility 2-bay garage
Disinfectant & Backpack Sprayer	1	Placed inside service van
PPE (gloves, eyewear, coveralls, etc.)		Placed inside service van and sewer vehicles
SSO Emergency Response Plan	5	SSOERP includes spill response plan, SSO investigation and reporting forms, contact lists, etc. Copies in all Sewer service vehicles and at Compliance Officer office.

Appendix 4.D: Maintenance Cleaning Schedule & Lift Station Checklist

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 4.D is attached on the following pages.



City of Lakeport Sewer Main Line & Lift Station Cleaning Schedule

Appendix 4.D

Updated February 2018

Starting Location	Manhole #	Destination	Manhole #	Pipe Size/Material	Frequency	Notes
Main Lines						
Fifth & Park St	H 17-07	50' North	EOL	8" PEP liner	Quarterly	Use wart hog
Fifth & Park St	H 17-07	245' southeast / Fifth St restrooms	EOL 145' past H 17-08	6" ACP; 4" ACP past H 17-08	Quarterly	Use wart hog
Fourth & Park St	H 17-16	240' north	H 17-07	8" PEP liner	Quarterly	Use wart hog
Fourth & Park St	H 17-16	190' east	H 17-17	6" PVC	Quarterly	Use wart hog
Third & Park St	H 17-20	260' north	H 17-16	8" PEP liner	Quarterly	
Third & Park St	H 17-20	60' west – just past PP C/O	N/A	6" PVC	Quarterly	Use wart hog
Second & Park St	H 17-25	325' north	H 17-20	8" PEP liner	Quarterly	Use wart hog
First & Park St	H 18-07	325' north	H 17-25	8" PEP liner	Quarterly	Use wart hog
Willow Point MH Park	H 18-15	450' north	H 18-07	8" PEP liner	Quarterly	Use wart hog; segment includes H 18-14 north side Forbes Creek
C St Lift Station	H 19-15	600' north	H 18-15	8" PEP liner	Quarterly	Use wart hog; segment includes H 19-04
Fourth St	G 17-06	225' west, uphill to EOL CO	N/A	6" ACP	Quarterly	Use wart hog
Twenty Fourth St.	F 11-02	175' east to end of line (EOL)	F 11-01	4" OB	Quarterly	Flush only
Lakeshore Blvd	H12-15	490' west	H12-13	8" ACP	Quarterly	Use wart hog; segment includes H 12-14
20 th St & Lakeshore	H 12-13	300' west	H 13-01	8" ACP	Quarterly	Use wart hog; check FOG at M 13-01
Page Dr	F13-06	205' west AND 60' north to EOL	F13-05	6" PVC	Quarterly	Use wart hog
Mellor Dr	G 13-06	460' west	F 13-08	6" PVC	Quarterly	Use 4" PIG @ C/O nest; use wart hog; segment includes F 13-09
Seventeenth & N. High St	H 13-08	60' west on Seventeenth	N/A	6" ACP	Quarterly	Use warthog; Let shop @ 17 th & N High know



City of Lakeport Sewer Main Line & Lift Station Cleaning Schedule

Updated February 2018

Starting Location	Manhole #	Destination	Manhole #	Pipe Size/Material	Frequency	Notes
Eleventh St	G 15-10	230' north to 10th @ Pool St	G 15-18	8" ACP	Quarterly	Use warthog
Sixth St/N. Main	H 16-14	N. Forbes St	E 16-2	8" ACP	Quarterly	Use wart hog
Lupoyoma Circle (unpaved street)	H20-09	290' north to EOL	N/A	6" ACP	Quarterly	Root cutter & RootX
1279 Craig Ave Quail Run Fitness	E 21-01	Manhole	F 21-02	6" PVC	Quarterly	Flush only
Sewer Lines & Laterals						
390 20 th St					Quarterly	TV & Router
265 Hillcrest Dr					Quarterly	C/O on Green St.
285 Hillcrest Dr					Quarterly	C/O on Green St.
430 Hillcrest Dr		Main Line	N/A		Quarterly	flush
224 Via Del Lago: P/L CO	N/A				Quarterly	Lat cleaner
1652 N. Main St					Quarterly	TV & Router
1450 N. High St					Quarterly	Roots- south side of manhole
14 th St. manhole	G14-13				Quarterly	TV & Router
230 11 th St					Quarterly	Lat cleaner
970 11 th St					Quarterly	TV & Router
1005 N. Main St Renee's Café			N/A	6" ACP	Quarterly	FOG issues; cleanout; use warthog, CCTV & record results
Central Park Ave	F 16-01	10' southeast		6" ACP	Quarterly	TV for roots
455, 475 & 485 Ninth St					Quarterly	TV & Router
420 Sixth St	N/A	C/O @ private lateral to main line		4" PVC	Quarterly	Roots in lateral between C/O and main line



City of Lakeport Sewer Main Line & Lift Station Cleaning Schedule

Updated February 2018

Starting Location	Manhole #	Destination	Manhole #	Pipe Size/Material	Frequency	Notes
50 3rd St. Park Place Restaurant					Quarterly	FOG issues; cleanout; use warthog CCTV & record results
109 N. Russell St.					Quarterly	TV & Router
568 Spurr St.					Quarterly	TV & Router
550 Martin St.	G 18-13	300' north	G 19-08	8" VCP	Quarterly	Sewer main in Forbes Creek. Issues impact rear house behind 550 Martin St.
1077 Lakeport Blvd McDonalds	F 22-02	85' south to F 22-04; 85' southeast to McDonalds C/O	N/A	6" ACP / 4" ACP after F 22-04	Quarterly	FOG issues; cleanout; use warthog CCTV & record results
Lift Stations						
USE 1 GALLON OF DEGREASER ON ALL LIFT STATIONS AFTER INITIAL CLEANING						
Lakeshore Blvd/Ashe St					Quarterly	
Rose Avenue					@ SIX WEEKS	Check for rags
Clearlake Avenue					@ SIX WEEKS	Check for rags
C Street					Quarterly	
Martin Street					Quarterly	
Larrecou Lane					Quarterly	
Lakeport Blvd					Quarterly	
Linda Lane					Quarterly	



City of Lakeport Sewer Lift Station Inspection Checklist

Instructions:

1. Inspect the areas of the plant site listed below, marking the results in the appropriate box
2. Note any deficiencies or defects in the space provided
3. Forward a completed copy of the inspection to the Utilities Superintendent.

Date of Inspection: _____	Plant Site: _____
Department: <u>Wastewater</u>	Inspected By: _____

General Plant Site:	Good	N/A	Action *Req'd	Wet Well	Yes	No	Action *Req'd
Check for evidence of unauthorized intrusion or vandalism (graffiti, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Clear of grease and debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No excessive corrosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Floats clear of debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grounds & immediate surroundings are free of contaminant sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	High level test/Call out Sequence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All paint is in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hatch cover closes and locks, key ways are clear of debris and functional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant site is free of trash, weeds and clutter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Generator							
Fuel level adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Power fail operational test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Fluid levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

*State action required in comment section.

Comment:

Corrections Made:

APPENDIX 5

Appendix 5: Adopted Sewer System Design and Construction Standards

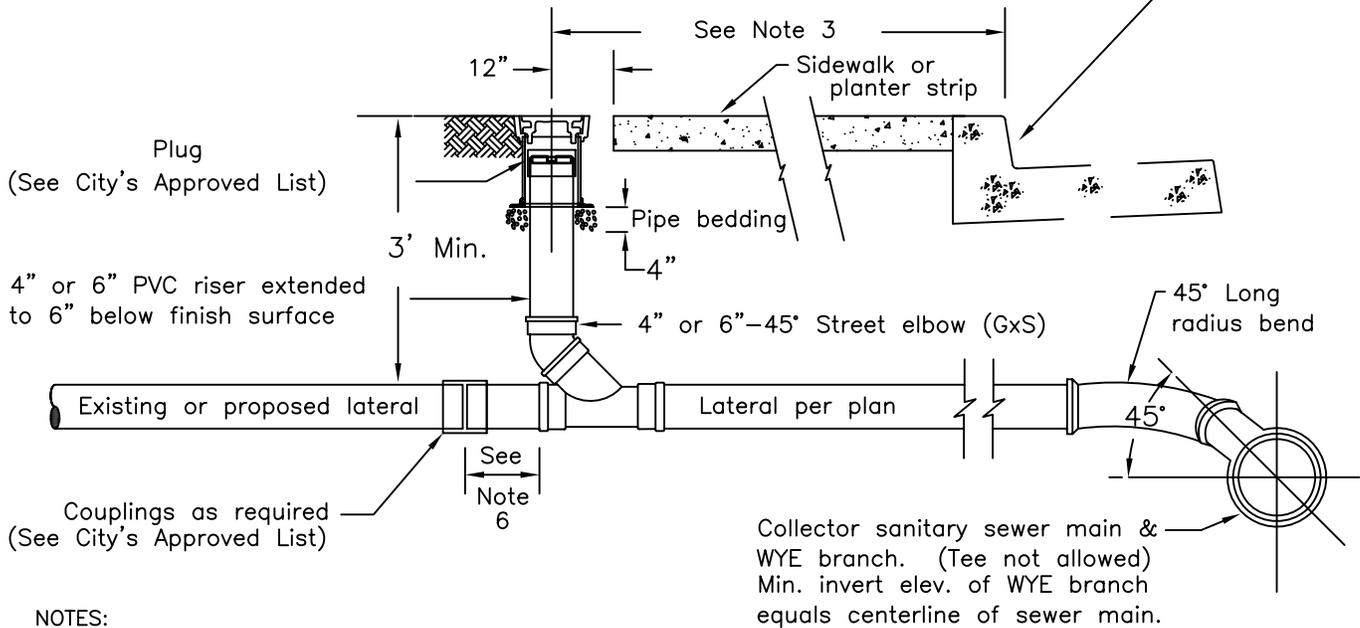
MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 5 is attached on the following pages.

4" high "S" marked on face of curb or at back of sidewalk for lateral location.

CLEANOUT BOX
(See City's Approved List)



Collector sanitary sewer main & WYE branch. (Tee not allowed)
Min. invert elev. of WYE branch equals centerline of sewer main.

NOTES:

1. The sewer service lateral shall be of sufficient depth to adequately serve the building site, and in no case shall be less than 3 FT. deep at the cleanout unless otherwise authorized by the City.
2. Where problems are anticipated in providing sewer service to a given building site, the lateral invert at the cleanout shall be staked by the owner's engineer.
3. Cleanout must be installed within the Public Right of Way or P.U.E. Cleanout to be installed 36" from face of curb. Where service is in driveway, install cleanout 18" behind apron.
4. In cases where the cleanout installation conflicts with existing facilities, the contractor shall verify any alternate location with the City prior to installation.
5. Minimum 2% slope for 4" laterals and a min. 1% slope for 6" laterals are required unless a variance is specifically approved by the City.
6. A minimum of 12" when connecting to existing sewer lateral or extend to 1' behind P.U.E. or sidewalk for new construction.
7. For new construction, install cap or plug at end of service lateral.
8. Lateral material shall be PVC SDR 26 or SDR 35, Ductile Iron pipe.
9. Cleanout components shall be the same size as the lateral.
10. Tap fittings on mains smaller than 12" may only be used under the approval of the City.

LATERAL CONNECTIONS TO EXISTING MAINS:

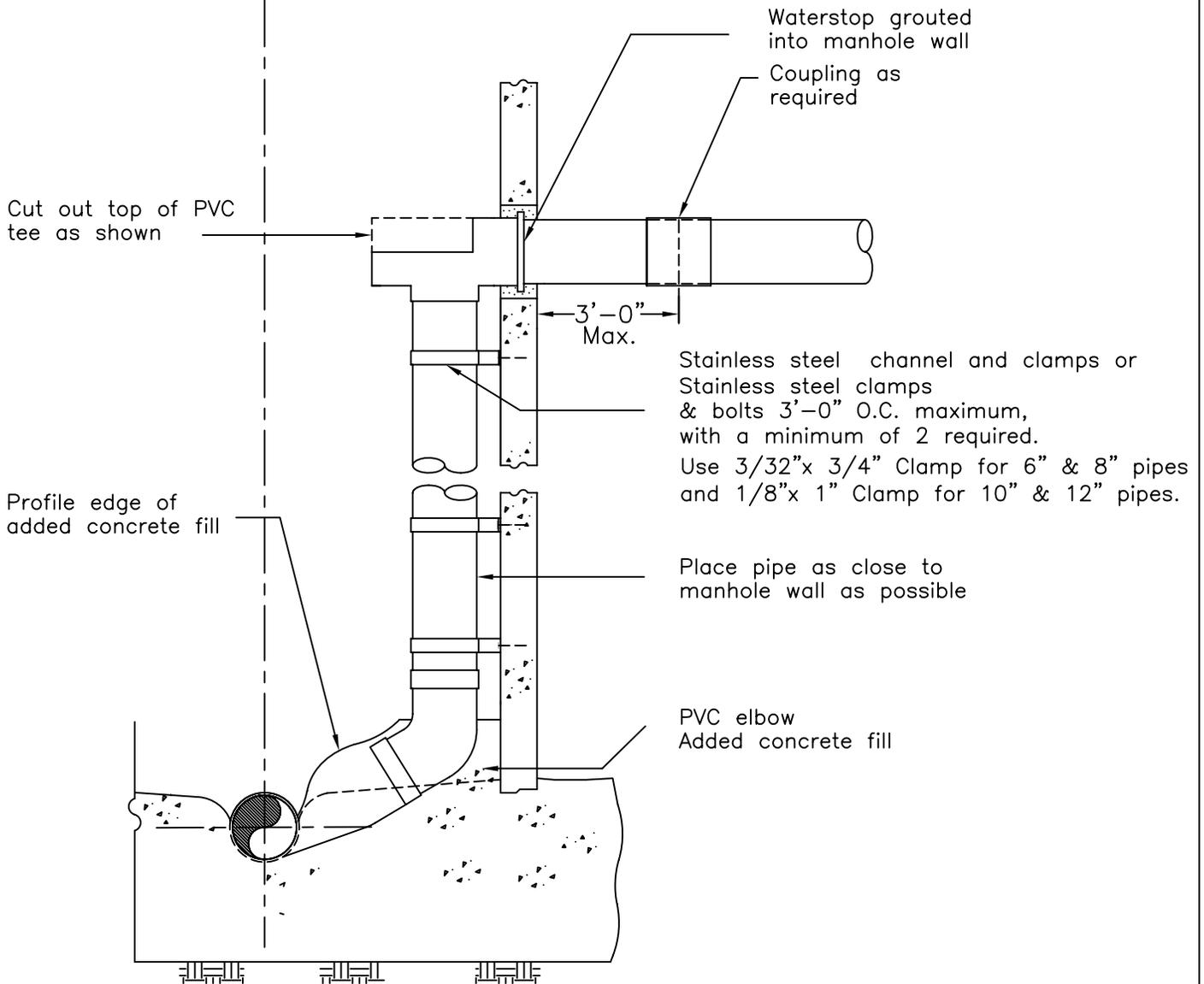
Main Size & Material	Connection Type	Couplings
6-10" ACP, PVC	See City's approved list	See City's approved list
6-10" ACP, PVC	See City's approved list	See City's approved list
6-10" PVC, ACP	See City's approved list	See City's approved list
12" and larger	Tap fitting see City's approved list	See City's approved list

City of Lakeport

4" & 6" SEWER SERVICE LATERAL and CLEANOUT

SCALE: NONE	DATE: April 04
DWN: MEB	APPROVED
CHK:	FILE NO.

Q M.H.



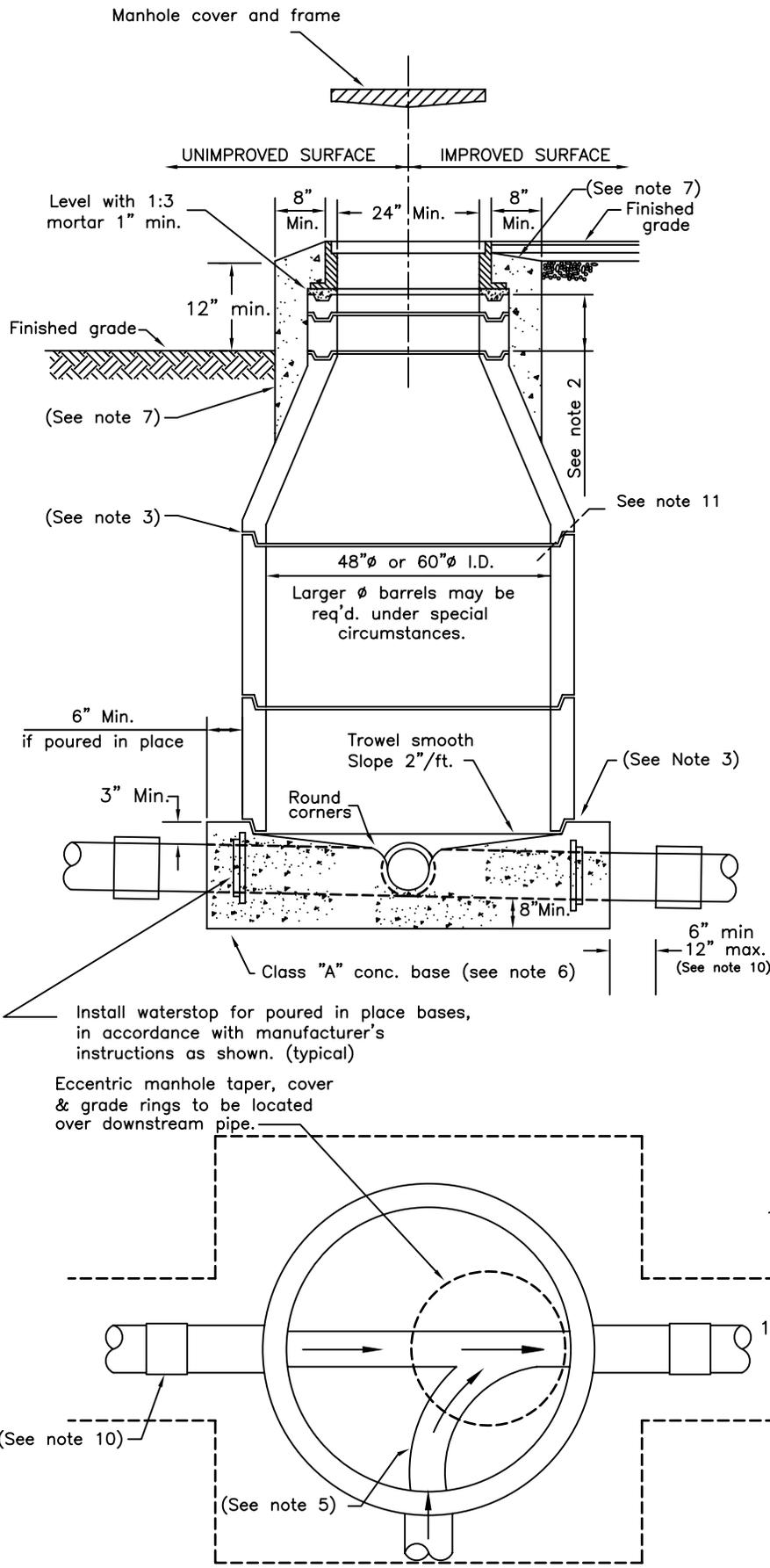
NOTES:

1. Manholes constructed using this standard shall be 60" in diameter and installed in conformance with City Standard. Use 72" MH where there are two drop connections.
2. Enclose elbow in concrete. Form smooth channel with sweep to manhole flowline.
3. Install waterstop in accordance with manufacturer's instructions as shown.
4. PVC pipe and fittings shall have same nominal size and SDR rating as incoming pipes.

City of Lakeport

INSIDE
DROP MANHOLE

SCALE: NONE		DATE: Jan 2003	
DWN:	MEB	APPROVED	
CHK:		FILE NO.	



NOTES:

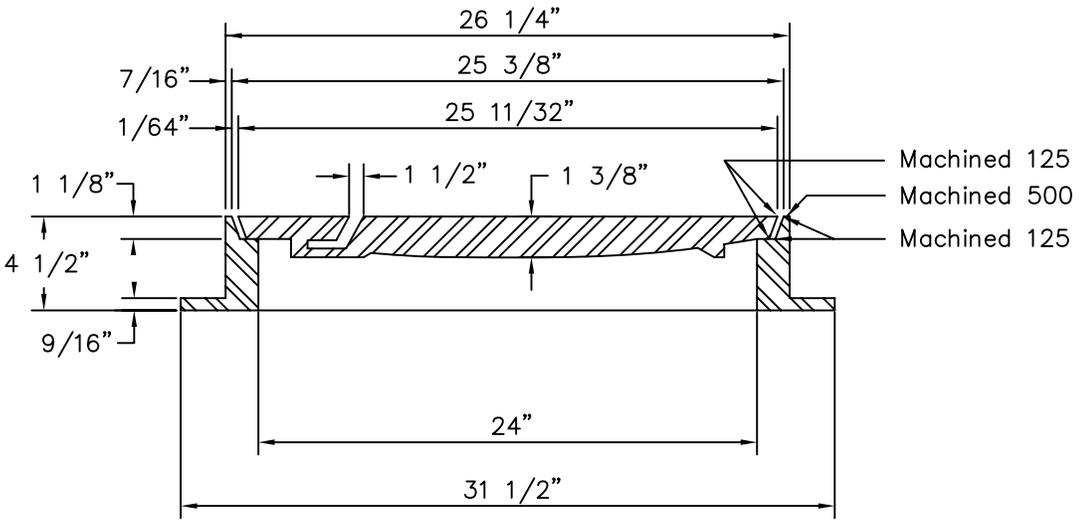
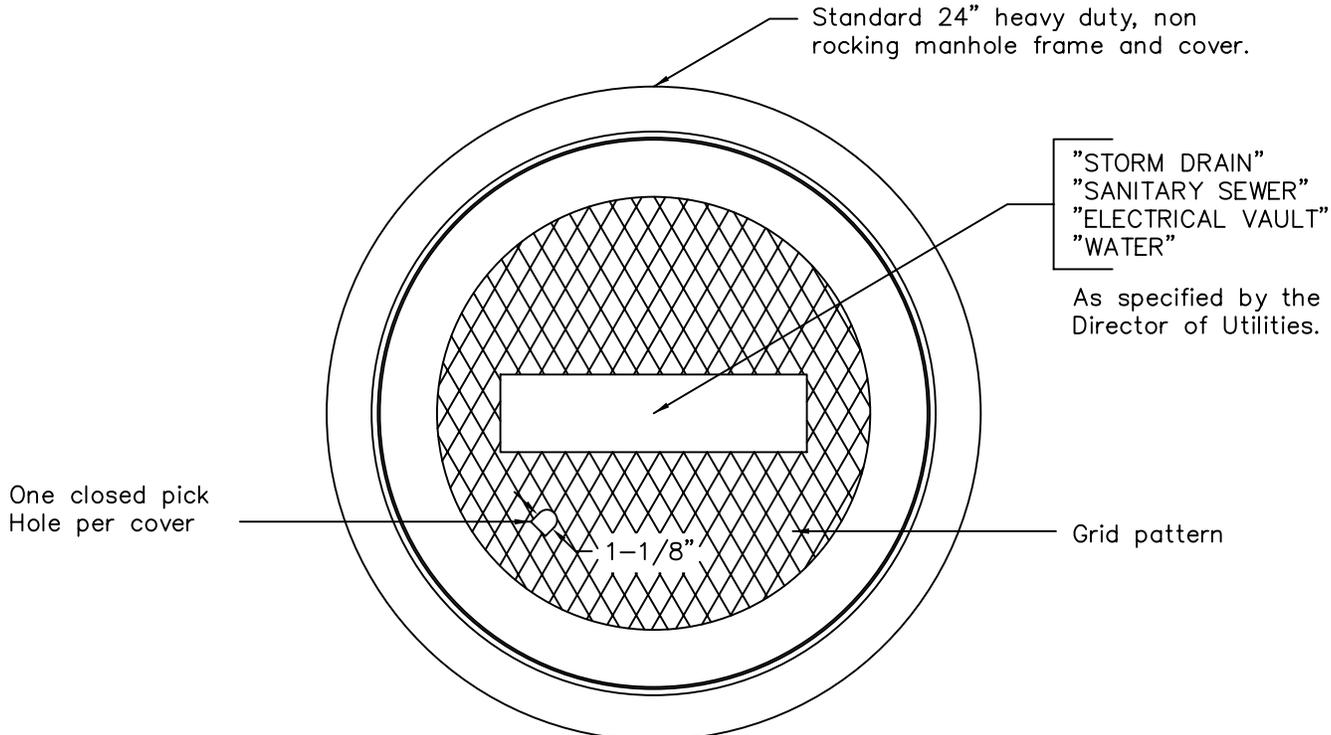
1. When manholes are installed in unimproved areas, the top of the cover shall be a min. of 1 foot above grade.
2. Min. of one 3" grade adjustment ring. Max. height of grade adjustment rings = 20". Alternately, contractor may cast grade adjustment rings in place.
3. Set all barrel sections & taper sections in plastic gasket, Ram-nek or approved alternate. Typical joint use (1) 3/4" x 2-1/2" Ram-nek seal, (2) seals in high water table areas.
4. Cone section (taper) must be concentric for 48"Ø manhole or eccentric for 60"Ø manhole unless otherwise specified and approved by the City
5. After lower ring section is set, break out top half of pipe flush with inside face of M.H. wall and construct shelf and u-shaped channel. Make elevation changes gradually and directional changes with smooth curves. Slope and size of channels shall match upstream and downstream pipes. Manhole channels with a horizontal change in direction of 30' or more shall have a minimum drop of 0.1' across the manhole or shall match the slope of the pipe, whichever is greater.
6. Poured-in-place base shall be poured full thickness on undisturbed soil. Precast base to be from City approved list and placed on 6" minimum of 3/4" drain rock installed against undisturbed earth.
7. Class "A" conc. collar shall be 2" below finished grade.
8. Standard manhole barrel section per ASTM C478.
9. 48"Ø I.D. M.H. to be used for sewer mains less than 18"Ø. 60"Ø I.D. M.H. to be used for all trunk and collector sewers 18"Ø to 48"Ø or where drop fittings are used.
10. Flexible pipe coupling is required on all pipe other than SDR 35 PVC pipe. Flex coupling to be installed in mainline trench and out of manhole excavation.
11. 60" Dia. Manholes are required for main lines 18" or larger in Dia.

City of Lakeport

STANDARD PRECAST
CONCRETE MANHOLE for
SANITARY SEWER

SCALE: NONE		DATE: Jan. 2003	
DWN:	APPROVED		FILE NO.
CHK:			

MANHOLE BASE
CHANNELIZATION PLAN AND LOCATION OF
ECCENTRIC MANHOLE COVER



NOTES:

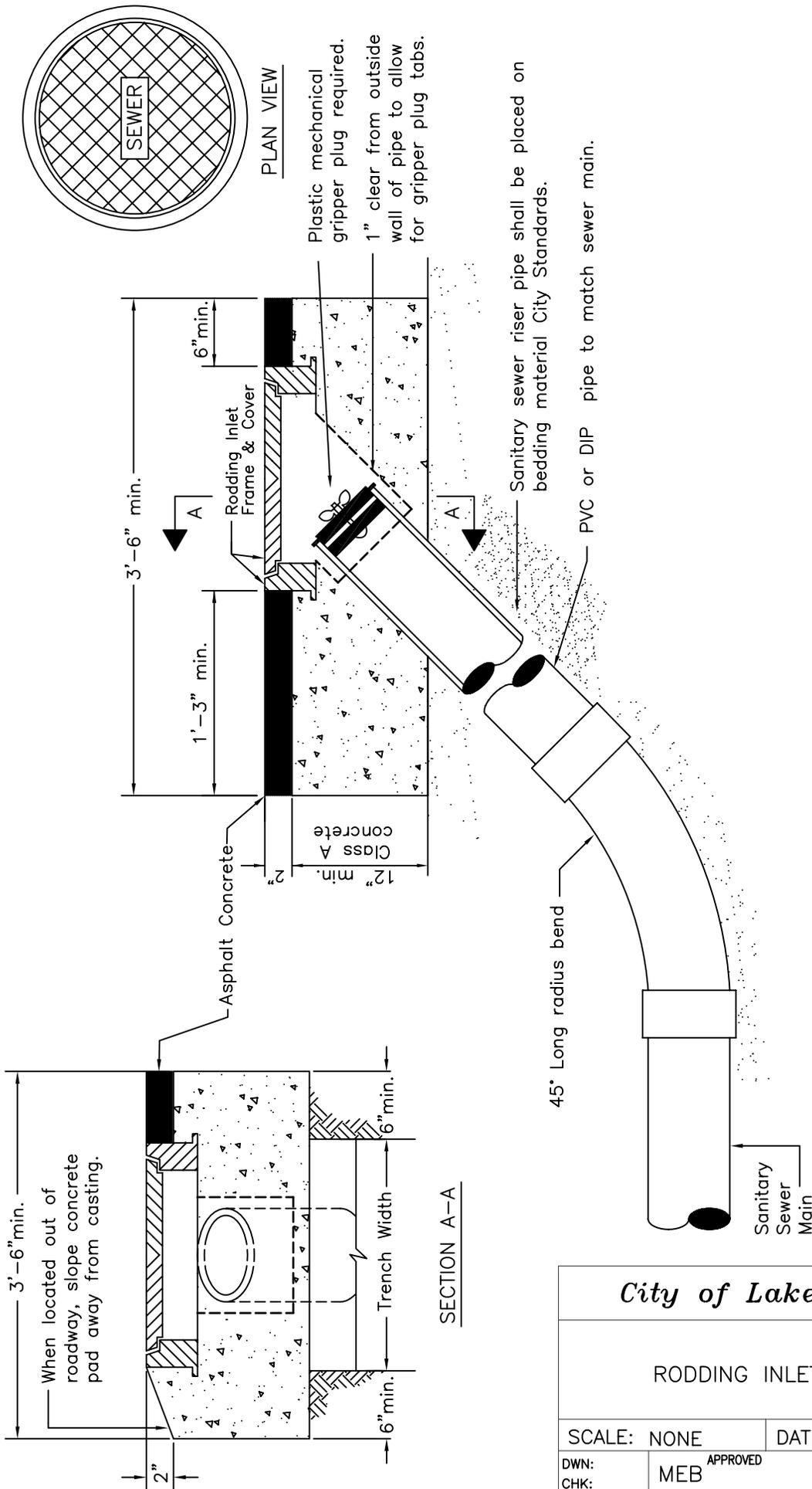
1. Specify sanitary sewer, storm drain, electrical vault, or water when ordering. All castings shall be dipped in approved ASPHALTUM or BITUMINOUS Paint.
2. All material used in manufacturing shall conform to A.S.T.M. designation A-48 Class 35 B, or of United States Government Specifications QQ1-652b.
3. Minimum weight components: Cover - 130 pounds
Frame - 135 pounds
4. Bolt down covers are required on all sewer mains located in easements, on school grounds, through parks, and on any trunk sewers larger than 12" in diameter. Coat the bolt threads on the final bolt up with "never cease" or teflon based pipe dope.

<i>City of Lakeport</i>		
MANHOLE FRAME and COVER		
SCALE: NONE	DATE: Jan 2003	
DWN:	APPROVED	FILE NO.
CHK:		

APPROVED MANHOLE FRAME & COVER
See City Approved List

APPROVED FRAME & COVER

See City's Approved List

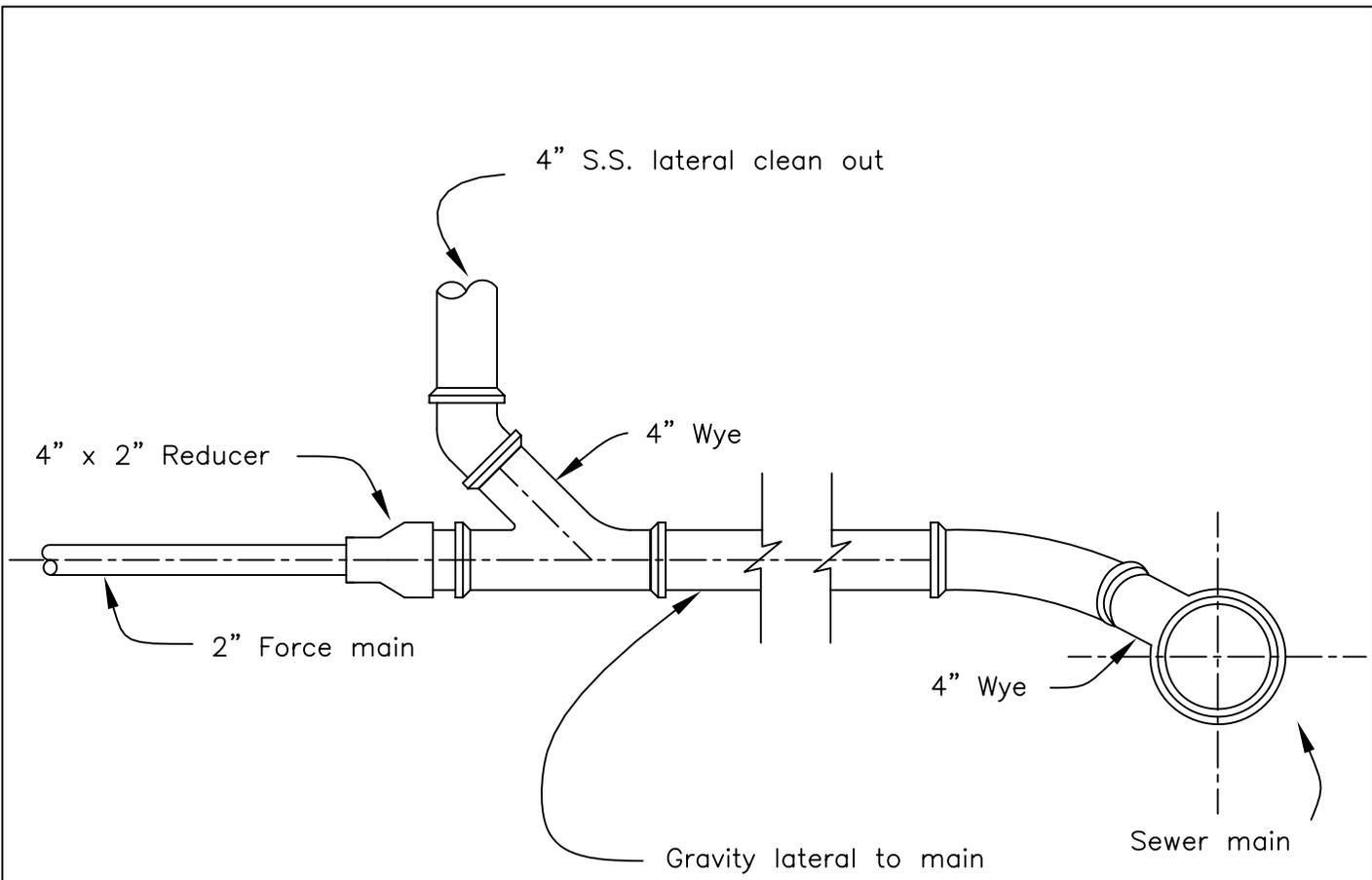


PLAN VIEW
Plastic mechanical gripper plug required.
1" clear from outside wall of pipe to allow for gripper plug tabs.

SECTION A-A

Note: To be used for main sizes 10" or less and where sewer main will not be extended.

<i>City of Lakeport</i>		
RODDING INLET		
SCALE: NONE	DATE: April 04	
DWN: CHK:	APPROVED MEB	FILE NO.

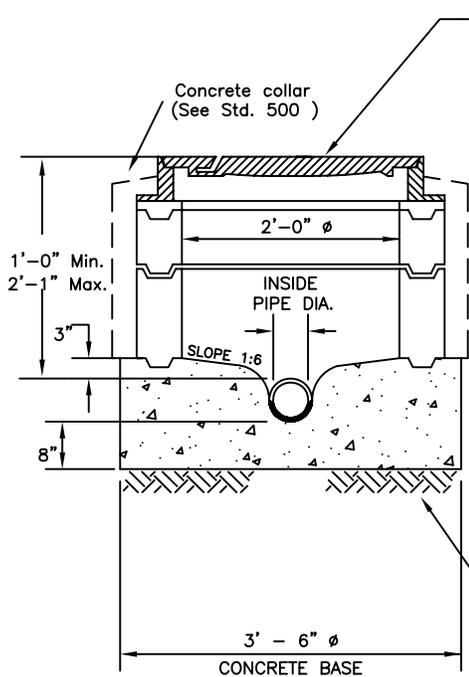


NOTES

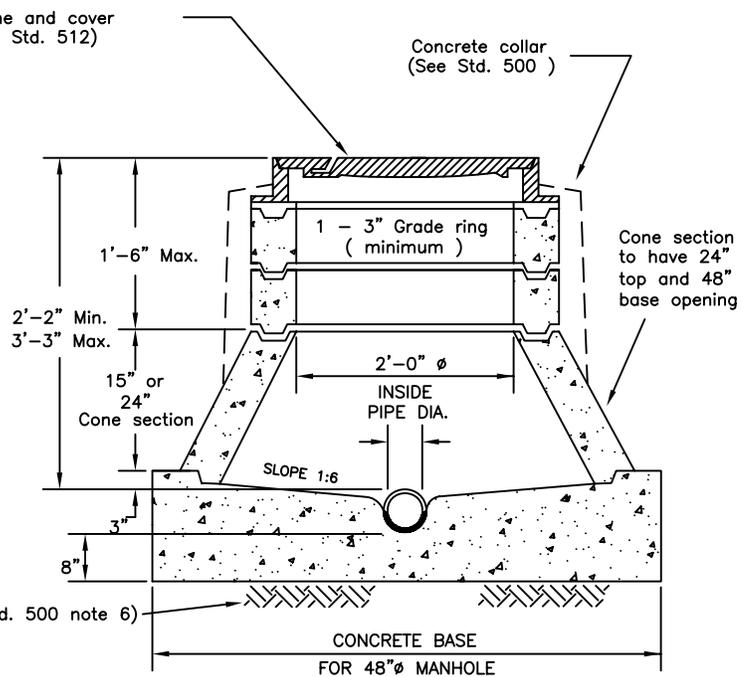
1. Must be used for all private sewage lift station discharges. No discharges may be made directly to the collector sewer, trunk sewer, or manhole.

2. Any alternate design must be approved by the City.

<i>City of Lakeport</i>		
DISCHARGE for PRIVATE FORCE MAIN		
SCALE: NONE		DATE:
DWN:	APPROVED	FILE NO.
CHK:		



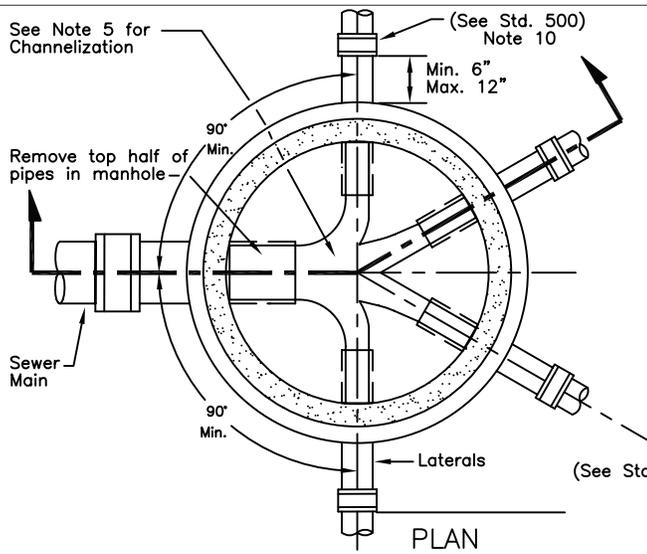
TYPE "A" MANHOLE



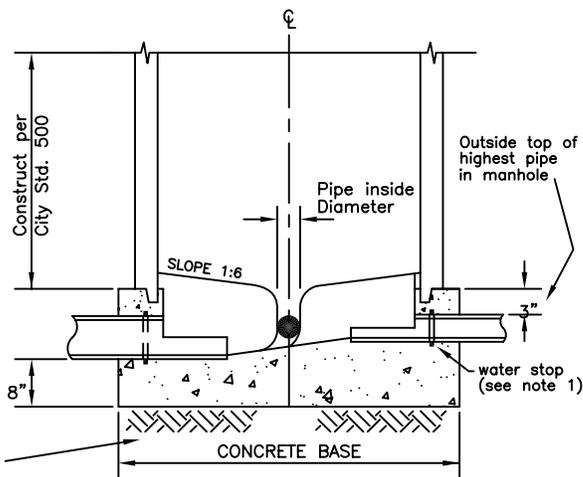
TYPE "B" MANHOLE

SHALLOW MANHOLE DETAILS

- NOTE - See Std. 500 for typical construction details
 NOTE - Type "A" Manhole to be installed only where specifically approved by the Director of Utilities.



PLAN



ELEVATION SECTION

JUNCTION STRUCTURE FOR MULTIPLE LATERALS

NOTES:

1. An approved water stop shall be installed on all pipe entering or leaving a manhole and centered under manhole wall as shown.
2. Generally, the elevations of the top of all pipes entering the manhole base block shall be the same.
3. The maximum number of laterals to be connected to a manhole is (4) four.
4. See Std. 500 for manhole construction details.
5. The channels shall be formed to provide smooth flow through the manhole to the satisfaction of the City Engineer.
6. Channels and laterals through the exterior of the base shall be constructed radially.

City of Lakeport

SHALLOW MANHOLES

JUNCTION STRUCTURES FOR MULTIPLE LATERALS

SCALE: NONE

DATE: Jan 2003

DWN:

APPROVED

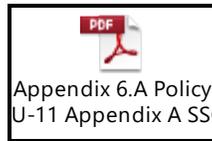
FILE NO.

CHK:

APPENDIX 6

Appendix 6.A: SSO Investigation and Reporting Forms

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 6.A is attached on the following pages.

Appendix 6.B: Hazardous Materials Incident Response Plan

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 6.B is attached on the following pages.

Appendix 6.C: Sanitary Sewer Overflow (SSO) Emergency Response Plan

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 6.C is attached on the following pages.

City of Lakeport
Public Works Department
Utilities Division
Policy U-11
SSO Response Plan
Appendix A

Investigation and Documentation Forms



SSO INVESTIGATION FORM

<p><u>Caller Summary</u></p> <p>SSO ADDRESS: _____</p> <p>Cross Street: _____</p> <p>CALLER NAME: _____</p> <p>CALLER CONTACT #: _____</p> <p>DATE OF INITIAL CALL: _____</p> <p>TIME OF INITIAL CALL: _____ am pm</p> <p>EST. TIME SSO STARTED: _____ am pm</p> <p><u>Work Summary</u></p> <p>REC'VD BY CREW (DATE/ TIME): _____ am pm</p> <p>ARRIVAL TIME: : _____ am pm</p> <p>____ Called Supervisor Spoke Left message (Initial) (Sup Initials)</p> <p>TIME SSO ENDED: _____ am pm</p> <p>TIME CLEAN-UP FINISHED: _____ am pm</p> <p>EMPLOYEES: _____</p> <p>VEHICLES: _____</p> <p>MATERIALS: _____</p>	<p><u>Condition Encountered</u> (Describe):</p> <p>Customer Cleanout was (circle): Full Empty Non-existent</p> <p>ACTIONS TAKEN (circle): JET VAC CCTV HANDROD SNAKE OTHER: _____</p> <p><u>Order of Steps Taken:</u></p> <p>1. _____ 3. _____</p> <p>2. _____ 4. _____</p> <p>Contained Spill (circle): ALL PORTION NONE</p> <p>Restored Flow : Y N</p> <p>SITE CLEANED-UP : Y N</p> <p>SITE DISINFECTED : Y N</p> <p>HEALTH WARNINGS POSTED AT SITE : Y N</p> <p>SIGNS POSTED : Y N</p> <p>BARRICADES PLACED Y N</p> <p>PHOTOS TAKEN Y N</p>
<p><u>SSO Details</u></p> <p>SSO DURATION (hrs/min): _____</p> <p>EST. SSO RATE (gal/min): _____</p> <p>EST. SSO VOLUME (gal): _____</p> <p>EST. VOL RECOVERED(gal): _____</p> <p>EST. VOL NOT RECOVERED(gal): _____</p> <p>FEET CLEANED: _____ main _____ lateral</p> <p>RAIN: Y N If Yes Size of Rain Event: _____</p> <p>PROPERTY TYPE : Public Private</p> <p>PROPERTY DAMAGE : Yes No</p> <p>SPILL APPEARANCE POINT:</p> <p>Inside Bldg/Struc (location) _____</p> <p>Cleanout on lateral</p> <p>Lat type: Proper c-o Imp c-o No c-o</p> <p>Lat loc: Front Back Side</p> <p>Manhole MH# _____</p> <p>Lampost Cleanout LP# _____</p> <p>Other _____</p> <p>PROBLEM FOUND IN: Lateral Mainline</p> <p>UPSMH# _____ DWNMH# _____</p> <p>PIPE DIA.: _____ MATERIAL: _____ AGE _____</p>	<p>PROBLEM (circle):</p> <p>Blockage (If blockage) → BLOCKAGE FROM:</p> <p>Broken Animal Carcass</p> <p>Capacity Deficiency Construction Debris</p> <p>I & I Debris/Grit</p> <p>Unknown Detergent</p> <p>Grease/FOG</p> <p>Roots</p> <p>Solids</p> <p>Other _____</p> <p>Further Details:</p> <div style="border: 1px solid black; height: 80px; width: 100%;"></div> <p>FINAL DESTINATION:</p> <p>Storm Drain System*</p> <p>Inside Bldg/Structure</p> <p>Unpaved Surface</p> <p>Street/Curb/Gutter</p> <p>Surface Water Impact</p> <p>Other _____</p> <p>*If Storm Drain System Was stormpipe plugged downstream and vacuumed Y N N/A</p> <p>REACH STATE WATERS : Y N UNK</p> <p>EST VOL REACHED STATE WATER: _____ gal</p> <p>SAMPLES COLLECTED: Y N N/A</p>



SSO SERVICE CALL FORM

When a call is received by a representative of the City of Lakeport regarding an SSO complaint, or when a City representative witnesses a sewage discharge, the following information should be recorded:

Date: _____ Time Call Received: _____ Received By: _____

Caller's Name: _____ Phone #: _____

Caller Address: _____

Location of SSO: _____ X-St. _____

Estimated Time SSO began: _____

NOTE: A City Representative could be any City employee, a police officer or dispatcher, fire fighter, or administrative staff. The Utilities Division is to ensure that all representatives of the City understand the urgency in contacting the Utilities Division directly after receiving an SSO complaint and the importance of collecting contact information and the estimated start of spill time.

SSO - REQUIRED NOTIFICATIONS

SECTION BELOW TO BE COMPLETED BY SUPERINTENDENT OR MANAGEMENT STAFF

<p>If more than 1,000 gallons reached surface waters or are likely to reach waterways:</p> <p style="text-align: center;">CALL CAL OES WITHIN 2 HOURS*: 800-852-7550</p> <p><small>* notify CAL OES as soon as notification can be provided without substantially impeding cleanup or other emergency measures, but no later than 2 hours after becoming aware of spill</small></p>	<p>Initial phone call:</p> <p>PERSON CALLING: _____</p> <p>DATE & TIME: _____</p> <p>SPOKE TO: _____</p> <p>CAL OES #:</p>
<p>Call CAL OES back if the information you initially provide them (SSO volume, waterway being impacted, etc) significantly changes from the time of the initial phone call.</p>	<p>Updates to CAL OES, if needed:</p> <p>PERSON CALLING: _____</p> <p>DATE & TIME: _____</p>
<p>Central Valley Regional Water Quality Control Board (Guy Childs): 916-464-4648</p>	<p>PERSON CALLING: _____</p> <p>DATE & TIME: _____</p> <p>SPOKE TO:</p>
<p>Lake County Environmental Health: <u>707- 263-1164</u> <i>night/weekend: <u>707-263-2690</u></i></p> <p>LCEH Action Requirements: <input type="checkbox"/> Water quality sampling <input type="checkbox"/> Sewage Contamination Posting</p>	<p>PERSON CALLING: _____</p> <p>DATE & TIME: _____</p> <p>SPOKE TO: _____</p>
<p>Lake County Air Quality Management District: <u>707- 263-7000</u></p>	<p>PERSON CALLING: _____</p> <p>DATE & TIME: _____</p> <p>SPOKE TO:</p>
<p>Enter SSO in CIWQS / Water Boards Online Database</p> <p><input type="checkbox"/> Category 1 (Sanitary sewer system failure with ANY discharge that reaches surface water or drainage channel (dry or wet) or to storm drain system and is not fully captured and returned to sewer)</p> <p><input type="checkbox"/> Category 2 (Sanitary sewer system failure with 1,000 gallons or greater that do not reach surface water, a drainage channel, or the storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly)</p> <p><input type="checkbox"/> Category 3 (All other discharges of sewage resulting from a failure of the sanitary sewer system)</p> <p><input type="checkbox"/> PLSD (Private Lateral Sewer Discharge)</p>	<p>DATE & TIME: _____</p> <p>SSO Event ID #: _____</p>

Optional Notifications

Lake County Office of Emergency Services	<input type="checkbox"/> (707) 262-4090
California Department of Health Services, Michelle Frederick (Category 1 Spills)	<input type="checkbox"/> (707) 576-2731
Department of Fish and Game, 24-Hour Dispatch <input type="checkbox"/> (916) 358-1300	<input type="checkbox"/> (916) 445-0045
Department of Fish and Game, Lt. Loran Freeman, Cell <input type="checkbox"/> (707) 227-6991	<input type="checkbox"/> (707) 998-9208

SAMPLING AND PUBLIC POSTINGS: Sampling needed if 50,000 gallons or more reach surface water

Receiving Waters were: Noticeably Impacted NOT Noticeably Impacted

Name of waterway where sewage entered water: _____

Waterway was a: Creek Channel Other
Waterway was: Dry Poned Trickling Flowing Gushing

Locations where signs were posted: _____(take pictures)



Samples taken by: _____ Date & Time: _____

Samples taken: _____ ft upstream & _____ ft downstream of where sewage entered water

Conditions that may have influenced sample results: _____

RE-SAMPLING

Sample dates: _____

Date of clear sample and signs removed: _____

Additional notes: _____

ADDRESS HISTORY/ SSO FOLLOW-UP

Date of last Maintenance: _____ Frequency of Maintenance: _____

Dates/ WO#s of Previous Backup Calls: _____

Final Determinations of Cause:

Spill Corrective Action Taken:

Adjust Maintenance Schedule / Method of Cleaning Describe: _____

Line TV'd Date: _____ Replaced Line Date: _____

Repair Scheduled for Date: _____ Other (Describe)



SPILL START TIME INVESTIGATION

Caller: _____

Where did you see sewage spill from? Manhole Inside Building Clean Out Wet well/Lift station

Other _____

Date/time caller noticed spill: Date: ___/___/___ Time: ___:___ AM PM

Comments from caller: _____

Last time Caller observed NO spill occurring: _____:_____ AM PM Date: _____/_____/_____

Comments: _____

First Responder: _____

Arrival Date/Time: Date: ___/___/___ Time: ___:___ AM PM

**** Attempts should be made to interview at least two (2) others in addition to the Caller.
If nobody is available, document attempts (by address or passer-by) ****

On Site Interview 1: Name/Address: _____

Observation Description: _____
_____ Time Observed Spill: _____:_____ AM PM N/A

On Site Interview 2: Name/Address: _____

Observation Description: _____
_____ Time Observed Spill: _____:_____ AM PM N/A

Other comments regarding spill start time (more attempted interviews, or reason for no interviews, etc.): _____

SPILL VOLUME CALCULATION

The purpose of this worksheet is to capture the data and method(s) used in estimating the volume of an SSO. Since there are many variables and often unknown values involved, this calculation is just an estimate. Additionally, it is useful to use more than one method, if possible, to validate your estimate.



Remember to take photos!

Check all methods and tools that you used:

- Visual estimate
- Measured surface area and volume
- Duration and flow rate
- Estimated daily use per capita upstream
- Meter Pump Station
- Other (use notes to explain)

Visual Estimate Method- Imagine a bucket(s) or barrel(s) of water tipped over.

Size of bucket(s) or barrel(s)	How many of this Size	Multiplier	Total Volume Estimated
1 gal. water jug		X 1	
5 gal. bucket		X 5	
32 gal. trash can		X 32	
55 gal drum		X 55	
Total Volume Estimated Using Visual Method			

Measured Volume Method (this may take several calculations as may have to break down the odd shaped spill to rectangles, circles, and polygons)

If the entire spill is settled in one area, calculate the volume of spill in feet (L X W X D) and convert to gallons (X 7.5 for gallons in a square area, and X .785 for gallons in a circular area). It is important when guessing depth to measure, if possible in several locations and use an average depth.

1. Draw a sketch of the spill in the space provided on next page
2. Draw shapes and dimensions used for calculations
3. Use correct formula for various shapes (see table below)

SSO Shape	Volume Calculation Formula	Volume Result
Rectangle	$L \times W \times D \times 7.5$	
Circle	$D \times D \times 0.785$	
Polygons	Show formula used	
Triangle	$\text{base (ft)} \times \text{height (ft)} \times 0.5$	



USE THIS SPACE TO DRAW A SKETCH OF THE SSO SHAPE AND DIMENSIONS

Duration and Flow Rate Method

Start date and time:	
End date and time:	
Total spill duration: Subtract line 1 from line 2. Show time in minutes	
Average flow rate in GPM: Use photo chart to estimate flow rate (account for diurnal patterns if long duration)	
Total volume estimate: minutes x gpm	

Upstream Connections Method

If you are dealing with a spill that has been running into a storm drain, you must estimate the gallons by: the amount of the overflow times the number of upstream connections on the receiving line (200 gal. per household per 24 hr) and estimate the time that the flow has been occurring. Each residence contributes about 240 gallons per day or about 10 gallons per hour. Multiply the number of residences by 10 and by the number of hours. This gives you the number of gallons.

EXAMPLE A: If you have a line with 6 houses on it and it has been overflowing for 24 hours :
6 houses x 200 gallons per house per 24 hours = 1,200 gal.

EXAMPLE B: If you have 60 houses on a line that has been overflowing for 4 hours :
60 houses x 10 gallons per house per hour x 4 hours= 2,400 gal.

Pump Station Method

If the flow is coming from a pump station, use the previous day s (same weather) flow and pump capacity to estimate the flow.

Additional Notes (attach extra pages if needed): _____



SAMPLING

Remember to take photos

Required for spills where 50,000 gallons or more reach surface waters



Name of waterway/channel where sewage entered water: _____

Waterway was: Dry Ponded Trickling Flowing Gushing

Waterway was: Noticeably Impacted NOT Noticeably Impacted

Samples taken by: _____ Date & Time: _____

Samples taken: _____ ft upstream & _____ ft downstream of where sewage entered water

Conditions that may have influenced sample results: _____

Additional sample location(s), if requested by Lake County Environmental Health: _____

RE-SAMPLING

Sample Dates/Times: _____

Additional Sampling Notes: _____

USE THIS SPACE TO DRAW A SKETCH OF SAMPLING LOCATIONS IN RELATION TO THE SSO LOCATION

City of Lakeport / CLMSD Collection System Failure Analysis Form

CIWQS Event ID:		Prepared By:	
SSO/Backup Information			
Event Date/Time:		Address:	
Volume Spilled:		Volume Recovered:	
Cause:			
Summary of Historical SSOs / Backups / Service Calls / Other Problems			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By:		Record Review Date:	
Summary of CCTV Information			
CCTV Inspection Date:		Tape Name/Number:	
CCTV Tape Reviewed By:		CCTV Review Date:	
Observations:			
Recommendations			
	No Changes or Repairs Required		
	Maintenance Equipment		
	Maintenance Frequency		
	Repair (Location and Type)		
	Add to Capital Improvement Rehabilitation/Replacement List: Yes <input type="checkbox"/> No <input type="checkbox"/>		
Underground Field Supervisor:			
Review Date:			
Public Works Manager:			
Review Date:			

CLMSD Contact List

Updated 12/7/17

<u>Position/Title</u>	<u>Name</u>	<u>Telephone Number</u>
City Manager	Margaret Silveira	(707) 263-5615 x104 Cell: (209) 505-0858
CLMSD Director	Douglas Grider	(707) 263-3578 x401 Cell: (707) 489-3311
City Engineer	Paul Curren	(707) 263-5615 x407
Compliance Officer	Andrew Britton	(707) 263-3578 x403 Cell: (707) 349-4763
Utilities Superintendent	Paul Harris	(707) 263-3578 x402 Cell: (707) 533-9168
Building Official	Tom Carlton	(707) 263-5615 x202 Cell: (707) 349-3492
Wastewater Facilities Supervisor	Carlos Pradomerze	(707) 263-3578 x702 Cell: (707) 245-6754
Construction Supervisor	Jim Kennedy	(707) 263-3578 x601 Cell: (707) 484-5948

Other Agencies and Private Contractors

Lakeport Police Department	Brad Rasmussen, Chief Jason Ferguson, Lieutenant	(707) 263-5491
Lake County Special Districts Jan Coppinger Scott Harter Will Evans	Main Line Administrator Deputy Administrator Compliance Coordinator	(707) 263-0119
Perkins Septic Tank Cleaning Action Sanitary Silva Septic & Rooter Services		(707) 263-6168 (707) 994-5068 (707) 462-8304
Lakeport Fire Protection Dist. Lake County Sheriff's Office	Doug Hutchison, Chief Brian Martin, Sheriff	(707) 263-4396 (707) 262-4200



Sanitary Sewer Overflow & Backup Response Regulatory Reporting Guide

ALWAYS document regulatory reporting regardless of whether reporting is done during business hour or after hours.

Reporting Instructions

Deadline	See Side B for definitions of the categories of spills of untreated or partially treated wastewater from City-owned sanitary sewer system.			Private Lateral Sewage Discharge (PLSD)
	Category 1	Category 2	Category 3	
2 hours <i>after awareness of SSO</i>	1. Notify CalOES at (800) 852-7550 of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water 2. Obtain CalOES incident number			
48 hours <i>after awareness of SSO</i>	1. If 50,000 gal or more were NOT recovered, begin water quality sampling and initiate impact assessment 2. Notify Lake County Environmental Health Dept (707-263-1164; after hrs: 707-263-8656) to determine if public warning signs are necessary			
3 Days <i>after awareness of SSO</i>	1. Submit Draft Spill Report in the CIWQS* database 2. Call Regional Water Quality Control Board, Guy Childs (916) 464-4648	1. Submit Draft Spill Report in the CIWQS* database 2. Call Regional Water Quality Control Board, Guy Childs (916) 464-4648		
15 Days <i>after awareness of SSO</i>	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end time	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end time		
30 Days <i>after awareness of SSO</i>			Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end time	
30 Days <i>after SSO end time</i>	If 50,000 gal or more were NOT recovered, submit SSO Technical Report using CIWQS			Submit Spill Report in CIWQS database* (optional)

*In the event the CIWQS database is not available, notify the State Water Resources Control Board (SWRCB) by phone.

Note: For reporting purposes in the CIWQS database, if one SSO event results in multiple appearance points, submit one report based on the location of the SSO failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.

Definitions of Spill Categories

Be sure to document how the category was determined: See Utilities Division Policy U-11 SSO Emergency Response Plan for details.

Category	Definition
Category 1:	Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either: <ul style="list-style-type: none">• Reached surface water and/or drainage channel tributary to surface water; or• Reached a Municipal Separate Storm Sewer System (MS4) and was not full captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.
Category 2:	Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer failure or flow condition that either: <ul style="list-style-type: none">• Did not reach surface water, a drainage channel or an MS4; or• The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.
Category 3:	All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer failure or flow condition.
Private Lateral Sewage Discharge (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately-owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the SSO Database.



Portable sign (WARNING SIGN) for public awareness of SSO to be placed near discharge source in an area that may endanger human health. Use if directed by Lake County Environmental Health Dept.



Do not touch

¡NO TOQUE EL AGUA!

Water in this area may be contaminated by a temporary overflow of a sanitary sewer.

Please avoid physical contact as it may pose a health risk.

Contact County of Lake Environmental Health Department for more information 707-263-1164

Portable sign (SURFACE WATER SIGN) for public awareness of SSO to be placed near surface waters. Use if directed by Lake County Environmental Health Dept.

COVER LETTER TO ACCOMPANY ALL SSO REPORTS SENT TO RWQCB

Spill Notification Report

Attention: Guy Childs

Discharger: **City of Lakeport**
Name of Facility: **City of Lakeport Collection System**
WDRs Order Number: **2006-0003-DWQ**
CIWQS Place ID: **5SSO10896**
County: **Lake**

I am hereby submitting to the Central Valley Water Board the following information:

Spill Description:

Location of spill (street address or gps coordinates):

Map of area affected by spill (please attach):

Date and time spill was discovered:

Material discharged:

Time discharge was ceased:

Cause of spill:

Estimated volume spilled:

Was the spill contained on site?

Did spill reach any surface water drainages?

Description of cleanup procedures (please attach post cleanup photographs):

Volume of spill recovered and final disposal method?

Corrective Actions Taken to Prevent Future Spills:

Fully describe corrective actions taken to prevent re-occurrence of spills. These actions may include operational and mechanical improvements to the facility. If the improvements have not already been implemented, then a schedule for implementing the corrective actions shall be included with this report. If additional room is necessary, please attach the corrective actions description and implementation schedule to this Spill Notification Report.

Certification Statement:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Signature: _____

Phone: 707-263-3578

Printed Name:

Date:

Electronic Report Submittal:

To submit the electronic reports please do the following:

1. First, make a PDF copy of your report and include this *form as the first page of the report.*
2. Attach the PDF file to the email.
3. Send the email and PDF attachment to **centralvalleysacramento@waterboards.ca.gov** (Please note that in order to ensure your reports are cataloged correctly and routed to the appropriate Regional Board staff, only one report/attachment shall be included with each e-mail.)

CITY OF LAKEPORT
HAZARDOUS MATERIALS
INCIDENT RESPONSE PLAN



March 2009

Revised February 2, 2010

Revised June 1, 2017



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EMERGENCY RESPONSE PROCEDURES

In the event of a release of a hazardous material, close all entry and exits to the release area, move at least 50 feet away from the release area, and dial 9-1-1 immediately. Be sure to name the material being released and an approximate quantity. Reference the following procedures and use common sense:

Detect, Identify, and Assess the Hazard

a. Evaluate the hazards of the material and estimate the quantity of spilled material. Determine if it is:

- Explosive
- Flammable
- Corrosive
- Toxic
- An inhalation hazard
- An environmental hazard
- A hazard of any sort not listed above

b. Check labels on containers, for example:

- Placards
- Safety Data Sheets



- c. If unlabeled, treat as hazardous
- d. Check for unusual colors, odors, or sounds
- e. Observe instances of unexplainable illness or injuries

Initiate the Notification Process

- a. Upon identifying a hazardous materials spill, contact the Lakeport Fire Department immediately by dialing 911 and notify your immediate supervisor.
- b. The supervisor shall contact the Compliance Officer, immediately following notification of a hazardous materials spill.

Isolate, Control, and Contain the Hazard

- a. Treat all materials as hazardous until proven otherwise
- b. Do not touch, inhale, or ingest any unknown material
- c. Do not eat, drink, or smoke in the incident area
- d. Be mindful that other variables (i.e., fire, wind, rain, temperature, etc.) may change risks

Secure the Scene

Without entering the immediate hazard area, do what you can to isolate the area and assure the safety of people and the environment.

- a. Isolate and restrict access to the areas which threaten human health and safety



- b. Move and keep people away from the scene and the perimeter
- c. If hazard is compressed gas, evacuate the area and allow gas to vent
- d. Create space for emergency response equipment to enter and exit the scene without difficulty
- e. Remember to stay upwind of the incident scene
- f. Remove sources of ignition (i.e. open flames, electrical equipment, etc.)
- g. Close valves and containers
- h. Dike, divert, and absorb liquids
- i. Cover or suppress emissions using soil, foam, plastic, etc.
- j. Protect storm drains and sewers
- k. As best as is reasonably possible, mitigate effects of hazard on the environment and property
- l. Mark areas to warn others, restrict access, and prevent accidental contamination or track-out of contaminants
- m. Provide assistance to emergency personnel, as appropriate

In the Event of Fire, Call 911

- a. Evacuate all persons in the affected incident zone to a safe, upwind location



- b. Take roll call, and make sure all people are accounted for

Cleanup

- a. Sweep up or collect small spills into labeled container
- b. Use absorbent or berms to absorb material
- c. Use appropriate equipment to deal with material
- d. Do not attempt to cleanup large spills of hazardous materials without trained personnel or contractors
- e. Dispose of waste material safely and appropriately
- f. Low level Hazmat secured in lockers may be stored on-site until the next local Hazmat collection event.

Post-Incident Reporting/Recording

The time, date, and details of any hazardous materials incident that requires implementation of this plan shall be noted in the facility's operating record.

Within 15 days of any hazardous materials emergency incident or threatened hazardous materials emergency incident that triggers implementation of this plan, a written Emergency Incident Report (attached hereto in the appendix), including, but not limited to a description of the incident and the facility's response to the incident, must be submitted to the California Environmental Protection Agency's (Cal EPA) Department of Toxic Substances Control, the local CUPA, the local fire department's hazardous materials program, and the City's Compliance Officer. The report shall include:



- a. Name, address, and telephone number of the facility's owner/operator;
- b. Name, address, and telephone number of the facility;
- c. Date, time, and type of incident (*e.g., fire, explosion, etc.*);
- d. Name and quantity of material(s) involved;
- e. The extent of injuries, if any;
- f. An assessment of actual or potential hazards to human health or the environment, where this is applicable;
- g. Estimated quantity and disposition of recovered material that resulted from the incident;
- h. Cause(s) of the incident;
- i. Actions taken in response to the incident;
- j. Administrative or engineering controls designed to prevent such incidents in the future.

The Compliance Officer may be required to submit an Emergency Release Follow-Up Notice Reporting Form thereafter.

Chlorine Leak

In the event of a minor chlorine leak, all employees are to evacuate the facility, close all exterior doors, and dial 9-1-1 immediately.

Media Communications

The Compliance Officer, Utilities Superintendent, or City Manager shall be responsible for any and all communication



with the media, including announcements, alerts, interviews, and updates.

Media contacts are as follows:

Media	General Phone	Contact
Radio		
Bicoastal Media (KXBX AM & FM, KNTI, KUKI AM & FM)	(707) 263-6113	George Feola, Manager (707) 263-6113 x106
KPFZ FM	(707) 263-3640	Andy Weiss, Manager
Television		
Mediacom (local cable provider)	(707) 998-1516	
LCPTV (local public access TV)	994-8201 x109	Beth Katherine Kaiman, Interim Station Manager

LAW ENFORCEMENT COORDINATION

The Lakeport Police Department shall be notified, if necessary, to inform the general public of a serious release of hazardous materials and shall coordinate public canvassing and notification.

CONTACTS SUMMARY

<u>Name</u>	<u>Position</u>	<u>Primary Contact</u>	<u>Secondary Contact</u>
Paul Harris	Utilities Superintendent	(707) 263-3578 x102 pharris@cityoflakeport.com	(707) 533-9168
Andrew Britton	Compliance Officer	(707) 263-3578 x106 abritton@cityoflakeport.com	(707) 349-4763



<u>Name</u>	<u>Position</u>	<u>Primary Contact</u>	<u>Secondary Contact</u>
Lakeport Police Department		(707) 263-5491	9-1-1
Lakeport Fire Protection District		(707) 263-4396	9-1-1
Lake County Sheriff		(707) 263-2690	9-1-1
CHP		(707) 279-0103	9-1-1
Lake County Environmental Health		(707) 263-1164	
State Office of Emergency Services (OES)		(800) 852-7550	
Local Hazardous Materials Program		(707) 263-1164	
Cal EPA Toxic Substances Control		(800) 728-6942	
Cal OSHA Division of Occupational Safety and Health		(510) 622-2891	
Lake County Air Quality Management District		(707) 263-7000	
Regional Water Quality Control Board		(916) 464-4618	
Poison Control Center		(800) 222-5000	
Sutter Lakeside Hospital		(707) 262-5000	5176 Hill Road, Lakeport, CA 95453
St. Helena Hospital Clearlake		(707) 994-6486	15630 18 th Ave., Clearlake, CA 95422

Citizen inquiries should be directed to those individuals listed above only after they have been notified of the spill.



FACILITY EVACUATION PROCEDURES

The following information describes evacuation routes, safe gathering locations, and roll-call procedures at each location where hazardous materials are kept. Please reference the attached maps for further direction.

Groundwater Storage Facility

- i. Personnel are not stationed at this facility but, if personnel are on site, announce evacuation verbally and over two-way radios
- ii. Evacuate the facility heading east on Riggs Road
- iii. Meet at the Riggs Road intersection for head count

Water Treatment Plant

- i. Announce evacuation over the yard intercom and any available two-way radios
- ii. Evacuate south through main gate and meet in the parking lot south of the facility
- iii. Use employee roster for roll-call and head count

Wastewater Treatment Plant

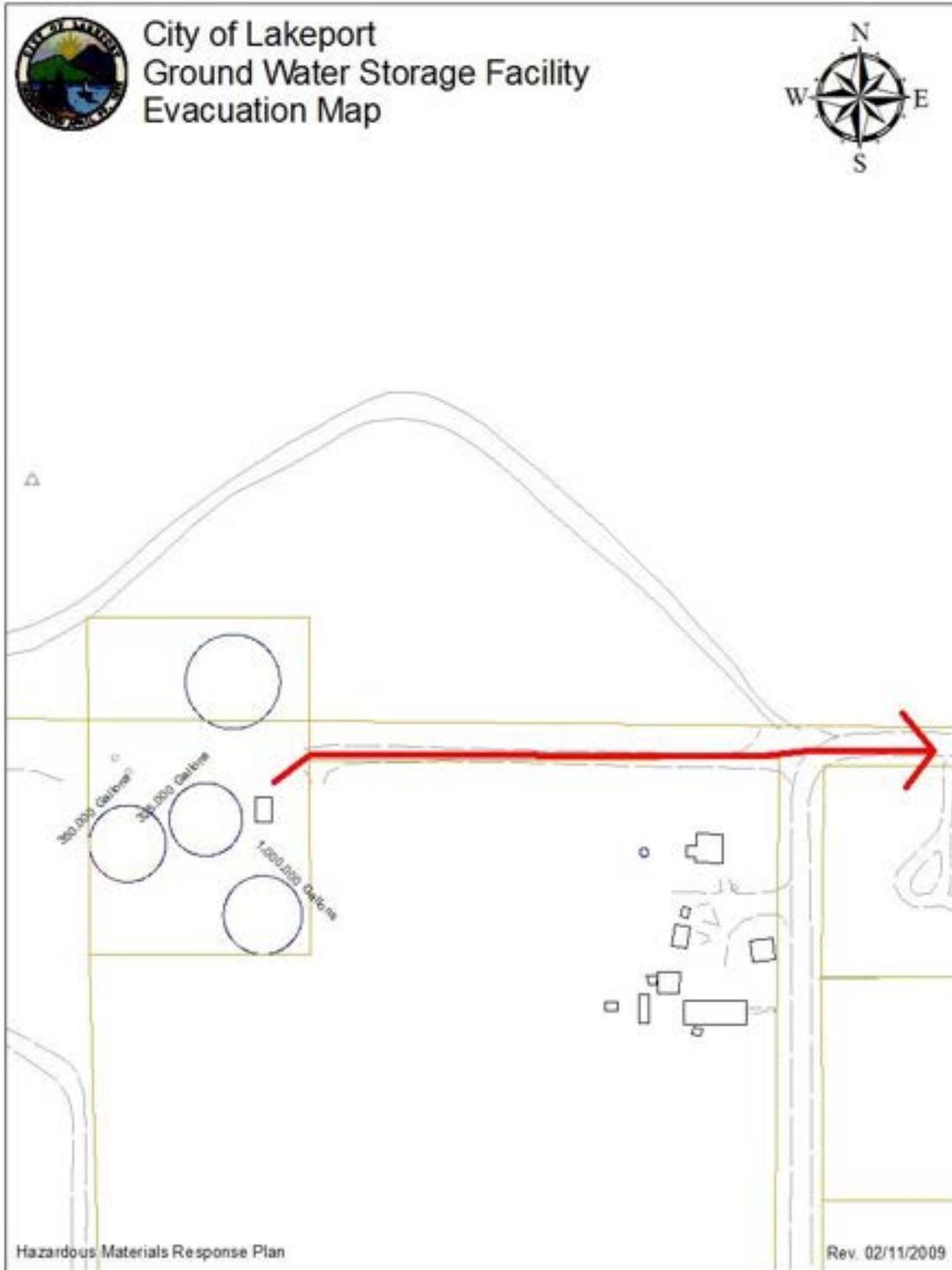
- i. Personnel are not stationed at this facility, but, if personnel are on site, announce evacuation verbally and over two-way radios
- ii. Evacuate the facility heading east on Linda Lane
- iii. Meet at the Linda Lane lift station for head count

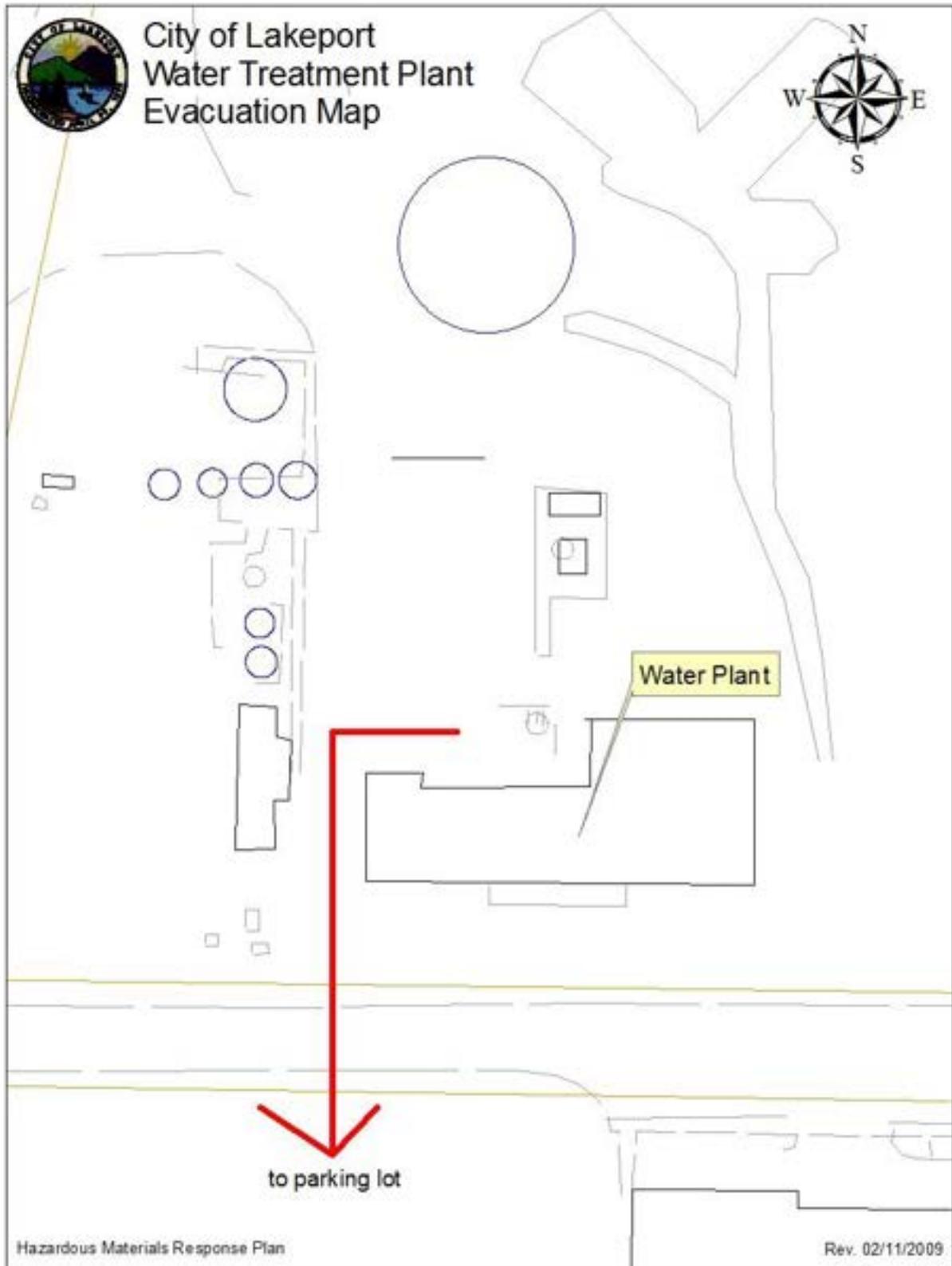
Corporation Yard

- i. Announce evacuation over the yard intercom and any available two-way radios
- ii. Take Martin Street Corporation Yard exit north to baseball field
- iii. Use employee roster for roll-call and head count

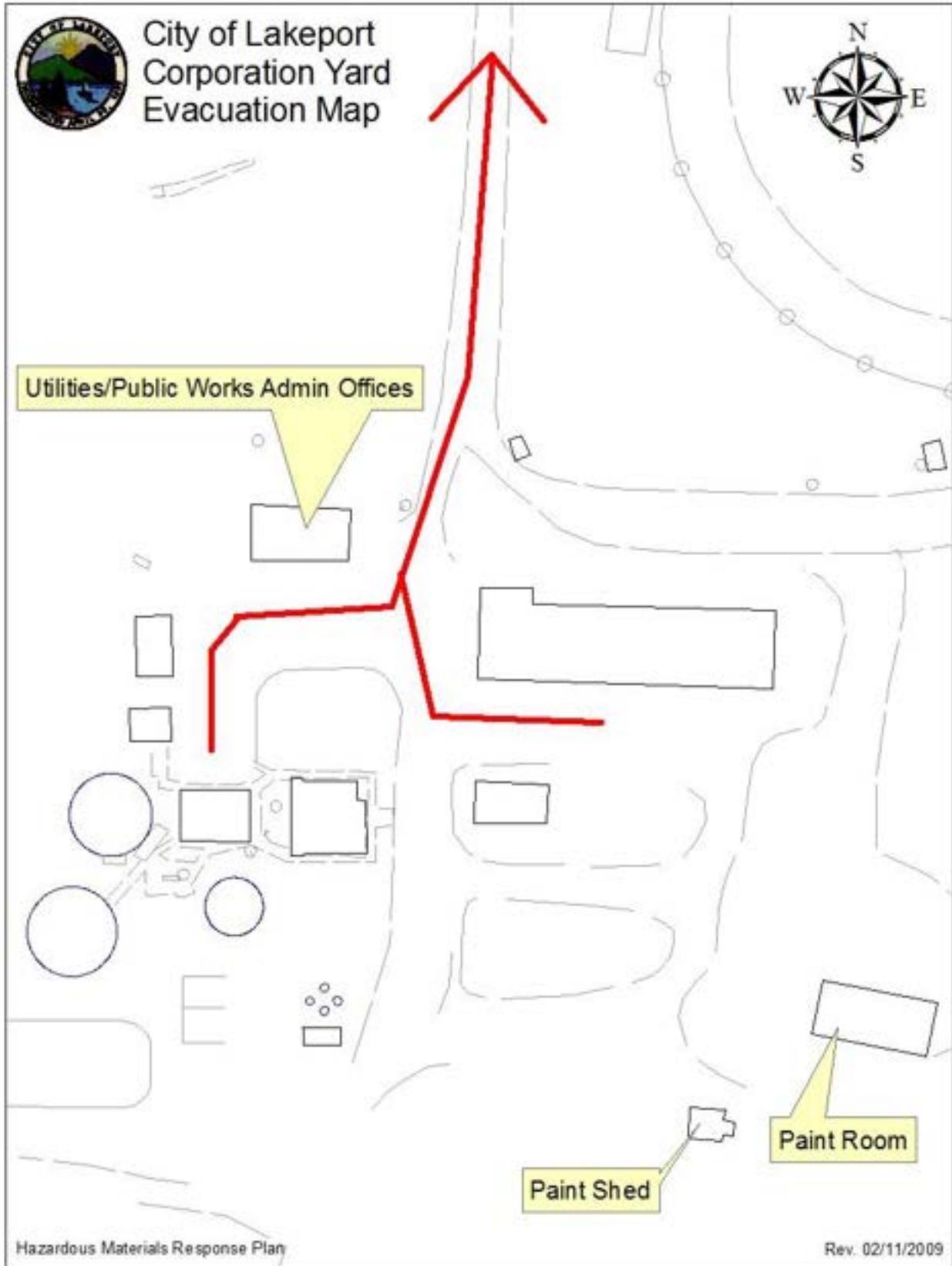


Evacuation Maps











HAZARDOUS MATERIALS INVENTORY AND LOCATION

Groundwater Storage Facility (GWSF)

Material Name	Type and (Physical State)	Quantity (max present on site)	Hazard Categories (risk associated with release)	Location Code (see map GWSF-1 below for physical location)
Chlorine Gas	Pure (gas)	750 lbs	Pressure release, acute health, chronic health	See map
Sulfuric Acid	Mixed with de-mineralized water (liquid)	100 ml	Reactive, acute health, chronic health	See map
Caustic Soda	Liquid	1,000 gallons	Acute health, chronic health	See Map

Water Treatment Plant (WTP)

Material Name	Type and (Physical State)	Quantity (max present on site)	Hazard Categories (risk associated with release)	Location Code (see map WTP-1 below for physical location)
Chlorine Gas	Pure (gas)	450 lbs	Pressure release, acute health, chronic health	See map



Hydrochloric Acid	Mixed with water (liquid)	1,200 gal	acute health, chronic health	See map
Caustic Soda (sodium hydroxide)	Mixed with water (liquid)	55 gal	Reactive, acute health	See map
ProPac 9800	(liquid)	55 gal	N/A	See map
Clarifloc C-309p Polymer (epichlorohydrin-dime thylamine copolymer)	Mixture (liquid)	55 gal	N/A	See map
Sulfuric Acid	Mixed with de-mineralized water (liquid)	100 gal	Reactive, acute health, chronic health	See map
Ozone	(gas)	40 lbs	Acute health, chronic health	See map

Wastewater Treatment Plant

Material Name	Type and (Physical State)	Quantity (max present on site)	Hazard Categories (risk associated with release)	Location Code (see map WWTP-1 below for physical location)
Chlorine Gas	Pure (gas)	2,400 lbs	Pressure release, acute health, chronic health	See map

Corporation Yard



Material Name	Supplier	Quantity (max present on site)	Hazard Categories (risk associated with release)	Location Code (see map CY-1 below for physical location)
3M Spray Adhesive Super 77	Spray	Super	Do not inhale	See Map
3M Strip Caulk (Black)	3M Corp.	3 tubes	Skin/eye irritant	See Map
3M Strip Caulk (White)	3M Corp.	3 tubes	Health - 3	See Map
Acetic Acid Glacial	Hach	55 gal.	Health - 2, Fire - 2	See Map
Acetylene (Welding)	Liquid Air Corp.	2 cyl	Health 2, Asphyxiant	See Map
Acrylic Enamel	Du Pont	2 gal	Do not inhale, ingest	See Map
Acrylic Lacquer Primer & Sealer	Tri-Valley Paints	4 gal	Avoid eyes, skin, inhal	See Map
Activated Carbon - Impregnated	Carbtrol Corp.	1000 F3	Health - 1	See Map
Activator 90	Loveland Ind.	100 lbs	Health - 2	See Map
Acza Treated Wood (Chemonite)	J. H. Baxter & Co.	10 timbers	Hlth.-1; Fire-2; Reac.-0	See Map
Adhere	Ukiah Paper Products	1 gal	Health - 2, Ingestion	See Map
Adhesive 312, 87401	Curtis Industries	2 ea	Health - 2	See Map



Air	Liquid Air Corp.	1 cyl	None	See Map
Alcohol Pads	Triad/H&P Industries	2 boxes	Avoid skin/inhalation	See Map
Alka-Seltzer w/o Aspirin	Hach Company	2 boxes	Avoid eyes/skin	See Map
All Pro Cleanser (Dry Chlorine)	Ukiah Paper Products	6 cans	None	See Map
All Pure Sudsy Amonia	All Pure Chemical Co.	1 gal	Health - 3	See Map
Amitrol T Herbicide	Rhone-Poulence Ag Co.	150 lbs	Health - 1	See Map
Ammonia Inhalant Solution B-33	Lab Safety	10	Eye, Skin, Ingestion	See Map
Ammonia Solution	Delta Scientific Corp.	1 pint	Health - 3	See Map
Ammonium Hydroxide	All Pure Chemical Co.	12 oz.	Health - 3; Fire 1	See Map
Anchoring Cement	Piedmont	1 bag		See Map
Anionic Emulsion SS-1H	Parnum Paving	200 gal	Health - 2	See Map
Anionic Emulsion RS-1	Parnum Paving	deleted		See Map



Anthracite Coal	Carbon Sales, Inc.	126 F3	Do not inhale	See Map
Anti-Freeze	Handy Auto Supply	12 gal		See Map
Anti-Seize Compound	Curtis Ind.	15-16 oz. cans	Hlth.-1, Fire-NA, Reac.-0	See Map
Antiseptic Hand Cleaner	Georgia-Pacific Corp.	12 bottles	Health - 1	See Map
Aqua Clean Windshield Cleaner	Napa	3 gal		See Map
Argon	Lake Co. Welders	1 cyl	Asphyxiant	See Map
Armor-All All Purpose Cleaner	Napa	1 bottle		See Map
Auto-Electric Sealing Compound	KAR Product	6 rolls	Health - 0	See Map
Automatic Transmission Fluid (Dexron)	Napa-Handy Auto	24 qt	Health-1, Fire-1	See Map
Automatic Transmission Fluid (Donax R TG Plus Fluid)	Shell	24 qts	Health-1, Fire-1	See Map
Barium Grease-Heavy #105	Texas Refinery Corp.	2 drums	Health - 1	See Map
Battery (Acid/Lead)	Interstate Battery	4	Health - 3	See Map
Battery 6V Lantern	Bay Area Barricade	5 cases		See Map



Battery Cleaner & Acid Detector	KAR Product	6 cans	Health - 2	See Map
Battery Cleaner, Acid Detector (E404)	Interstate Batteries	12-14 oz. cans	Hlth.-2, Fire-4, Reac.-0	See Map
Battery Term Protectors (#75583)	Curtis Industries	100 rings	Health-1, Fire-1	See Map
Battery Term Protectors (Top Mount)	KAR Product	1 can	Health - 0	See Map
Big Orange Aerosol	ZEP Manuf.	15 cans	Health - 1	See Map
Big O-X	Aldran Chemical	deleted	Hlth-0; Fire-0; Reac.-0	See Map
BIZ Chemtool	Delta Dist.	6 cans	Health - 3	See Map
Black Flag Wasp Killer	Piedmont	1 can	Do not swallow	See Map
Boraxo Pink Luron Powder Hand Soap	The Dial Corp.	2 boxes	Health - 1	See Map
Brass Fittings & Gate Valves	James Jones Co.	100's	Health - 3	See Map
Brake Cleaner (non-chlorinated)	KAR Product	6 cans	Health - 2	See Map
Brake Cleaner TM 1807	Curtis Industries	6 cans	Health - 2	See Map
Brake Fluid	Napa	2 gal		See Map
Burn Cream/Chloroxylenol	Lab Safety	12 pkts.	Eye/skin irritant, flamm.	See Map
Cable Lubricant	Napa	2 tubes	None	See Map



Car Brite	National Chemsearch	5 gal	Health - 1	See Map
Carb Choke & Throttle Body Cleaner.	Napa-Handy Auto	12-16 oz. cans	Hlth.-2, Fire-3, Reac.-0	See Map
Carbon Dioxide	Liquid Air Corp.	1 cyl	Avoid inhalation	See Map
Cartridge, Ultrapure (with resin)	Hach Company	2	Health - 1	See Map
Cascade Liquigel	Piedmont	1 box	Avoid eyes, skin	See Map
Caulking Strip (Black)	Handy Auto Supply	1 box		See Map
Caustic Soda Liquid 25% (GW)	Great Western ChemCo	55 gal	Health - 3	See Map
Cement & Mortar Color	Piedmont	3 lbs		See Map
Cement (Portland)	Piedmont	30 bags		See Map
Chain Lube	Aerosol Systems, Inc.	6 cans	Avoid eyes, inhaling	See Map
Chemstrip	National Chemsearch	7 gal	Hlth.-3 ; Fire-2; Instab.-0	See Map
Chemsearch Concentrate (Detergent)	National Chemsearch	5 gal	Health - 2	See Map
Chlorinated Solvents	Ukiah Paper Products	2 qtrs.	Irritate eye/skin	See Map



Chlorine (DPD Free Chlorine Reagent)	Hach Company	12 gal.	Health - 2	See Map
Chlorine (DPD Total Chlorine Reagent)	Hach Company	400 ea	Avoid eyes, inhaling	See Map
Chlorine (gas) CL2	All Pure Chemical Co.	6900 lbs	Health - 3	See Map
Chlorine (Liquid, Pool Bleach)	All Pure Chemical Co.	0	Health - 2	See Map
Chlorine Buffer for CL-17	Hach Company	1 gal	Eye irritation	See Map
Chlorine CLS Tablets	All Pure Chemical Co.	25 lbs.	Health - 2	See Map
Chlorine Indicator Solution for CL-17	Hach Company	1 gal	Eye irritation	See Map
Citra Tech ST	National Chemsearch	7 gal	Health - 1	See Map
Citron Hand Cleaner	National Chemsearch	12 tubes	Health - 1	See Map
Claro 100 (500 ML)	National Chemsearch	12 cans	Health - 2	See Map
Clear Multisurface Sealer	Masterchem Industries	18 gal	Health - 2	See Map
CN 2000 Multi-purpose Lubricant	Curtis Industries	10-20 oz.cans	Hlth.-1; Fire-3; Reac.-0	See Map
CN-400	Curtis Industries	12 cans	Health - 2, Fire - 4	See Map



Cold Galvanizing Compound (ZRC)	Z.R.C. Products Co.	1 qt.	Avoid eyes/skin	See Map
Concrete Bonder (Elmers)	Piedmont	1 gal		See Map
Concrete Fixall	Piedmont	2 bags		See Map
Concrete, Boxes, Lids Pipe	Vintage Water Works	numerous	Health - 3	See Map
Conquest	National Chemsearch	deleted	Health - 1	See Map
Cool Shield	National Chemsearch	12 cans	Health - 2	See Map
Cool Trak Test Strips	Napa	1 jar (100)		See Map
Cooling System Cleanser	Napa	2 cans		See Map
Copper Anti-Seize (Aero)	Curtis Industries	3 cans		See Map
Countertop Cleaner Polish	Magic American Corp.	deleted		See Map
CRF (Crack Filler ok)	Golden Bear Co.	200 gals	Health - 1	See Map
Crown & Chassis Grease NLGI #880	Texas Refinery Corp.	5 gal	Skin/eye irritant	See Map
Diesel oil (dieseline)	Shell (Helms)	500 gal	Health - 2	See Map



Dimonyl Enginer Oil 306-15-40	Swepeco	25 gals	Health - 1	See Map
Disc Brake Quiet	CRC Chemicals	1 can	Health - 1	See Map
Disc Brake Quiet	KAR Products	1 box	Health - 1	See Map
Ductile Iron Pipe	Vintage Water Works	1500 ft	Health - 3	See Map
Dyna-Pro Under Coat	Handy Auto Supply	1 can	Health - 2	See Map
Dzl-Lene XL	Texas Refinery Corp.		Health - 0	See Map
E1 Summer Grade Concentrate	Speed Shore Corp.	24 cans	Health - 1	See Map
Easy-Arc 7014 Electrode	AIRCO Welding Prod.	25 lbs	Health - 1	See Map
Easy-Arc 7018 MR Electrodes	AIRCO Welding Prod.	15 lbs	Health - 1	See Map
Electric Motor Cleaner	Napa	3 cans		See Map
Electrical Coating	3M	1 can		See Map
Electrolyte (Process PH)	Hach Company	0	Skin/eye irritant	See Map
Embrace Room Deodorizer	National Chemsearch	12 cans	Health - 1	See Map



Expo Cleaner for Dry Erase Surfaces	Sanford Corp.	2 cans	Eye irritant	See Map
Fast Dry Acrylic Enamel	The Martin-Senour Co.	1	Avoid eyes/skin	See Map
Fire Clay	Piedmont	1 bag		See Map
Fire Extinguisher (chem)	Fire Safety	25 ea	Do not inhale	See Map
Fitting Gaskets Asbestos and Rubber	Richard Klinger, Inc.	24 ea	Avoid eyes, inhaling	See Map
Floor Sweep	Acme Rigging	5 bags		See Map
Flow Guard Pellets Black	Endustra Filter Manuf.	deleted		See Map
Form-A-Gasket #2	Handy Auto	3-11 oz. tubes	Hlth.-2, Fire-2	See Map
Formazin Turbidity Standard	Hach Company	750 ml	Skin/eye irritant	See Map
Formula 409 Antibacterial Cleaner	Clorox Company	2 qts	Avoid skin, eyes	See Map
Garlon	DOW Chemical	2 gal	Avoid skin, ingestion	See Map
Garlon 4 Herbicide	Jones Ranch & Feed	1 gallon		See Map
Gasoline (Shell Regular Unleaded)	Shell (Helms)	500 gal	Health - 3, Fire - 4	See Map



Gear Oil Treatment	Napa	2 cans		See Map
Giant 20lb Deodorant Blocks	Norlab, Inc.	2 cs.	Health - 3	See Map
Gold Line Clear 2000 ind. Cleaner	KAR Product	1 gal	None known	See Map
Grenadier Disinfect/Deodorize/Clean	National Chemsearch	PW	Health - 2	See Map
Hand Cleaner (formula II)	Sta-Lube, Inc.	1 can	Health - 1	See Map
Hornet & Wasp Killer	Ortho	2 cans		See Map
Hydrochloric Acid	Sierra Chemical	4/55-gal drums	Hlth.-3; Fire-0; Reac.-1	See Map
Hy-Zinc Aerosol	National Chemsearch	12 cans	Health - 2	See Map
Industrial Spray Any Way Enamel	Plasti-Kote Co., Inc.	0	Avoid skin, eyes	See Map
Insect Sting Relief w/Benzocaine	Lab Safety	.22 oz.	Hlth.-1, Fire-3, Reac.-0	See Map
KAR Pipe Sealant with Teflon		6 tubes	Health - 1	See Map
Kerosene	Helm's Petroleum	55 gal	Fire - 2	See Map
K-Kleen For Toilets	Klix Corporation	2 gal	Avoid eyes	See Map
Klean Strip Graffiti Remover	Piedmont	deleted	Do not inhale	See Map



Klean-N-Prime	Napa	2 cans		See Map
Klix Odor Eliminator	Ukiah Paper Products	deleted		See Map
Kopr-Shield CP4d	Campton Electric	1 can		See Map
Kwik Klean (cleaner)	Ukiah Paper Products	1 gal	None	See Map
Lacquer Thinner	Tri Valley Paints	5 gal		See Map
Lavoptik Eye, Face, Body Wash	Lavoptik Company, Inc.	2 kits		See Map
Lextend Aerosol	National Chemsearch	12 cans	Health - 3	See Map
Linseed Oil	Piedmont	1 qt		See Map
Liquid Paper Correction Fluid	Mendo-Lake Office	15 bottles	Health - 1	See Map
Liquid Powder Tracing Dye	Norlab Inc.	5-8oz btls	None known	See Map
Loctite 242 Threadlocker (blue)	Handy Auto Supply	4 tubes	Health-1, Fire-1, Reac.-1	See Map
Loctite 271 Threadlocker (red)	Handy Auto Supply	4 containers	Health-1, Fire-1, Reac.-2	See Map
Loctite 290 Threadlocker (green)	Handy Auto Supply	4 tubes	Health-2, Fire-1	See Map



Loctitie 640 Sleeve Retainer	Handy Auto Supply	4 containers	Health-1, Fire-1, Reac.-2	See Map
Loctite 7070 Cleaner	Napa	3 cans		See Map
Lub-A-Spray Graphite	Napa	2 tubes		See Map
Lubrease Aerosol	National Chemsearch	12 cans	Health - 1	See Map
Lubriplate #110 Brake Lube	KAR Product	1 can	Health - 2	See Map
Lubriplate 630-AA	Napa	1 can		See Map
Mac's Injector Care	Napa	2 cans	Health - 2	See Map
Mac's Non-chlorinated Brake Cleaner	Handy Auto	12-16 oz. cans	Hlth.-2, Fire-3, Reac.-0	See Map
Marking Chalk (Blue,White,Green)	Aervoe-Pacific Co.	3 cases	Do not inhale	See Map
Marking Paint	Aervoe-Pacific Co.	3 cases	Do not inhale	See Map
Marvel Lubricating Oil	Napa	2 tubes		See Map
Maxi-Lube	National Chemsearch	2 cans	Health - 1	See Map
MC-250 Cold Mix (liquid asphalt)	Parnum Paving	40 tons	Health - 2	See Map
Medi-Spray Aerosol	Ukiah Paper Products	12 cans	Eye irritant	See Map



Mild Steel Cov Electrodes (Welding)	Alloy Rods Corp.	25 lbs	Health - 2	See Map
Mineral Seal Oil	Handy Auto	1/2 cup	Hlth.-NA, Fire-NA, Reac.-NA	See Map
Min-Wax Wood Finish	Piedmont	1 qt		See Map
Mirror Repair Kit (Accelerator)	KAR Product	2 kits	Avoid eyes, skin	See Map
Mirror Repair Kit (Adhesive)	KAR Product	3 cans	Health - 1	See Map
Motor Oil (Shell)	Shell (Helm's)	600 qts.	Health - 1	See Map
Naturalizer Aerosol	National Chemsearch	12 cans	Health - 1	See Map
Naturalizer VC Liquid	National Chemsearch	7 gal	Hlth.-1; Fire-2; Instab.-0	See Map
NC-123 Aerosol	National Chemsearch	12 cans	Health - 3, Fire - 3	See Map
ND-165	National Chemsearch	5 gal	Health - 1	See Map
Never-Seize	Handy Auto Supply	2 cans		See Map
Nickel Arc Electrodes/Cast Iron Weld	Alloy Rods Corp.	5 lbs	Health - 2	See Map
Nitrogen Gas	Lake Co. Welders	1 cyl	Health - 3	See Map



Non-Chlorinated Brake Cleaner	Valvoline Company	12	Skin/eye irritant	See Map
Odor Eliminator Deodorant	Klix Corporation	2 gal	Avoid skin, eyes	See Map
Oil (Bar and Chain)	Stihl	1 gal	Health - 1	See Map
Outside Gear Lube	Southwestern Petro.	24 tubes	None	See Map
Oxygen (welding)	Lake Co. Welders	2 cyl	None	See Map
Ozium Glycol-ized Air Sanitizer	Blue Coral Inc.	1 can	Health - 1	See Map
Ozone (Gaseous)	Generated On-site	Unknown	Do not inhale	See Map
Paint & Gasket Remover TM 75005	Curtis Industries	6 cans	Health - 2, Fire - 4	See Map
Permanent Markers	Mendo-Lake	8 ea		See Map
Permatex Ultra Blue	Handy Auto Supply	6 tubes	Health - 2	See Map
Personal Antimicrobial Wipe (PAWS)	Lab Safety	20 pks.	Hlth.-0; Fire-2; Reac.-0	See Map
Pine Sol Cleaner	Piedmont	1 bottle	Avoid eyes	See Map
Plasti-Kote 2355N Flat Black	Plasti-Kote Co., Inc.	3 cans	Avoid eyes, skin	See Map



Polyethylene Tubing	Vintage Water Works	1000 ft	Health - 1	See Map
Potassium Bromide	Hach Company	500 mg	Health - 2	See Map
Potassium Chloride-Reference Electrolyte Cartridge	Hach Company	6/3cc cartridges	Hlth.-1; Fire-1; Reac.-0	See Map
Power Steering Fluid	Valvoline (Handy Auto)	3 qts.	Health-1, Fire-1	See Map
P-O-W Aerosol	National Chemsearch	12 cans	Health - 3	See Map
Pro Grip 4000	Fel-Pro Chemical Prod.	2 oz	Skin/eye irritant	See Map
Pro-Kleen (Battery Protector)	Curtis Industries	10 cans	Health - 3	See Map
Pro-Kleen (Red 83240/TM2551)	Curtis Industries	12 16oz cans	Health-2, Fire-4	See Map
Propane Gas	AmeriGas	600 gal	Health - 1	See Map
Purechlor Sanitizer	All-Pure Chem Co.	2 gals	Health - 1	See Map
PVC Cement (clear) #711	Vintage Water Works	10 cans	Health - 3, Fire - 4	See Map
PVC Cement (Gray) #712	Vintage Water Works	6 cans	Health - 3, Fire - 4	See Map
PVC Cement (wet set)	Vintage Water Works	6 cans	Health - 3, Fire - 4	See Map



PVC Pipe & Fittings	Vintage Water Works	150	Health - 1, Fire - 2	See Map
Quiet Brake	Handy Auto Supply	6 cans		See Map
Rain-X	Napa	2 bottles		See Map
Read Right Screen Cleaner	Konocti Computer	1 bottle		See Map
Rector Seal No. 5	Vintage Water Works	6 cans	Health - 1, Fire - 2	See Map
Resin (Fiberglass)	PPG Industries	0	Do not inject	See Map
Resinoid Bonded Grinding Wheels	Norton Co.	20 ea.	Health - 1	See Map
Root Out	National Chemsearch	deleted	Health - 1	See Map
Root Stimulator and Starter Solution	Green Light Products	deleted	Avoid eyes, inhale	See Map
Round Up	United Ag	20 gal	Health - 2	See Map
RTV Clear Silicone	Lakeparts Service	2 cans	Health - 1	See Map
RTV Silicone Blue Gasket Maker	Handy Auto Supply	3 tubes	Health - 1	See Map
Rubber Cement (tire patch)	Napa	6 tubes		See Map
RuGLIDE Tire Mounting Rubber Lubricant	Handy Auto	5-gallons	Hlth.-1; Fire-0; reac.-0	See Map



Saf-T Solvent	Curtis Industries	10 cans	Health - 2	See Map
Sana-Bole Cleaner	Ukiah Paper Products	1.5 gal	Health - 2	See Map
Scentron Bowl Bars	National Chemsearch	deleted	Health - 1	See Map
Scentry Urinal Screens	National Chemsearch	deleted		See Map
Selex 100 (silicone lubricant)	Curtis Industries	12 cans	Health - 1, Fire - 4	See Map
Shell AR 4000 Paving Asphalt Cement	Parnum Paving	None	Health - 1	See Map
Sight Savers Disposable Clean Station	Bausch & Laumb	3 bottles	None	See Map
Sikaflex 1A	Sika Corp.	1 case	Health - 2	See Map
Silica Gel	Hach Co.	30 pkgs.	Health - 1	See Map
Silicone Lubricant All Purpose	Curtis Industries	2 tubes	Health - 1	See Map
Silicone Sealant	Curtis Industries	5-3oz tubes	Health-1, Fire-1	See Map
Silicone Spray 8300	Napa	1 can	Avoid eyes, skin	See Map
Simple Green	Sunshine Makers, Inc.	2 qts	Eye irritant	See Map
Snapper "00" Grease	Unocal Corp.	1 can	Fire - 1	See Map



Solder Acid Core	Lake Co. Welders	5 rolls		See Map
Solder Flux (Silver)	Lake Co. Welders	2 jars		See Map
Solder Silver	Lake Co. Welders	10 rods		See Map
Soldering Paste	Lake Co. Welders	2 cans		See Map
Solvent Recycled 105	Safety-Kleen	10 gallons	Health -1, Fire - 2	See Map
Spark Kleen	Curtis Industries	12 cans	Health - 3	See Map
Spray Paint (Aervoe) (Street Marking)	Bay Area Barricade	50 cans	Health - 2, Fire - 4	See Map
SR2000 Super Regular Unleaded Gasoline	Shell (Helms)	1000 Gal.	Health-2, Fire - 4	See Map
Sta-Lube Hand Cleaner	Ukiah Paper Products	2 tubs		See Map
Starting Fluid	Napa-Handy Auto	2 cans	Health - 1, Fire - 4	See Map
STP	Lakeparts Service	6 bottles		See Map
Sulfuric Acid Powder Pillows	Hach Co.	100 packs	Health - 2	See Map
Super 300 Gasket Sealant	Napa	2 cont.		See Map



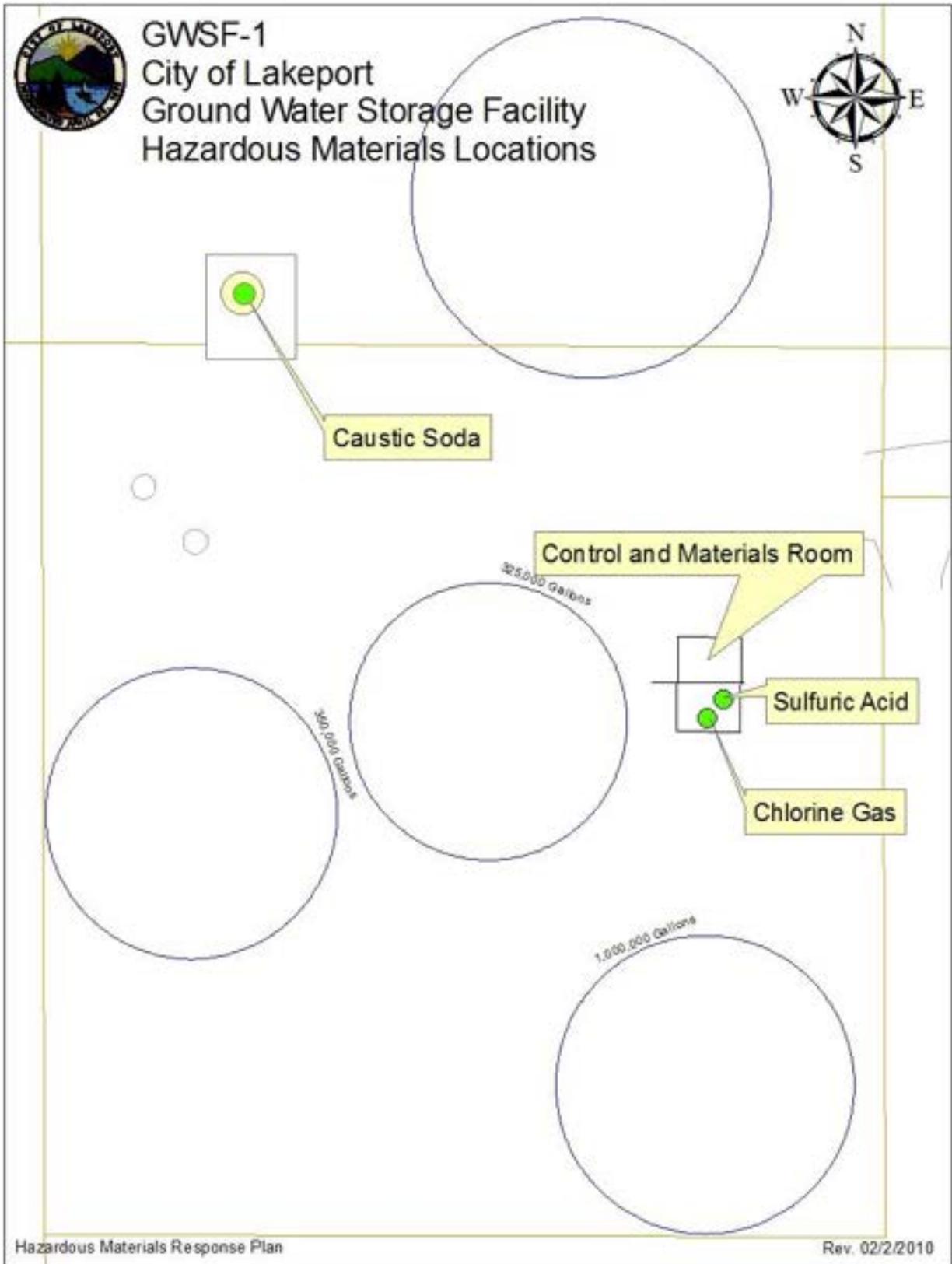
Super Gel Lube 81740	KAR Products	10 cans	Health - 1, Fire - 4	See Map
Surface Conditioning Discs	KAR Product	100 discs	Health - 1	See Map
Teflon Sealing Tape	KAR Product	20 rolls	None known	See Map
Thread Locker (Hi-Strength)	Bowman Distribution	1 tube	Avoid skin, eyes	See Map
Thread Locker (Medium strength)	Bowman Distribution	0 tube	Avoid skin, eyes	See Map
Thread-Eze	National Chemsearch	10 bottles	Avoid skin, eyes	See Map
Total Chlorine Reagent	Hach Company	50 mg	Health - 2	See Map
Traffic Paint (Pervo) Oil Base	Treso Paints	500 gal	Health - 3	See Map
Transmission Fluid (Shell)	Shell	36 qts	Do not ingest	See Map
Turbine Oil (Shell Turbo T Oil)	Helm's Petroleum	10 gal	Health - 1	See Map
Type 6011 Electrode	AIRCO Welding Prod.	10 lbs	Health - 1	See Map
Type 6013 Electrodes	AIRCO Welding Prod.	15 lbs	Health - 1	See Map
Undercoater & Sealer	Flo-Kem, Inc.	2 cans	Avoid eyes, ingestion	See Map

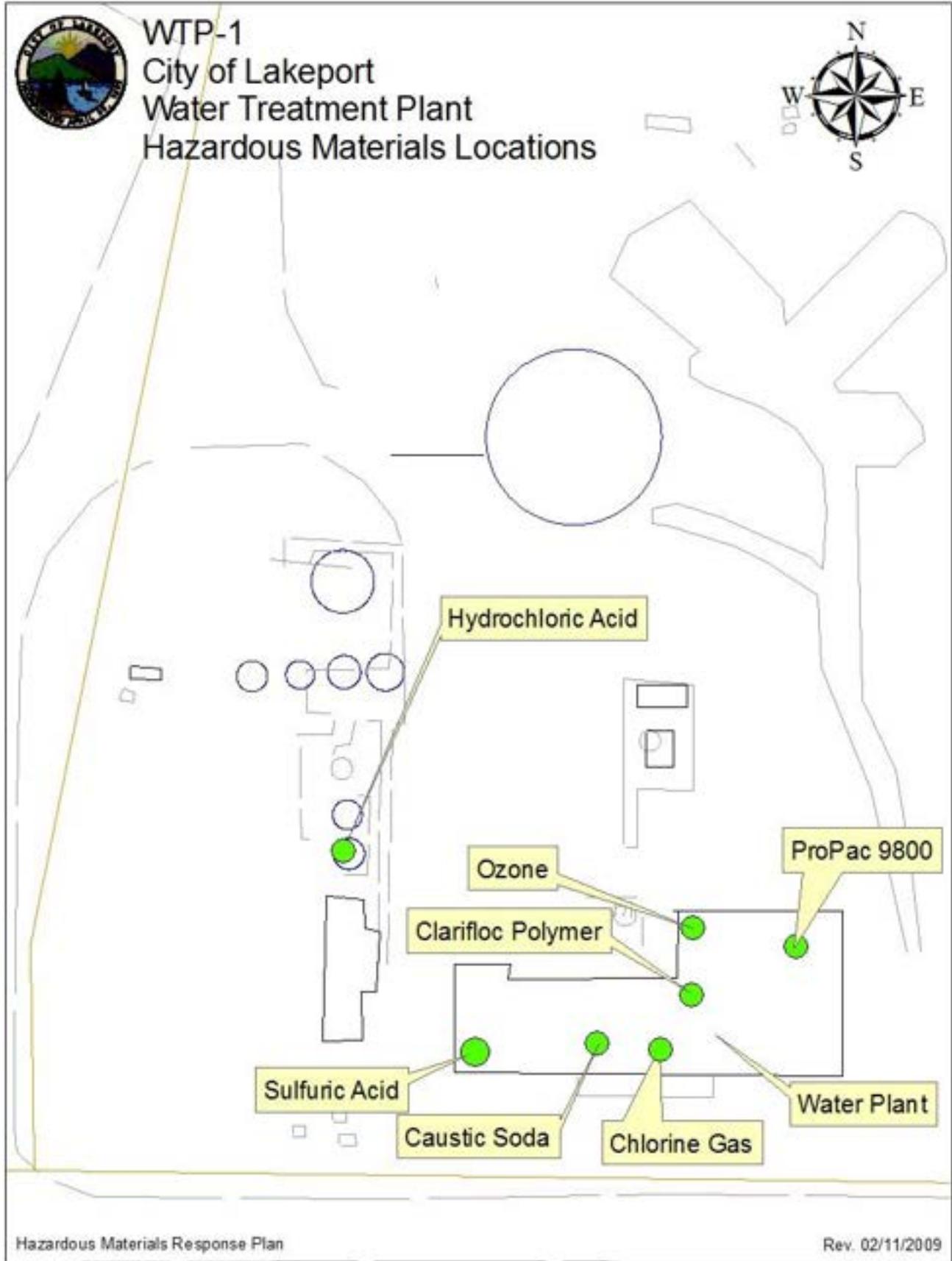


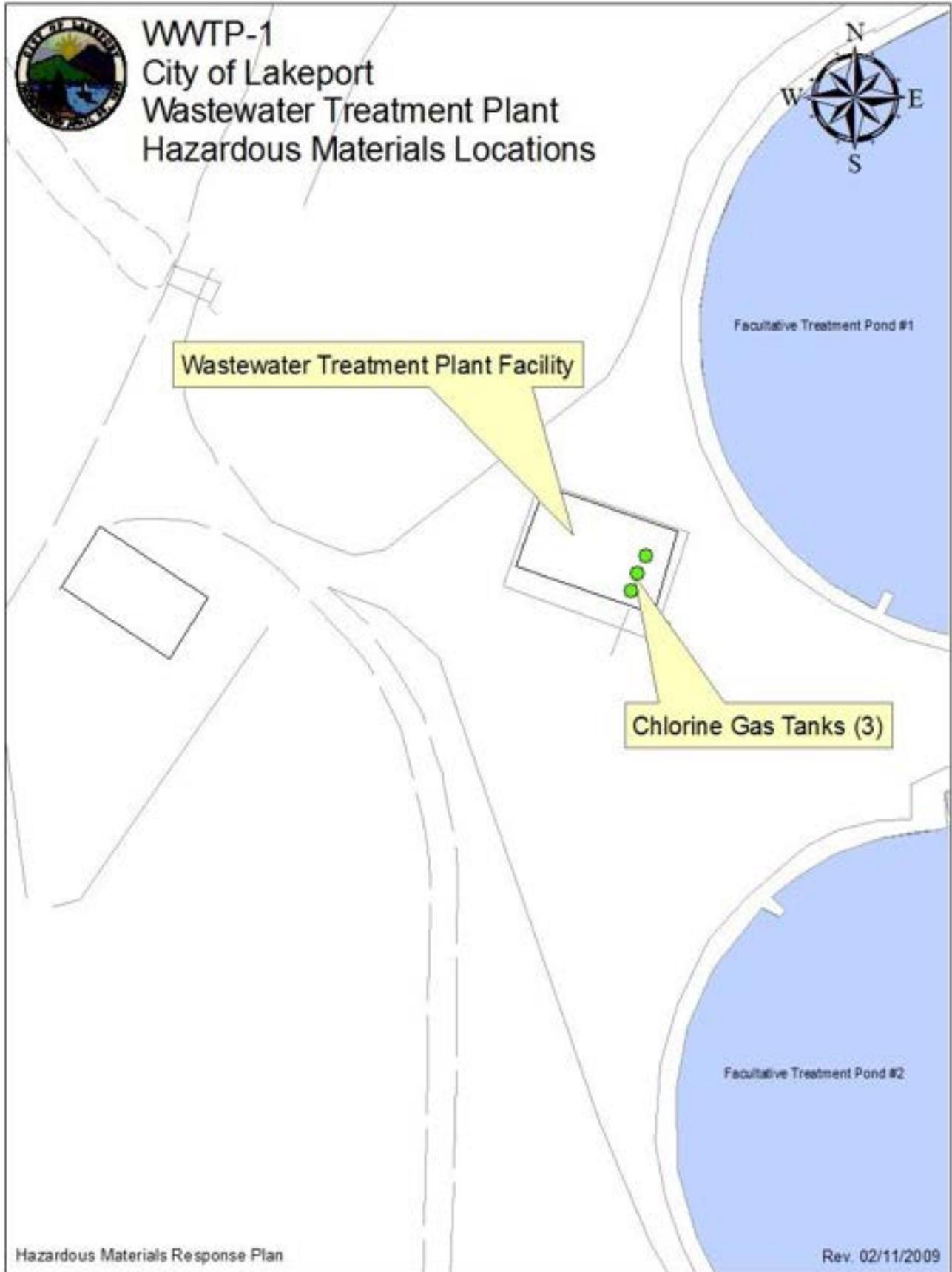
Valve Grinding Compound	Handy Auto Supply	2 cans	Eye irritant	See Map
Vari-Purpose Gear Oil 890	Texas Refinery Corp.	1 drum	None	See Map
Vionex Antimicrobial Hand Soap	Viro Research Int'l, Inc,	36	Avoid eyes	See Map
Wall Joint Compound	Piedmont	2 pails		See Map
WD-40 Bulk Liquid	Handy Auto Supply	6 cans	Health - 2	See Map
Welding Solid Wire and Rod	Lake Co. Welders	33 lbs roll	Health - 1	See Map
White Grease	Aerosol System, Inc.	6 cans	Eye/skin irritant	See Map
Windex	Piedmont	1 bottle	Avoid eyes, skin	See Map
Windshield Washer Solution	Napa	2 gal	Health - 1	See Map
Wood Glue (Elmer's)	Piedmont	1 bottle		See Map
Yield Aerosol	National Chemsearch	12 cans	Health - 1, Fire - 3	See Map

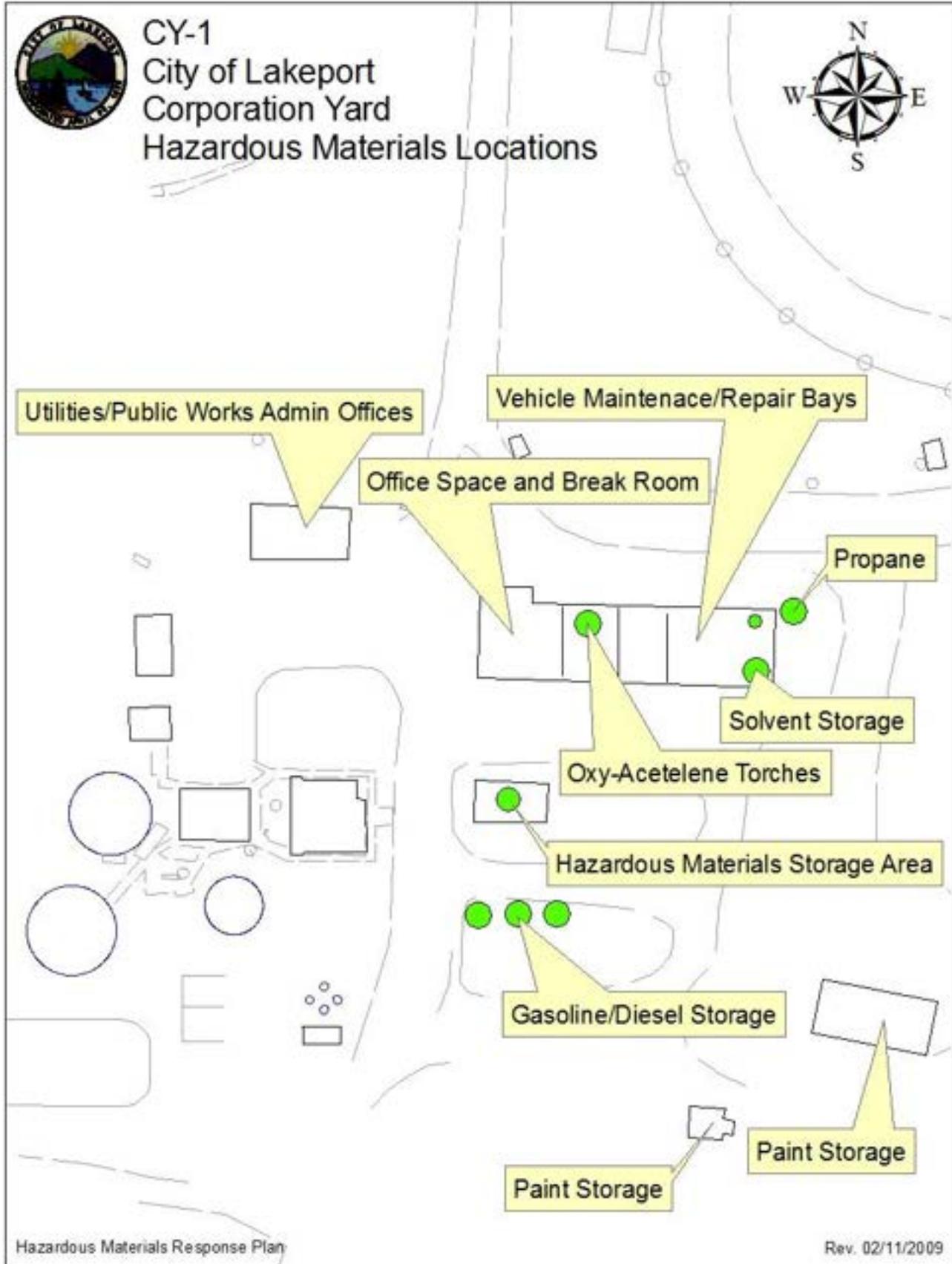


Hazardous Material Location Maps











EMERGENCY RESPONSE EQUIPMENT INVENTORY AND LOCATION

Groundwater Storage Facility

Equipment Type	Category	Description	Location Code (see map GWSF-2 below for physical location)
Cartridge Respirators	Protective, safety, first aid		L-1
Chemical Protective Gloves	Protective, safety, first aid		L-1
Face Shields	Protective, safety, first aid		L-1
First Aid Kit/Stations	Protective, safety, first aid		L-1
Hard Hats	Protective, safety, first aid	2 hard hats	L-1
Plumbed Eye Wash Solution	Protective, safety, first aid		L-2
Safety Glasses/Splash Goggles	Protective, safety, first aid		L-1
Safety Showers	Protective, safety, first aid		L-2



Self-Contained Breathing Apparatus (SCBA)	Protective, safety, first aid		L-3
Harness	Protective, safety, first aid	Fall protection	L-1
Fire Extinguishers	Fire extinguishing		L-1
Chemical Alarms	Communications and alarms systems	CL2 leak detector	L-1
Intercom/PA System	Communications and alarms systems	Public Works radio repeater	L-1
Telephone	Communications and alarms systems	Single land-line, telephone	L-1

Water Treatment Plant

Equipment Type	Category	Description	Location Code (see map GWSF-2 below for physical location)
Cartridge Respirators	Protective, safety, first aid	5 acid/CL2 cartridge respirators	L-1
Chemical Monitoring Equipment	Protective, safety, first aid	L.M.I. Pumps	L-1
Chemical Protective Aprons/Coats	Protective, safety, first aid	Extra coats available on site	L-1



Chemical Protective Boots	Protective, safety, first aid	Each employee stationed at plant possesses a pair of boots	L-1
Chemical Protective Gloves	Protective, safety, first aid	Each employee stationed at plant possesses a pair of gloves	L-1
Chemical Protective Suits	Protective, safety, first aid	Each employee stationed at plant possesses a suit	L-1
Face Shields	Protective, safety, first aid	Each employee stationed at plant possesses a shield	L-1
First Aid Kit/Stations	Protective, safety, first aid	Located in Lab room	L-1
Hard Hats	Protective, safety, first aid	2 hard hats	L-1
Plumbed Eye Wash Solution	Protective, safety, first aid	1 located in Filter room, 1 located at acid station, 1 located next to CL2 room	L-2
Respirator Cartridges	Protective, safety, first aid	1 extra set is available on site	L-1
Safety Glasses/Splash Goggles	Protective, safety, first aid	Each employee has a pair and extra pairs are available	L-1
Safety Showers	Protective, safety, first aid	1 located in Filter room, 1 located at acid station, 1 located next to CL2 room	L-2
Self-Contained Breathing Apparatus (SCBA)	Protective, safety, first aid		L-1



Fire Extinguishers	Fire extinguishing	7 total: 2 at water plant, one in each vehicle	L-1
Berms/Dikes	Spill control and decontamination	Controlled spillway	L-1
Emergency Tanks	Spill control and decontamination	Secondary containment tanks	L-3
Exhaust Hoods	Spill control and decontamination	Exhaust hoods in CL2 room breaker room, filter room, and Ozone room	L-1
Neutralizers	Spill control and decontamination	Vita-Chlor CL2 neutralizer	L-1
Chemical Alarms	Communications and alarms systems	CL2 leak detector	L-1
Portable Radios	Communications and alarms systems	Each employee has a radio	L-1
Telephone	Communications and alarms systems	Single land-line, telephone	L-1

Wastewater Treatment Plant

Equipment Type	Category	Description	Location Code (see map GWSF-2 below for physical location)
Cartridge Respirators	Protective, safety, first aid	Full face respirator	L-2



Face Shields	Protective, safety, first aid	Full face shield	L-2
First Aid Kit/Stations	Protective, safety, first aid	Basic first aid kit	L-2
Plumbed Eye Wash Solution	Protective, safety, first aid	Located outside building	L-5
Safety Showers	Protective, safety, first aid		L-5
Self-Contained Breathing Apparatus (SCBA)	Protective, safety, first aid	Out of date SCBA	L-2
Fire Extinguishers	Fire extinguishing	1 in control room, 1 in lab room, 1 in Irrigation building	L-1, L-2, L-6
Telephone	Communications and alarms systems	1 in control room, 1 in lab room	L-1, L-2
Tank Leak Detection System	Communications and alarms systems	CL2 gas detector	L-3, L-4

Corporation Yard

Equipment Type	Category	Description	Location Code (see map CY-2 below for physical location)
Cartridge Respirators	Protective, safety, first aid	Full face respirator	



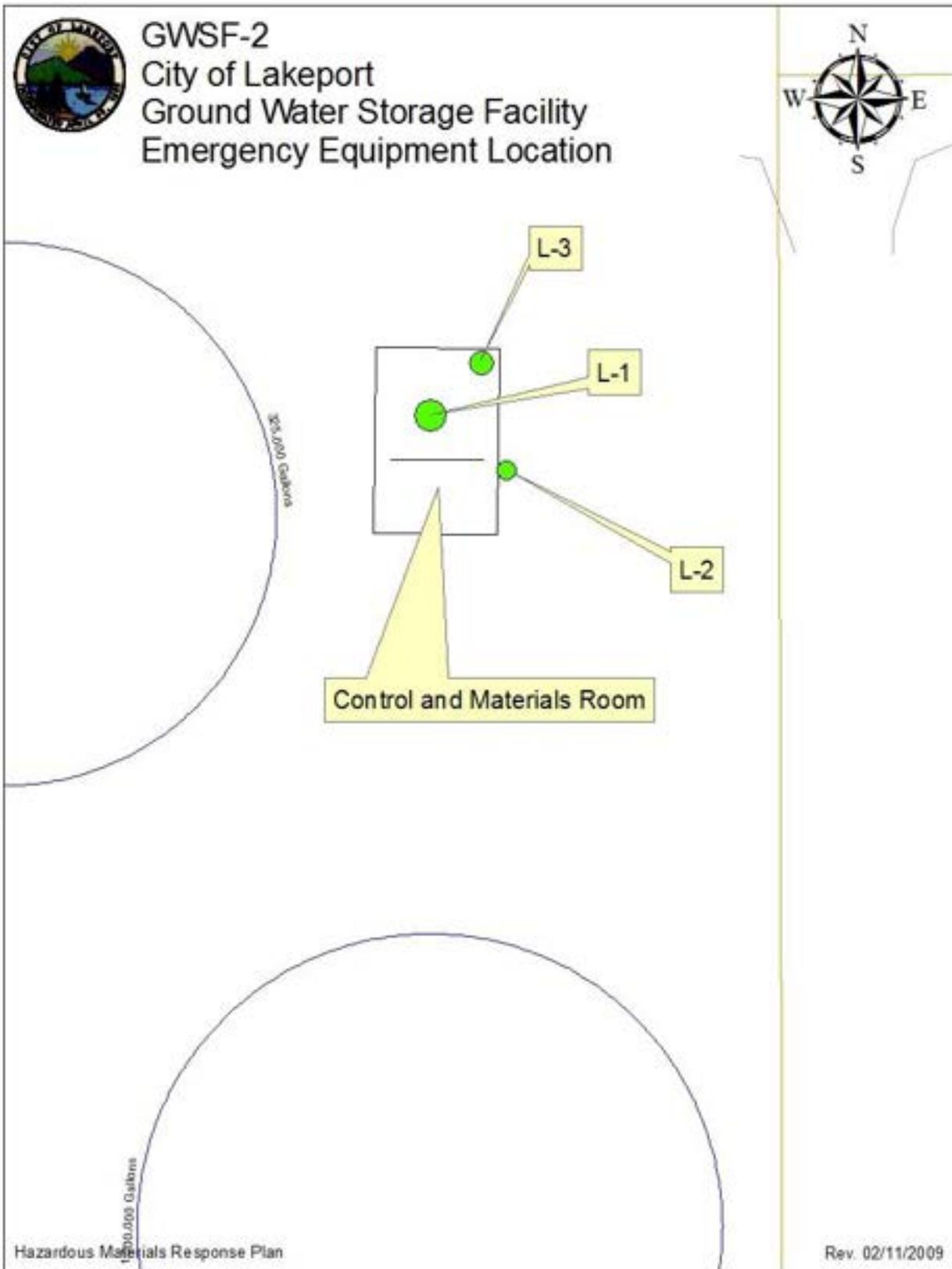
Face Shields	Protective, safety, first aid	Full face shield	L-2, L-5
First Aid Kit/Stations	Protective, safety, first aid	Basic first aid kit	L-1, L-8, L-10, L-11
Hard Hats	Protective, safety, first aid	Six hard hats present in main office, hats also available in trucks	L-10, L-11
Plumbed Eye Wash Solution	Protective, safety, first aid	Located outside building	L-6, L-7
Portable Eye Wash Kit	Protective, safety, first aid		L-11
Safety Glasses	Protective, safety, first aid	Glasses and earplugs	L-2, L-8, L-10, L-11
Safety Showers	Protective, safety, first aid	Located outside buildings	L-6, L-10
Self-Contained Breathing Apparatus (SCBA)	Protective, safety, first aid	Out of date SCBA	L-2
Other	Protective, safety, first aid	Portable stretcher	L-2
Other	Protective, safety, first aid	CPR valve mask, CPR face kit	L-10
Fire Extinguishers	Fire extinguishing	1 in control room, 1 in lab room, 1 in Irrigation building	L-1, L-2, L-3, L-5, L-7, L-8, L-9, L-10, L-11, L-12

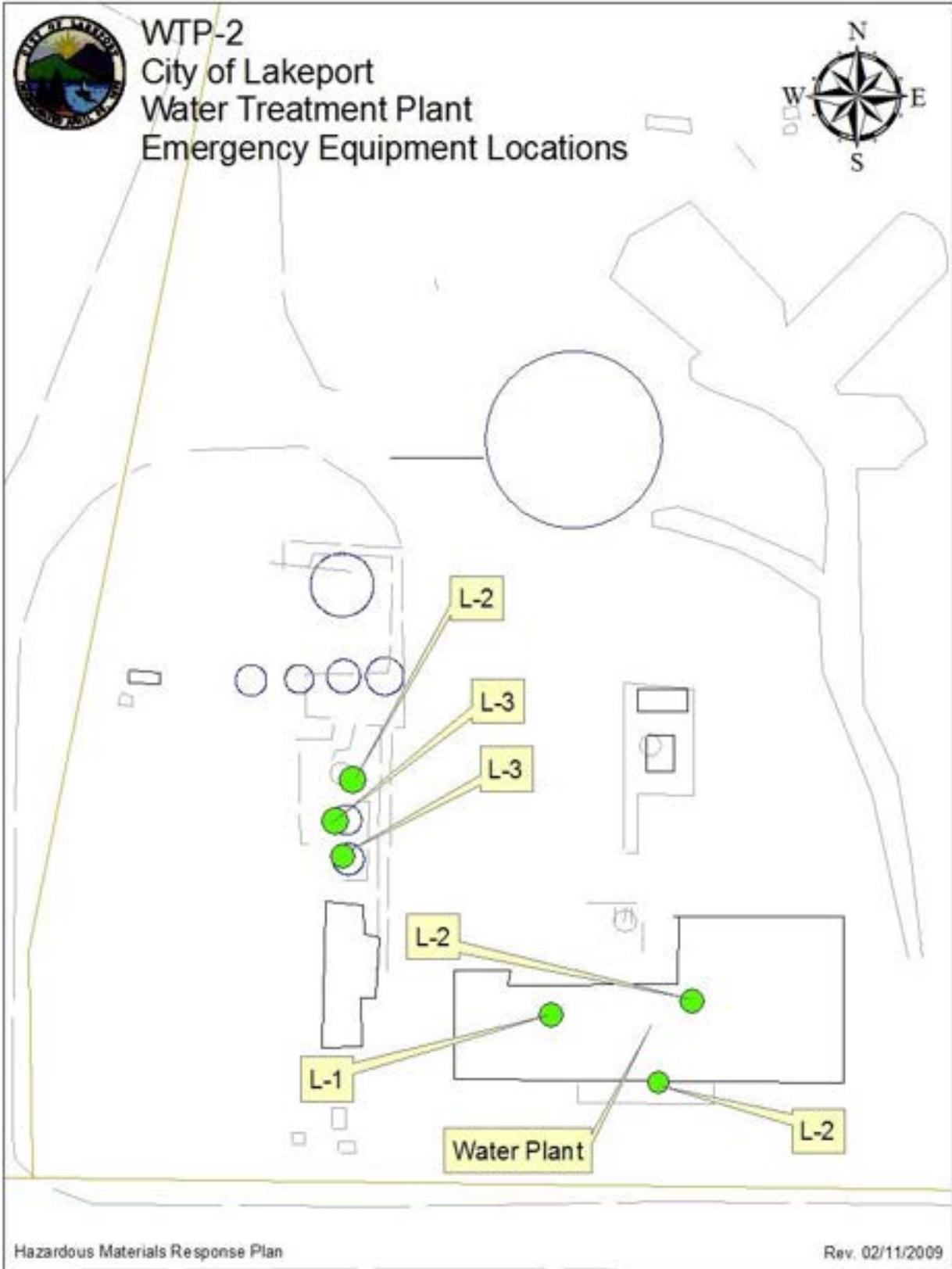


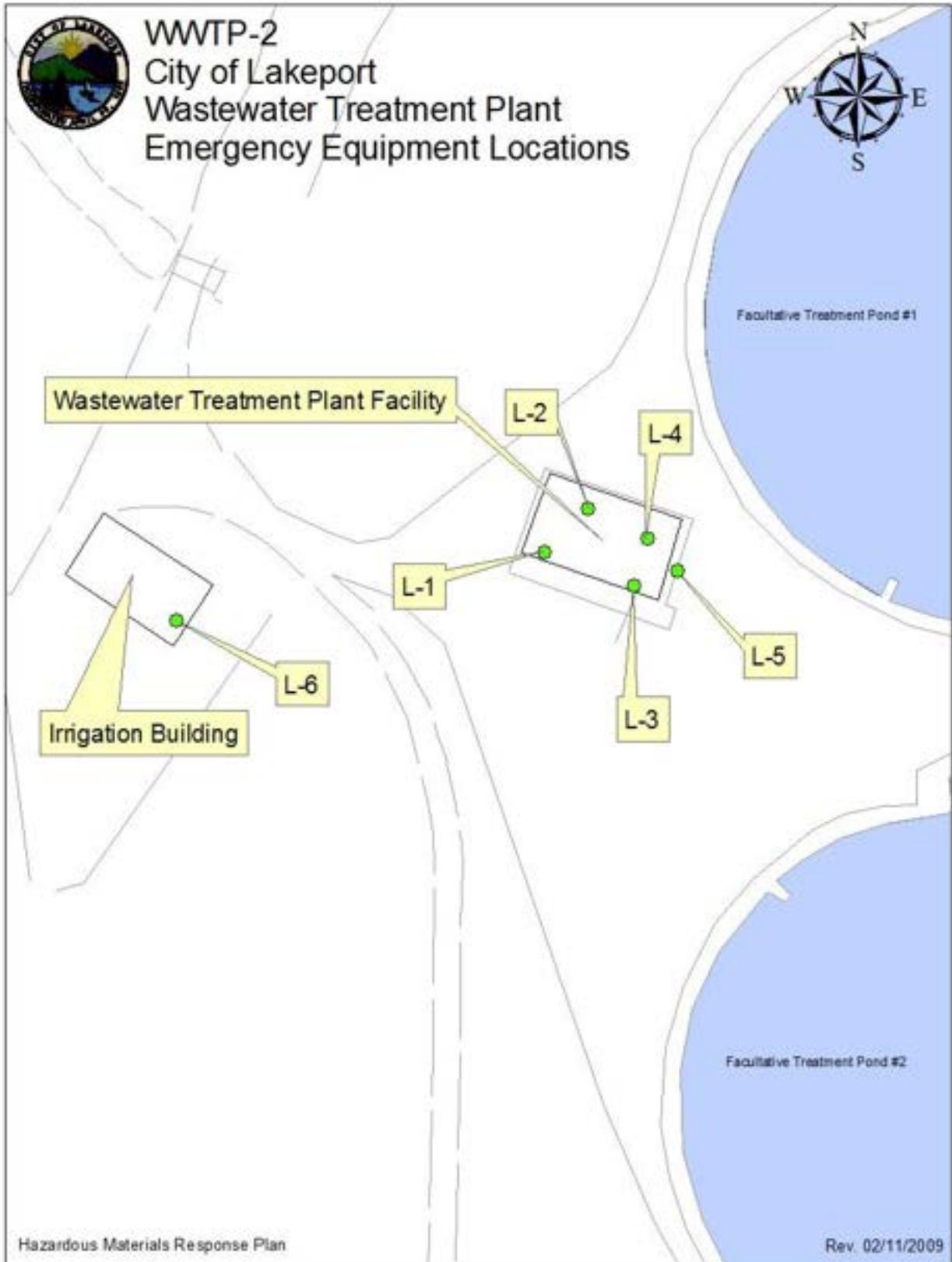
Spill Kits and Absorbents	Spill Control and Decontamination Equipment	3 universal spill kits, oil absorbent pig booms and pads, skimmer pig pillows	L-1
Intercom/PA System	Communications and alarms systems		L-10
Portable Radio	Communications and alarms systems	Main office has 7 radios, additional found throughout Corp Yard	L-1, L-7, L-8, L-10
Telephone	Communications and alarms systems		L-1, L-7, L-8, L-10
Tank Leak Detection System	Communications and alarms systems	CL2 gas detector	L-3, L-4

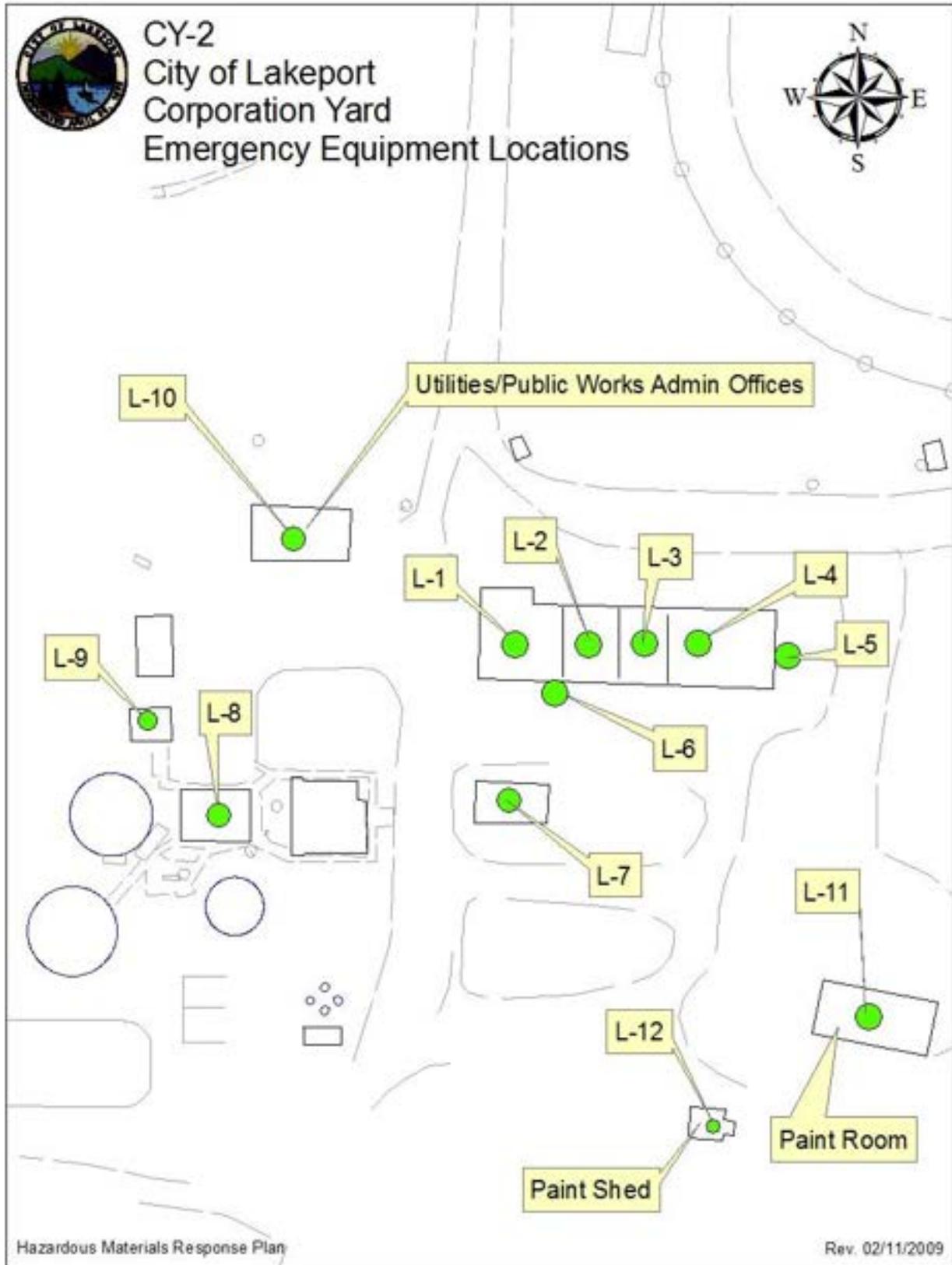


Emergency Equipment Location Maps











PERSONNEL TRAINING PROGRAM

New City employees are required to participate in an extensive introduction to City policies and procedures, which include hazardous communications and awareness. Elements of this introduction are reviewed regularly and modified as appropriate. The Utilities Department conducts weekly safety/staff meetings and routinely discusses safe handling of hazardous materials with employees.

Employees shall be trained and certified every year on refresher CPR protocols by the local fire department. The fire department will instruct city utilities staff on the use of fire extinguishers as well.

City utilities staff undergo regular training on the use of emergency response equipment and supplies that are under City control, including spill simulations and hazardous material release exercises. These training sessions are to be documented, noting employees who were in attendance and the subject of discussion. Additionally, the City will work actively to include documentation of training received in employee personnel files.

All personnel stationed at the locations described in this plan shall be trained regularly on the following procedures:

- Internal alarm/notification
- Evacuation/re-entry procedures & assembly point locations
- Emergency incident reporting
- External emergency response organization notification
- Location(s) and contents of Emergency Response/Contingency Plan
- Facility evacuation [drills are to be conducted annually]



Personnel responsible for the handling and use of the hazardous materials described in this plan shall be trained regularly on the following:

- Safe methods for handling and storage of hazardous materials
- Location(s) and proper use of fire and spill control equipment
- Spill procedures/emergency procedures
- Proper use of personal protective equipment
- Specific hazard(s) of each chemical to which they may be exposed, including routes of exposure (*i.e., inhalation, ingestion, absorption*)
- Hazardous Waste Handlers/Managers should be trained in all aspects of hazardous waste management specific to their job duties (*e.g., container accumulation time requirements, labeling requirements, storage area inspection requirements, manifesting requirements, etc.*)

This Hazardous Materials Incident Response Plan is posted at all City facilities where hazardous materials are stored and put to use. It is reviewed by staff annually during the HAZCOM safety meeting



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APPENDIX

SEWAGE SPILL REPORT

EMERGENCY RELEASE FOLLOW-UP NOTICE REPORTING FORM

EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A	BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER () -		
B	INCIDENT DATE	MO DAY YR	TIME OES NOTIFIED	OES CONTROL NO.
C	INCIDENT ADDRESS LOCATION		CITY / COMMUNITY	COUNTY ZIP
D	CHEMICAL OR TRADE NAME (print or type)			CAS Number
E	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>		CHECK IF RELEASE REQUIRES NOTIFICATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>	
F	PHYSICAL STATE CONTAINED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS		PHYSICAL STATE RELEASED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS	
G	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER		TIME OF RELEASE	DURATION OF RELEASE — DAYS — HOURS — MINUTES
H	ACTIONS TAKEN			
I	KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information)			
J	<input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____ <input type="checkbox"/> CHRONIC OR DELAYED (explain) _____ <input type="checkbox"/> NOTKNOWN (explain) _____			
K	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS			
L	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)			
M	CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete. REPORTING FACILITY REPRESENTATIVE (print or type) _____ SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____ DATE: _____			

EMERGENCY RELEASE FOLLOW-UP NOTICE REPORTING FORM INSTRUCTIONS

GENERAL INFORMATION:

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 30 days, following a release. The written follow-up report is required in addition to the verbal notification.

BASIC INSTRUCTIONS:

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

SPECIFIC INSTRUCTIONS:

Block A: Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

Block B: Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

Block C: Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

Block D: Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

Block E: Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

Block F: Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information if necessary to meet requirements specified in 42 U.S.C. § 11004(c).

Block G: Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was

made available to individuals exposed and to medical personnel, if appropriate for the incident, as specified in 42 U.S.C. § 11004(c).

Block H: List any additional pertinent information.

Block I: Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

MAIL THE COMPLETED REPORT TO:

**Chemical Emergency Planning and Response Commission (CEPRC) /
Attn: Section 304 Reports
Hazardous Materials Unit
3650 Shriever Avenue
Mather, CA 95655**

NOTE: Authority cited: Sections 25503, 25503.1 and 25507.1, Health and Safety Code. Reference: Sections 25503(b)(4), 25503.1, 25507.1, 25518 and 25520, Health and Safety Code.

EMERGENCY INCIDENT REPORTING FORM
(Post-Incident Reporting/Recording)

Facility Owner:

Name: _____

Address: _____

Telephone #: _____

Facility:

Name: _____

Address: _____

Telephone: _____

Date of Incident: _____

Time of Incident: _____

Type of Incident (e.g. fire, explosion, etc.): _____

Name & quantity of material(s) involved:

Extent of injuries, if any:

Assessment of actual or potential hazard to human health or the environment, if Applicable:

Estimated quantity and disposition of recovered material that resulted from the Incident:

Cause(s) of the incident:

Actions taken in response to the incident:

Administrative or engineering controls designed to prevent such incidents in the Future:

Signature

Date

HAZARDOUS MATERIALS/WASTE STORAGE AREA INSPECTION FORM

City of Lakeport

Community Development and Utilities Department
Compliance Division

Inspection Date: _____

Facility Name: _____

HAZARDOUS MATERIALS STORAGE PROGRAM VIOLATION CODES GENERAL STORAGE PROVISIONS

Authority Cited: Health and Safety Code (HSC); California Code of Regulations, Title 8, Div. 1, Chapter 4 (CCR)

This document has been prepared to briefly summarize common violations observed at facilities that store or handle hazardous materials. Each requirement of law/regulation is identified by a Violation Code (VC) to help you understand violations noted in an Official Notice of Inspection. The complete and official text of these requirements can be found on-line at: www.calregs.com for CCR; www.leginfo.ca.gov/calaw.html for HSC; and www.EHInfo.org/hazmat for SCCO. If you would like to discuss any interpretations of these requirements, please call HMCD at (408) 918-3400 and ask for the Hazardous Materials Program Manager.

A. Permits, HMBP/Registration Form

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2300	SCCO §§ B11-21 B11-320	Hazardous Materials Storage Permit - Any facility that stores or uses hazardous materials must apply for and obtain a hazardous materials storage permit from HMCD. Per SCCO §B11-30(a), the permit must be posted in a conspicuous place at the facility.
<input type="checkbox"/>	<input type="checkbox"/>	2301	HSC § 25501.5 SCCO § B11-301	Hazardous Materials Business Plan (HMBP) Submitted/Complete - The owner of any facility which handles any individual hazardous material or mixture containing a hazardous material that has an aggregate quantity on site at any one time during the reporting year equal to or greater than 500 pounds for solids, 55 gallons for liquids, or 200 cubic feet for gases must submit to HMCD a HMBP. The HMBP must include: <ul style="list-style-type: none"><input type="checkbox"/> Hazardous materials inventory information;<input type="checkbox"/> Emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material, including, but not limited to, notification of local emergency response agencies, HMCD, and the state Office of Emergency Services; procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment; and evacuation plans and procedures, including immediate notice, for the facility;<input type="checkbox"/> Training for all new employees and annual training, including refresher courses, for all employees in safety procedures in the event of a release or threatened release of hazardous material, including, but not limited to, familiarity with facility emergency response plans and procedures;<input type="checkbox"/> A facility site plan and hazardous materials storage map.

[Note: (1) There are exceptions to the reporting quantities specified above. The exceptions are listed in the instructions for the Hazardous Materials Business Plan available at www.unidocs.org. (2) Any hazardous material in a rail car or rail or marine freight container remaining at a facility longer than 30 days is deemed stored and subject to HMBP requirements. Per HSC §25501.4(c), HMCD must be notified immediately of such storage.]

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2302	HSC §§ 25505(b) 25503.5(c)(6)(B) 25510	<p>HMBP Changes Reported - Within 30 days of any one of the following events, a facility must submit to HMCD an amended HMBP:</p> <ul style="list-style-type: none"> <input type="checkbox"/> A 100% or more increase in the quantity of a previously disclosed material; <input type="checkbox"/> Any handling of a previously undisclosed hazardous material in HMBP quantities; <input type="checkbox"/> Change of business address; <input type="checkbox"/> Change of business ownership; <input type="checkbox"/> Change of business name; <input type="checkbox"/> A substantial change in the handler's operations (e.g., personnel changes, installation or closure of hazardous materials storage/handling systems, etc.) occurs.
<input type="checkbox"/>	<input type="checkbox"/>	2303	HSC § 25505(c)	<p>HMBP Review/Certification - A facility must review its HMBP at least once every three years to determine if a revision is needed and must certify to HMCD that the review was made and that any necessary changes were made to the plan. A copy of any changes to the plan must accompany the certification. <i>[Exception: Unstaffed remote facilities operating per HSC §25503.5(c)(6)]</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	2304	HSC § 25503.6	<p>Written Notice to Property Owner - Any facility which is required to establish and implement a HMBP and is located on leased or rented real property must notify, in writing, the owner of the property that the business is subject to HMBP requirements (i.e., HSC §25503.5) and has complied with its provisions, and must provide a copy of the HMBP to the owner or the owner's agent within five working days after receiving a request for a copy from the owner or the owner's agent. A copy of this notification should be kept at the facility.</p>
<input type="checkbox"/>	<input type="checkbox"/>	2305	HSC § 25505(d)	<p>Annual Hazardous Materials Inventory Certification Submittal - Any facility that handles hazardous materials in HMBP quantities must, on an annual basis, either: 1.) Submit to HMCD a completed "Hazardous Materials Business Plan Certification Form"; or 2.) Submit a report of its hazardous materials inventory in a format approved by HMCD. <i>[Exception: Unstaffed remote facilities operating per HSC §25503.5(c)(6)]</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	2306	SCCO § B11-302	<p>Hazardous Materials Registration Form Submitted/Complete - Any facility that stores or handles hazardous materials in quantities less than those specified for the HMBP must file a Registration Form. The Registration Form must be updated any time there is a significant change in the quantities of hazardous materials or changes in the process in which the hazardous materials are being used.</p>
<input type="checkbox"/>	<input type="checkbox"/>	2307	SCCO § B11-286(a) B11-320(b) B11-325	<p>Permit for Installation/Construction/Repair/Closure - Any facility which intends to install, construct, repair, replace, or close a hazardous materials storage/handling system or area (e.g., tank, room, etc.) must first obtain a permit from HMCD.</p>
<input type="checkbox"/>	<input type="checkbox"/>	2308	SCCO § B11-41 B11-290(b)	<p>Modifications to a Facility - Any substantial modification to, or repair of, a storage facility, other than minor or emergency repairs, must be performed in accordance with written plans submitted to and approved by HMCD prior to the initiation of work.</p>
<input type="checkbox"/>	<input type="checkbox"/>	2309	SCCO § B11-288(a) B11-288(c)	<p>Abandoned Facility or Tank - No hazardous materials storage facility may be abandoned. Owners/operators of facilities permanently taken out of service, or which are not monitored in accordance with an approved written monitoring plan, must submit a closure plan application and obtain a closure permit at least 30 days prior to final closure of the facility or aboveground/underground storage tank. Once the plan has been approved, a final walkthrough inspection must be completed by HMCD.</p>

B. Separation, Containment, Monitoring

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2310	SCCO § B11-292	Secured Storage Areas - Access to hazardous materials storage areas must be secured by means of fences and/or locks. Gates and doorways to such areas must be kept securely locked when unattended.
<input type="checkbox"/>	<input type="checkbox"/>	2311	SCCO § B11-286(e)	Separation of Incompatible Materials - Materials which in combination might cause a fire, explosion, or the production of a flammable or toxic gas must be separated in both primary and secondary containment so as to avoid potential intermixing in the event of a release.
<input type="checkbox"/>	<input type="checkbox"/>	2312	SCCO § B11-291(a)	Safe Chemical Handling - Dispensing and mixing of hazardous materials must not be done in such a manner as to substantially increase the risk of an unauthorized discharge.
<input type="checkbox"/>	<input type="checkbox"/>	2313	SCCO § B11-291(b)	Movement of Materials Within Facility - Hazardous materials must not be stored in a travel path (e.g., hallway, aisleway, etc.). They may remain in the travel path only for the time reasonably necessary to move them. Such movement must be in a manner which will not result in an unauthorized discharge.
<input type="checkbox"/>	<input type="checkbox"/>	2314	SCCO § B11-286(G)(1)	Primary Containment Product-Tight - All primary containment (i.e., the container in which a material is stored) used for the storage of hazardous materials must be product-tight (i.e., not leaking and compatible with the chemical being stored).
<input type="checkbox"/>	<input type="checkbox"/>	2315	SCCO § B11-286(G)	Secondary Containment Provided - Secondary containment (i.e., containment external to and separate from primary containment) constructed so as not to be structurally weakened as a result of contact with the material stored must be provided. It must be capable of containing 110% of the volume of the primary container if a single container is used, or in the case of multiple containers, 150% of the volume of the largest container or 10% of the aggregate, whichever is larger. In addition, the secondary containment, if open to rainfall, must be capable of accommodating the volume of a 24-hour rainfall from a 100-year storm (i.e., approximately an additional 4-1/2 inches in depth or height of the secondary containment).
<input type="checkbox"/>	<input type="checkbox"/>	2316	SCCO § B11-286(F)	Removal of Water from Secondary Containment - Any water which has entered the secondary containment must be removed, analyzed for contamination by hazardous substances, and disposed of properly. A system to prevent uncontrolled removal of such water must be provided.
<input type="checkbox"/>	<input type="checkbox"/>	2317	SCCO § B11-286(d)	Overfill Protection Provided - Primary containment of aboveground tanks holding hazardous materials must be equipped with a high-level alarm (i.e., an alarm which sounds when the tank is 90% full) and/or other approved overfill protection devices to prevent spills when filling the tank.
<input type="checkbox"/>	<input type="checkbox"/>	2334	SCCO § B11-286(g)	Spill Protection Provided - Aboveground tanks holding hazardous materials must be equipped with a spill container at each fill point to collect any hazardous material spilled during product delivery operations.
<input type="checkbox"/>	<input type="checkbox"/>	2318	SCCO §§ B11-286(b) B11-289(a)	Monitoring Performed - Each area in which liquid or solid hazardous materials are stored must be monitored. Monitoring methods must include at least one system for detecting leakage from the primary containment. Visual inspection of both primary and secondary containment is preferable; however, other methods may be allowed or required by HMCD. Per SCCO §288(b), facilities which are temporarily out of service, and are intended to be returned to use, must continue to be monitored and inspected.

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2320	SCCO § B11-289(G)	Inspection and Testing of Monitoring Equipment - All monitoring systems must be tested and inspected monthly, at a minimum, to ensure that they are in working order. Records of all inspection/maintenance/repairs must be kept on-site and be available for inspection by HMCD.
<input type="checkbox"/>	<input type="checkbox"/>	2321	SCCO § B11-289(G)	Visual/Audible Alarm - Whenever monitoring devices are provided, they must be connected to attention-getting visual and audible alarms.
<input type="checkbox"/>	<input type="checkbox"/>	2322	SCCO § B11-287 B11-301(c) B11-302(b)(4)	Written Monitoring Plan Submitted/Approved/Implemented - A written monitoring plan must be prepared and submitted to HMCD. The monitoring plan must describe the location, type, frequency, and manufacturer specifications (if applicable) of monitoring methods used in each storage area. <i>[Note: An Aboveground Separation, Containment, and Monitoring Plan form is available at www.unidocs.org/]</i>
<input type="checkbox"/>	<input type="checkbox"/>	2323	SCCO § B11-289(b)	Monitoring/Maintenance Records - Any facility that stores or uses hazardous materials must test, monitor, and inspect the facility in compliance with the approved written monitoring plan and maintain records adequate to demonstrate compliance therewith. SCCO §§B11-301(d) and B11-311 require that the facility maintain an inspection check sheet or log, in a format approved by HMCD, designed to be used in conjunction with routine inspections. A blank copy of this log must be submitted as an attachment to the facility's HMBP.
<input type="checkbox"/>	<input type="checkbox"/>	2324	SCCO § B11-290	Maintenance, Repairs, or Replacement - The facility owner/manager must carry out all necessary maintenance, ordinary upkeep, and minor repairs needed to keep equipment (e.g., monitoring systems, piping, etc.) in proper operating condition. This work must be performed in a careful and safe manner. Emergency repairs may be made immediately, but within 5 working days after such repairs have been started, a written plan describing the repairs must be submitted to HMCD for review and approval.
				All monitoring equipment and audible/visual overfill protection alarms must be installed, calibrated, operated and maintained in accordance with manufacturer's instructions, and tested every 12 months by a qualified technician to confirm operability, proper operating condition, and proper calibration. Written records of such testing must be maintained as required in SCCO §B11-313.

C. Training, Emergency Response, Unauthorized Discharges

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2325	HSC § 25594(c)	Emergency Response Training - At facilities required to prepare a HMBP, training must be provided for all new employees in the event of a release or threatened release of a hazardous material, including, but not limited to, familiarity with the facility's emergency response plans and procedures. Annual refresher courses must be provided for all employees. The training program may take into consideration the position of each employee. It must include, but not limited to, all of the following: <ul style="list-style-type: none"> <input type="checkbox"/> Immediate notification to HMCD and to appropriate local emergency rescue personnel and the State Office of Emergency Services. <input type="checkbox"/> Procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment. <input type="checkbox"/> The facility's evacuation plans and procedures.
<input type="checkbox"/>	<input type="checkbox"/>	2326	SCCO § B11-293	Emergency Equipment - Emergency equipment must be provided, regularly tested, and adequately maintained, and must be reasonable and appropriate to potential emergencies presented by the stored hazardous materials.

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2327	SCCO § B11-294	Posted Emergency Procedures - Any facility which stores hazardous materials must conspicuously post simplified emergency procedures (i.e., what to do in the case of fire, spill, etc.) in locations where hazardous materials are stored. <i>[Note: An Emergency Procedures form you can fill out and post is available at www.unidocs.org.]</i>
<input type="checkbox"/>	<input type="checkbox"/>	2328	SCCO § B11-30500(1)(a)	Unauthorized Discharge (Recordable) - Any facility which has had a recordable unauthorized discharge, must record it in the facility's monitoring records. A recordable unauthorized discharge is one that: * Is from primary containment to secondary containment; and * Is cleaned up before it leaves the secondary containment; and * Results in no increase in the possibility of explosion or fire.
<input type="checkbox"/>	<input type="checkbox"/>	2329	SCCO § B11-30500(1)(b) B11-30500	Unauthorized Discharge (Reportable) - Any facility which has had a reportable unauthorized discharge must report it to HMCD immediately. A reportable discharge is any unauthorized discharge that does not meet the definition of a recordable discharge. Any person in charge of a storage facility or responsible for emergency response for a storage facility, who has knowledge of any unauthorized discharge of a hazardous material which is a gas at STP, must immediately report such discharge to HMCD if such discharge presents a threat of imminent danger to public health and safety.
<input type="checkbox"/>	<input type="checkbox"/>	2331	SCCO § B11-305(a) B11-306	Cleanup of Unauthorized Discharge - Any person, business or facility which stores or uses liquid or solid hazardous materials must initiate and complete all actions necessary to remedy the effects of any unauthorized discharge.
<input type="checkbox"/>	<input type="checkbox"/>	2348	SCCO § 25270.5(d)	Spill Prevention Control and Countermeasure (SPCC) Plan - The owner or operator of any facility which stores more than 1,320 gallons of petroleum aboveground in 55 gallon or larger containers must prepare a SPCC Plan in accordance with guidelines contained in Part 112 of Title 40 of the Code of Federal Regulations. <i>[Exception: Tank facilities located on a farm, nursery, logging site, or construction site are not required to prepare a SPCC Plan if no tank exceeds 20,000 gallons and cumulative storage capacity does not exceed 100,000 gallons.]</i>

D. Record Keeping and Labeling

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2332	SCCO § B11-313	Records (Retention Time) - All records (e.g., maintenance, monitoring, training, unauthorized discharge logs, etc.) must be maintained for no less than 3 years and must be available for review by HMCD upon request.
<input type="checkbox"/>	<input type="checkbox"/>	2333	8 CCR § 5194(D)(4)	Labeling - Hazardous materials containers must be labeled with the identity of the hazardous substance(s) contained therein and appropriate hazed warnings.

E. Urban Runoff

V	NA	Violation Code	Regulatory Citation	
<input type="checkbox"/>	<input type="checkbox"/>	2349	SCCO § B11 1/2-3	Illegal Discharge - It is unlawful to discharge, or cause, allow or permit to be discharged into any part of the stormwater system or watercourse any sewage, industrial wastes, petroleum or petroleum products, coal tar, chemicals, detergents, solvents, paints, contaminated or chlorinated swimming pool water, pesticides, herbicides and fertilizers, soil sediments, washwater, cans, bottles, refuse, motor vehicles or parts thereof, or any material that may be deleterious to aquatic life.

F. Other Violations

V	N/A	Violation Code	Regulatory Citation
<input type="checkbox"/>	<input type="checkbox"/>	2399	See Official Notice of Inspection Other Hazardous Materials Storage Violations - See the Official Notice of Inspection for details.

LAKE COUNTY HAZARDOUS MATERIAL INCIDENT RESPONSE PLAN

The Lake County Division of Environmental Health is the Certified Unified Program Agency for all of Lake County, dealing with hazardous waste and hazardous materials.

922 Bevins Ct.
Lakeport, CA 95453
707.263.1164

<http://www.co.lake.ca.us/Emergencies/Hazmat/Management.htm>



CITY OF LAKEPORT UTILITIES DIVISION POLICY

Subject: Sanitary Sewer Overflow Emergency Response Plan	Policy Number: U-11	
	Date Adopted: 11/30/17	Date Revised:

- Scope:** Applies to all personnel that respond to Sanitary Sewer Overflows (SSOs).
- Purpose:** Establish the City’s activities in response to SSOs.
- Responsibility:** The Utilities Superintendent shall be responsible for ensuring SSO response, investigation, reporting and mitigation activities are consistent with this policy and other adopted procedures.

The Compliance Officer and Utilities Superintendent shall be responsible for any future revisions to this SOP.
- Reference:** City of Lakeport Utilities Division Policies. Yardshare Network location: <Y:\Utilities\Policies\Current Policies>

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Background

Sanitary sewers serving the City of Lakeport can occasionally overflow due to breaks or blockages in the sewer lines. These overflows can result in discharges of raw sewage into surface water/storm drains and eventually into Clear Lake.

The City's sewer system also includes eight lift (pump) stations that are needed to convey the flows to the Wastewater Treatment Plant on Linda Lane in the southwest portion of the City.

In order to protect public health and the environment from raw sewage, a quick, coordinated response is needed to stop the source of any overflow and to eliminate the migration of sewage either downstream or into Clear Lake.

The purpose of the Sanitary Sewer Overflow Emergency Response Plan (SSOERP) is to outline the City's SSO response activities, with the objective of minimizing impact of SSOs to the public and the environment. In achieving this goal, the OERP serves as a guideline for City of Lakeport personnel in cleaning and mitigating the effects of sanitary sewer spills, as well as in following proper sampling and reporting procedures. Detailed SSO reporting requirements are also set forth in the SSOERP.

Overflow Emergency Response Plan

Dispatch Responsibility

When a call is received from the public, dispatch personnel obtain:

- **Time and date** of call
- **Time and date** when overflow was **first noticed**
- **Specific location** of possible overflow
- **Description** of problem
- Caller's **name** and **call back number**

First Responder Assessment of Overflow

Always Remember...

- Use appropriate **Personal Protective Equipment**
- Use appropriate **safety precautionary measures**

When?	Assessment Steps
Immediately	Assess failure of equipment or overflow release
If needed	Call for assistance
After primary assessment	Obtain necessary equipment to respond to spill (e.g. sandbags, waddles, bypass pumps, vacuum truck, etc.)
If spill too large to be adequately controlled	Contact local septic pumping contractor(s) and request emergency service:

When?	Assessment Steps
	Perkins Septic Tank Cleaning: 707.413.6100 Action Sanitary: 707.994.5068 Silva Septic & Rooter Services: 707.462.8304
If there is a suspicious substance or odor (e.g. oil sheen, foam, gas odor)	Coordinate with County of Lake Environmental Health and Lake County Fire Protection District for hazardous materials response

Overflow Correction, Containment and Clean-Up

Always...	If applicable...
Protect water bodies, drainage channels and storm drains by diverting flow away from all entry points	If failure is at a lift station, take the malfunctioning pump off line. See lift station maps at end of this Policy for diversion locations and details.
Determine location and cause of overflow	Secure the affected area and post warning signs if deemed necessary (also see “Traffic and Crowd Control” below)
Implement appropriate corrective actions (e.g. sandbags, waddles, emergency generators, bypass pumps, etc.)	Sample as necessary (coordinate with Lake County Environmental Health Department). See lift station maps for details.
Clean and sanitize affected area(s): remove all debris found in SSO area; wash SSO area with fresh water; collect all water generated during cleaning with Vacuum Truck and return water to sewer system; use backpack sprayer to sanitize affected areas with disinfectant cleaner such as Zep DZ-7.	
Finalize the incident documentation	
Review overall response with Responding Parties	

Traffic and Pedestrian Control

Traffic and Pedestrian Control Recommendations

- Set up cones and warning signs
- Set up warning signs to inform public of hazards if deemed necessary
- Close affected entrances and exits from facilities
- Perform lane closures as necessary
- Use caution tape and barricades to prevent public access
- Inform Lakeport Police Department of any roadway closures / traffic control

SSO Spill Volume and Estimation Methods

Outlined below are three methods that are most often employed for estimating the volume of sanitary sewer spill. City staff preparing the estimate should utilize the most appropriate method for the sewer overflow in question and use the best information available.

Method 1: Eyeball Method

The volume of small spills can be estimated using an “eyeball estimate.” To use this method, imagine the amount of water that would spill from a container listed on the table below. A jug contains 1 gallon, a bucket contains 5 gallons, and a drum contains 55 gallons. If the spill is larger than 55 gallons, try to break the standing water into 55 gal drums and then multiply by 55 gallons. This method is useful for contained spills up to approximately 220 gallons. The photo illustrations incorporated herein should also be referred to when using the Eyeball Method.

<i>Size of container</i>	<i>How many of this size?</i>	<i>Size Multiplier (gal)</i>	<i>Total Volume Estimated (gal)</i>
1-gallon water jug		X 1	
5-gallon bucket		X 5	
55-gallon drum		X 55	
Total volume estimated			

Spill Estimation Representative Photographs

Five (5) Gallons Total Spilled:



Ten (10) Gallons Total Spilled:



Ten (10) Gallons Flowing Down Curb & Gutter:



Note: Water traveled 110 FT in curb & gutter.

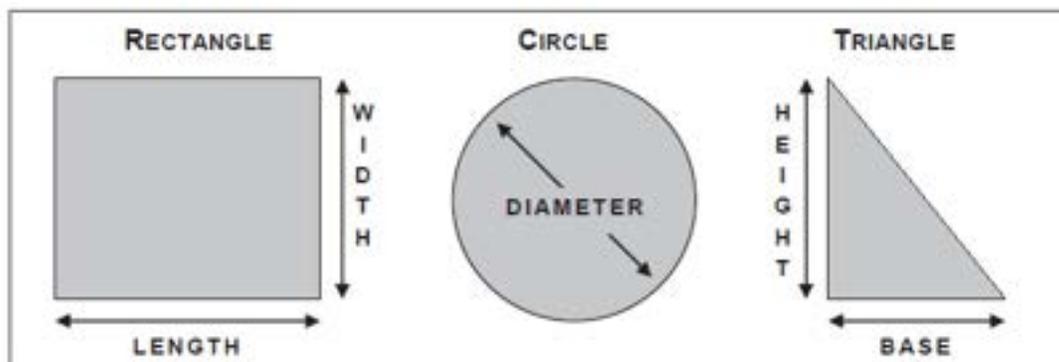
All photos courtesy of City of Hayward

<https://www.hayward-ca.gov/file/ssmp-sso-emergency-response-sopspdf>

Method 2: Measured Volume

The volume of most small spills that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

Common Shapes and Dimensions



Steps for Volume Calculation

- Step 1 Sketch the shape of the contained sewage (see figure above).
- Step 2 Measure or pace off the dimensions.
- Step 3 Measure the depth at several locations and select an average.
- Step 4 Convert the dimensions, including depth, to feet.
- Step 5 Calculate the area in square feet using the following formulas:
Rectangle: Area = length (feet) x width (feet)
Circle: Area = diameter (feet) x diameter (feet) x 0.785
Triangle: Area = base (feet) x height (feet) x 0.5
- Step 6 Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.
- Step 7 Multiply the volume in cubic feet by 7.5 to convert it to gallons.

Method 3: Duration and Flowrate

Calculating the volume of larger spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the spill and the flowrate. The methods of estimating duration and flowrate are:

Duration

The duration is the elapsed time from the time the spill started to the time that the flow was restored.

Start Time: The start time is sometimes difficult to establish. Here are some approaches:

1. Local residents can be used to establish start time. Inquire as to their observations. Spills that occur in rights-of-way are usually observed and reported promptly. Spills that occur out of the public view can go on longer. Sometimes observations like odors or sounds (e.g. water running in a normally dry creek bed or drainage channel) can be used to estimate the start time.
2. Changes in flow on a downstream flowmeter can be used to establish the start time. Typically, the daily flow peaks are "cut off" or flattened by the loss of flow. This can be identified by comparing hourly flow data during the spill event with flow data from prior days. This method will likely only be effective with consistent weather.

3. Conditions at the spill site change over time and can be used to establish the start time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. After a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of other information. Taking photographs to document the observations can be helpful if questions arise later in the process. This method is valid for spills that have been occurring for a long time and may be used in conjunction with either of the above methods.
4. It is important to remember that spills may not be continuous. Blockages are not usually complete (some flow continues). In this case the spill would occur during the peak flow periods (typically 10:00 to 12:00 and 13:00 to 16:00 each day). Spills that occur due to peak flows in excess of capacity will occur only during, and for a short period after, heavy rainfall.

End Time: The end time is usually much easier to establish. Field crews on-site observe the “blow down” that occurs when the blockage has been removed. The “blow down” can also be observed in downstream flowmeters.

Flow Rate

The flowrate is the average flow that left the sewer system during the time of the spill. There are three common ways to estimate the flowrate:

1. **City of Chico Manhole Overflow Flowrate Chart:** This chart, included herein, shows sewage flowing from manhole covers at a variety of flowrates. The observations of the field crew can be used to select the appropriate flowrate from the chart. If possible, photographs are useful in documenting basis for the flowrate estimate.
2. **Flowmeter:** Changes in flows in downstream flowmeters can be used to estimate the flowrate during the spill.
3. **Counting Connections:** Once the location of the spill is known, the number of upstream connections can be determined from the sewer maps. Multiply the number of connections by 200 to 250 gallons per day per connection or 8 to 10 gallons per hour per connection.

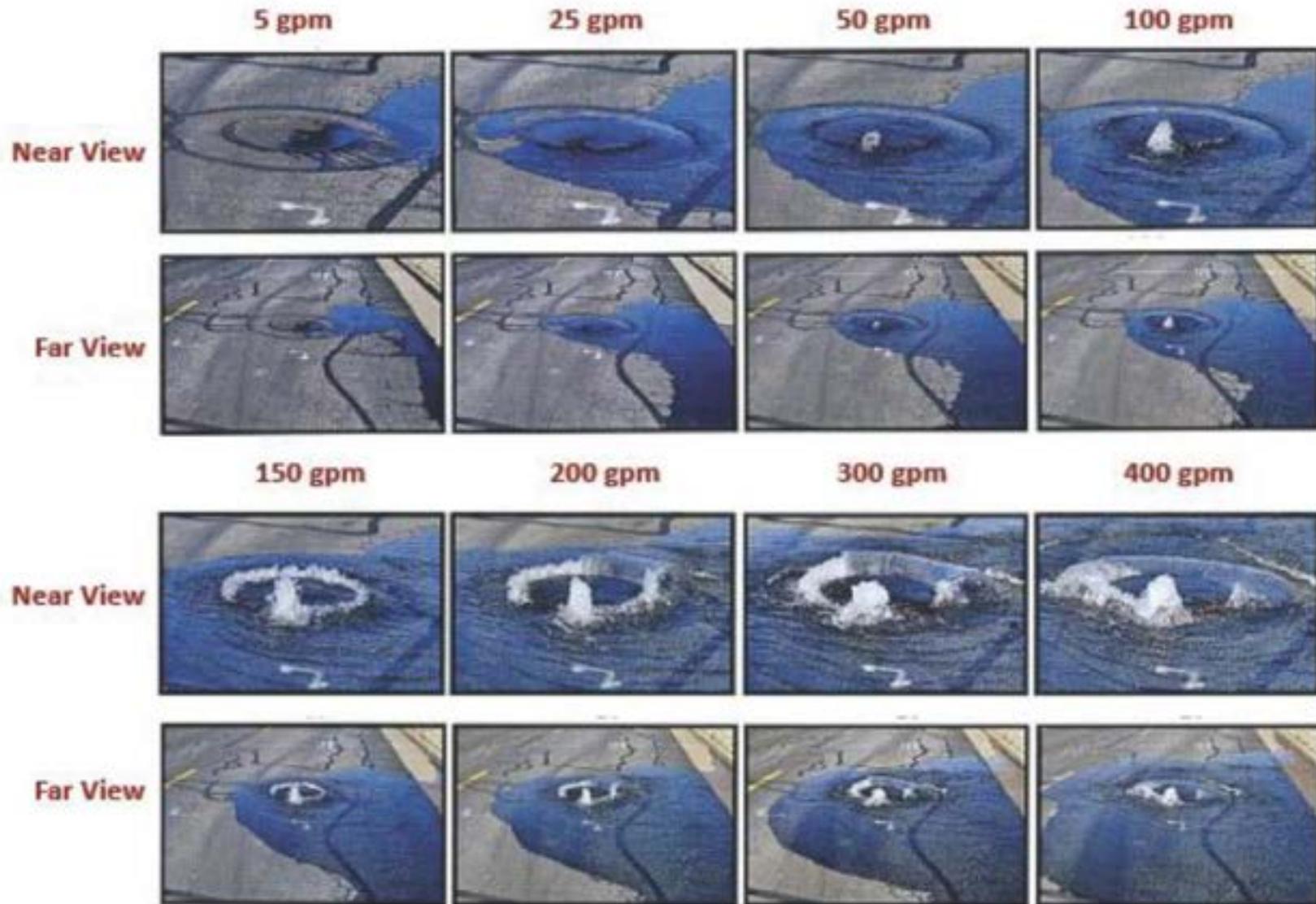
For example: 22 upstream connections * 9 gallons per hour per connection
= 198 gallons per hour / 60 minutes per hour
= 3.3 gallons per minute

Duration and Flow Rate Calculation

Once duration and flowrate have been estimated, the volume of the spill is the product of duration (hours or days) and the flowrate (gallons per hour or gallons per day).

For example: Spill start time = 11:00
Spill end time = 14:00
Spill duration = 3 hours
3.3 gallons per minute x 3 hours x 60 minutes per hour
= **594 gallons**

City of Chico* Manhole Overflow Flowrate Chart



*City of Chico, CA SSO Response Plan; Appendix G; 2014 update

http://www.chico.ca.us/general_services_department/operations_and_maintenance/documents/SSORPUpdateJuly312014forweb.pdf

Water Quality Monitoring Requirements

The SSO Water Quality Monitoring Program is meant to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled into surface waters.

- Utilize SSO Sampling Protocol shown below.
- When sampling account for spill travel time in the surface water.
- All samples being tested for indicators are to be analyzed in an accredited or certified laboratory.
- When analyzing samples, only use monitoring instruments and devices that have been properly maintained and calibrated.
- Within 48 hours of the enrollee becoming aware of the SSO, water quality sampling must, at a minimum, test for ammonia and appropriate bacterial indicators.

SSO Sampling Protocol

For large SSOs (50,000 gallons or more) that reach surface waters, monitoring and testing activities may include:

- Obtaining water quality samples.
- Gathering samples upstream and downstream of any location where SSO reached surface water. Logging the sample location, time, and water temperature on the chain of custody form.
- Creating a map of the sample locations so that follow-up testing can be performed.
- Collecting samples at the location where the SSO entered the water. When taking the sample, submerge the bottle below the surface of the water with the cap on. Once the bottle is under the surface, remove the cap and fill the bottle. Gloves should be worn while sampling to avoid infecting any open wounds.
- Analyzing the sample for at least the following constituents:
 - Ammonia Nitrogen;
 - Biochemical Oxygen Demand (BOD);
 - Dissolved Oxygen (DO);
 - Enterococci, Total Fecal Coliform;
 - Total Suspended Solids (TSS); and
 - Additional sampling requirements as imposed by Lake County Environmental Health Department or the CVRWQCB (could include VSS, pH, turbidity, Oil & Grease, etc.)

SSO Reporting Requirements and Procedures

Any prohibited discharge or spill of untreated or partially treated sewage/wastewater (SSO) from a public sewer system must be reported to state and local agencies responsible for oversight, abatement and public health and safety. Specifically, those agencies include:

- California State Water Resources Control Board (SWRCB)
- Central Valley Regional Water Quality Control Board (RWQCB)
- State Office of Emergency Services (OES)
- Lake County Environmental Health Department (LCEH)
- Lake County Air Quality Management District (LCAQMD)
- SSO Investigation and Documentation Forms are included in Appendix A of this Policy

City of Lakeport Internal SSO Reporting Protocol

1. Any active or inactive SSO which occurs within the City's sewer system (including the treatment plant) and is a result of, but not limited to, a blockage or obstruction, surge, equipment failure or malfunction, or inappropriate connection of a private lateral to a City main must be reported using the protocols and procedures outlined within this policy.
2. For purposes of this Policy, an active SSO shall refer to any spill that is in progress at the time identified or observed by City staff. An inactive SSO is any suspected spill positively determined to have occurred by the Utilities Superintendent, or designee.
3. Evidence of any suspected SSO reported to, or identified by, Department staff should be evaluated by the Utilities Superintendent, or designee. That individual shall determine whether a SSO did occur and, if so, the magnitude of the spill.
4. If evidence at a suspected SSO site suggests that a spill occurred, but an exact source, amount of discharge, and destination cannot reasonably be substantiated, the Utilities Superintendent may report the incident to the Compliance Officer at his/her discretion.
5. Unless creating a nuisance (as determined by the Utilities Superintendent), any active, inactive or suspected SSO on private property (PLSD), resulting from a blockage or failure of a sewer lateral from the property to the City right-of-way may not be reported to the Compliance Officer if the source and destination of the spill is determined to be localized to that property.
6. For purposes of this policy, a nuisance shall be defined as anything which meets all the following criteria:
 - a. Is a health hazard or has the possibility of being a health hazard, or is indecent or offensive to the senses and restricts the free use of the property;
 - b. Affects the entire community, neighborhood, or any other reasonable number of persons; and
 - c. Occurs during, or because of, the treatment or disposal of sewage or wastewater.
7. Reporting of active or suspected SSOs on private property, deemed reportable by the Utilities Superintendent, shall include ownership information of that property and contact information for that owner.
8. If any active or suspected SSO (as determined by the Utilities Superintendent to be an inactive spill) is observed or suspected of reaching a drainage channel or surface water, the Compliance Officer must be notified immediately.
9. Any SSO deemed reportable by the Utilities Superintendent must be reported to the Compliance Officer using the SSO Investigation Form, herein referred to as Attachment A.
10. Any active or inactive SSO estimated to be over 1,000 gallons in volume must be reported to the Public Works Director and the City Manager.
11. The Compliance Officer shall be responsible for all SSO regulatory reporting to state and local agencies (referred to herein) and is authorized to certify such reporting as a duly authorized representative of the City of Lakeport Municipal Sewer District.
12. Individual SSO records, including SSO Investigation and Report Forms, shall be maintained and kept by the Department for five (5) years. The RWQCB may extend this period at their discretion.

When reporting a SSO to the Compliance Officer or Utilities Superintendent, the following procedures shall be followed:

1. As soon as Department staff become aware of an active or inactive SSO (as determined by the Utilities Superintendent), and without substantially impeding cleanup or other emergency efforts,

the Sewer System Supervisor, or designee, shall complete, sign and submit an SSO Investigation Form to the Compliance Officer.

2. If an active or inactive SSO results in discharge to a drainage channel or surface water, the Sewer System Supervisor shall immediately notify the Utilities Superintendent by phone.
3. Upon receipt of notification of an active or inactive SSO discharging to a drainage channel or surface water, the Utilities Superintendent shall immediately notify the Compliance Officer.
4. The Compliance Officer must update the "Collection System Questionnaire," found on the [CIWQS SSO Database](#), when notified to do so by the SWRCB.
5. If no SSOs have been reported, identified, or substantiated in any given calendar month, the Compliance Officer shall submit a "No Spill Certification Report" to the SWRCB through the CIWQS Database. This report must be submitted no later than 30 days after the end of the month in question.
6. All reports and information submitted to the SWRCB shall be certified as described in Order No. WQ 2013-0058-EXEC referenced above.
7. The Compliance Officer or Utilities Director shall be responsible for notifying the Public Works Director of any spill over 1,000 gallons in volume; the Public Works Director shall notify the City Manager.
8. The Compliance Officer shall report SSOs to all appropriate state and local agencies based on the following criteria and reporting protocols:

CATEGORIES	DEFINITIONS
CATEGORY 1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: Reach surface water and/or reach a drainage channel (<i>Category 1 cont.</i>) tributary to a surface water; or Reach a municipal separate storm sewer system and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately-owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the SSO Database.

The reporting deadline for submittal of a SSO report to the SWRCB depends on the classification of the spill as shown in the above table. For Category 1 and 2 SSOs, the enrollee must submit an initial, draft report of the SSO as soon as possible but no later than 3 business days after becoming aware of the SSO. The final, certified report for Category 1 and 2 SSOs must be submitted within 15 calendar days of the

SSO end date. For Category 3 SSOs, the enrollee must submit a final, certified report (no initial, Draft report required) within 30 calendar days after the end of the calendar month in which the SSO occurred. For instance, if the SSO occurred on February 1st, the enrollee must certify the Category 3 SSO before March 30th.

SSO Reporting Requirements and Procedures

Any prohibited discharge or spill of untreated or partially treated sewage/wastewater (SSO) from a public sewer system must be reported to state and local agencies responsible for oversight, abatement and public health and safety. Specifically, those agencies include:

- California State Water Resources Control Board (SWRCB)
- Central Valley Regional Water Quality Control Board (RWQCB)
- State Office of Emergency Services (OES)
- Lake County Environmental Health Department (LCEH)
- Lake County Air Quality Management District (LCAQMD)

Current SSO Investigation and Documentation Forms are included in [Appendix A](#) of this Policy.

Regulatory Reporting Guide

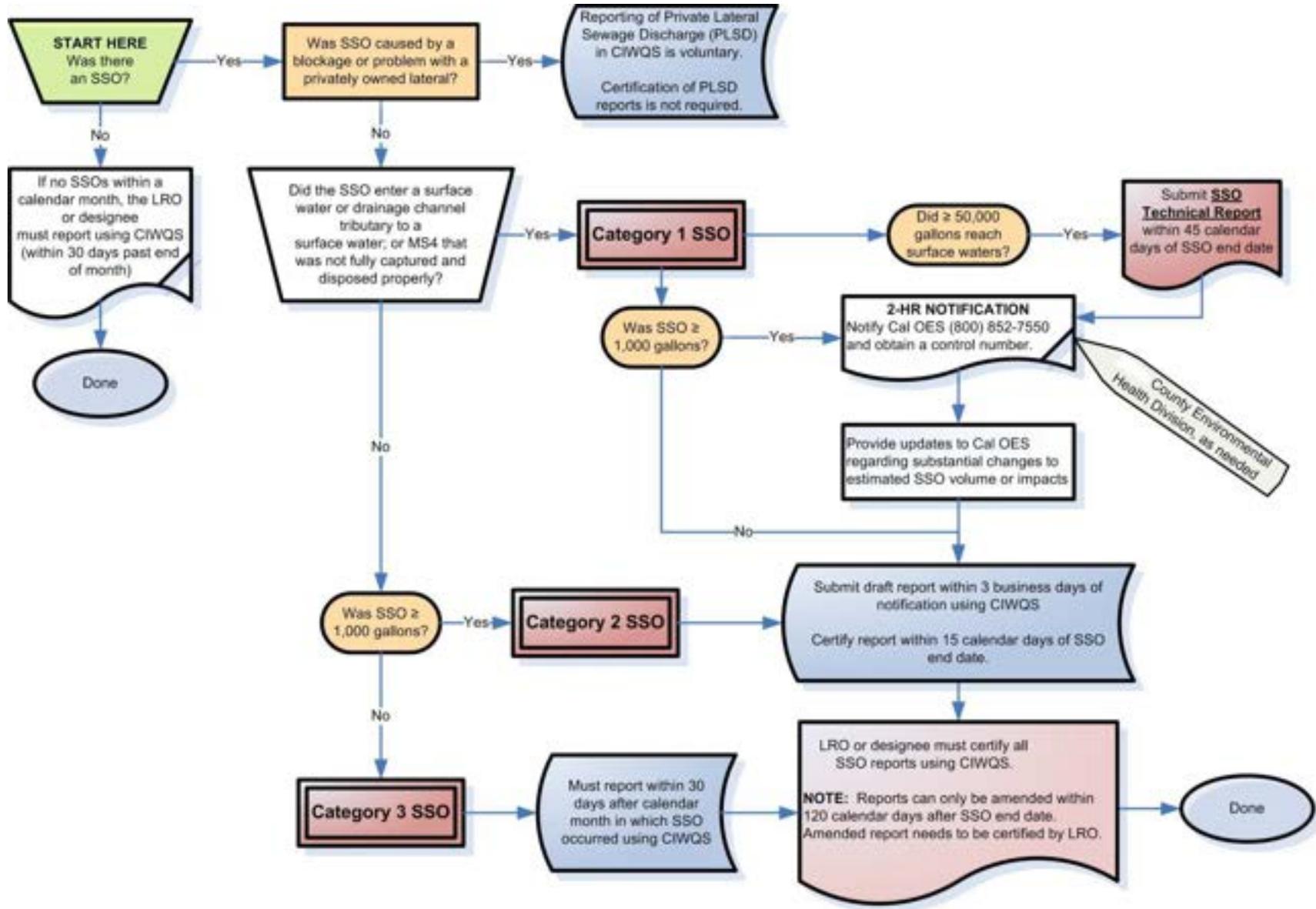
See the City's [Sanitary Sewer Overflow & Backup Response Regulatory Reporting Guide](#) for more details regarding the reporting protocols.

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (See Section B of SWRCB Order No. WQ 2013-0058-EXEC)	Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.	Call Cal OES at: (800) 852-7550
NOTIFICATION	SSO All Categories: Notify Lake County Environmental Health Dept.	Call LCEH at: (707) 263-1164
REPORTING (See Section C of SWRCB Order No. WQ 2013-0058-EXEC)	<p>Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.</p> <p>Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.</p> <p>Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred.</p>	Enter data into the CIWQS Online SSO Database http://ciwqs.waterboards.ca.gov , certified by enrollee's Legally Responsible Official(s).

These reporting requirements are detailed within the following documents:

- State Water Resources Control Board, [Order No. 2006-0003](#), Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- State Water Resources Control Board, [Order No. WQ 2013-0058-EXEC](#), Amended Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- California Regional Water Quality Control Board, Central Valley Region, [Order No. R-5-2012-0025](#), Waste Discharge Requirements for City of Lakeport Municipal Sewer District
- State Water Resources Control Board, [Enrollee's Guide to the SSO Database](#) (August 2013 update)

SSO External Reporting Flow Chart

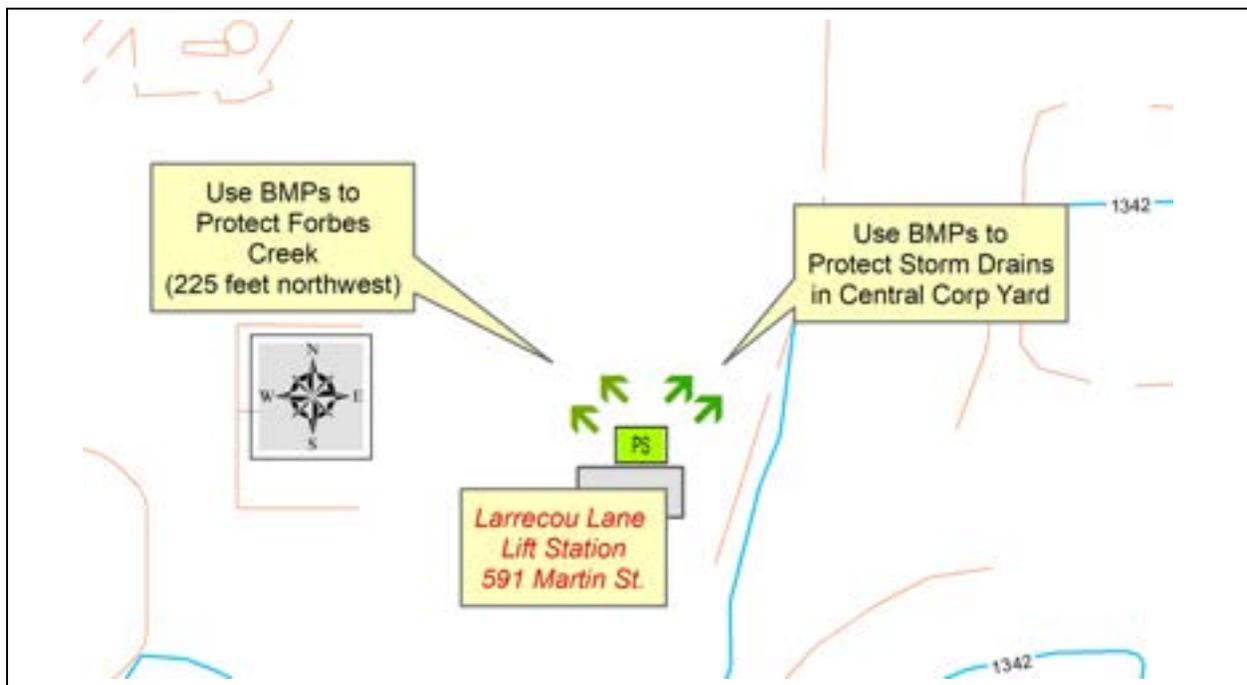


City of Lakeport Sewer Lift (Pump) Stations and SSO Deployment Maps

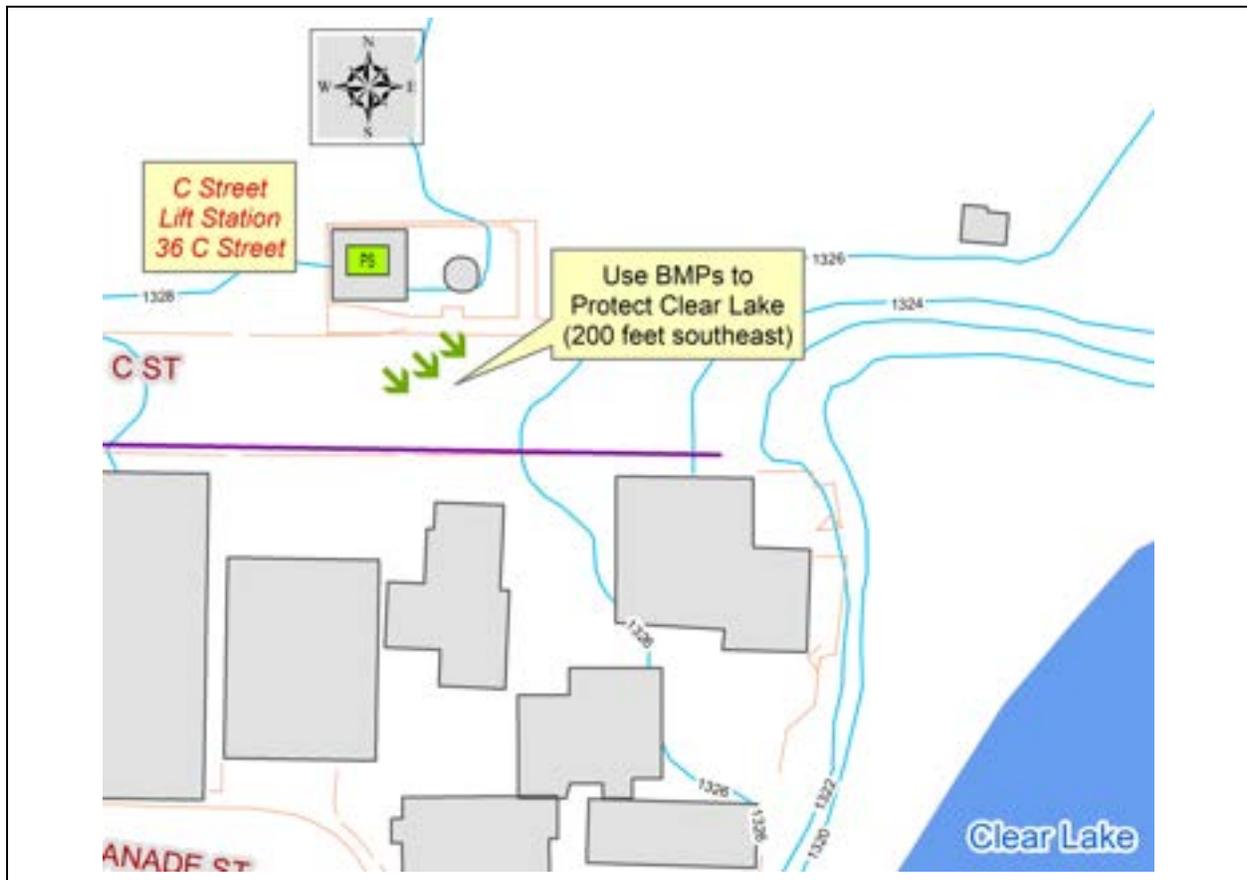
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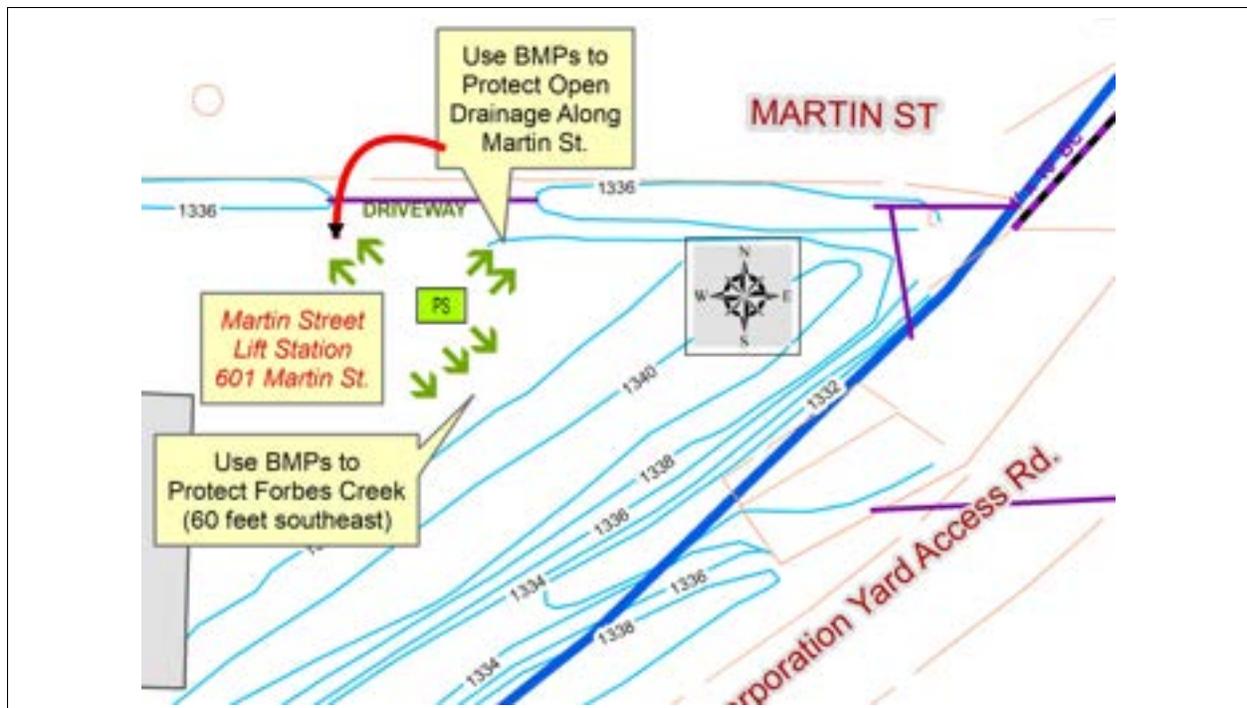
2. Larrecou Lane Lift Station 591 Martin Street



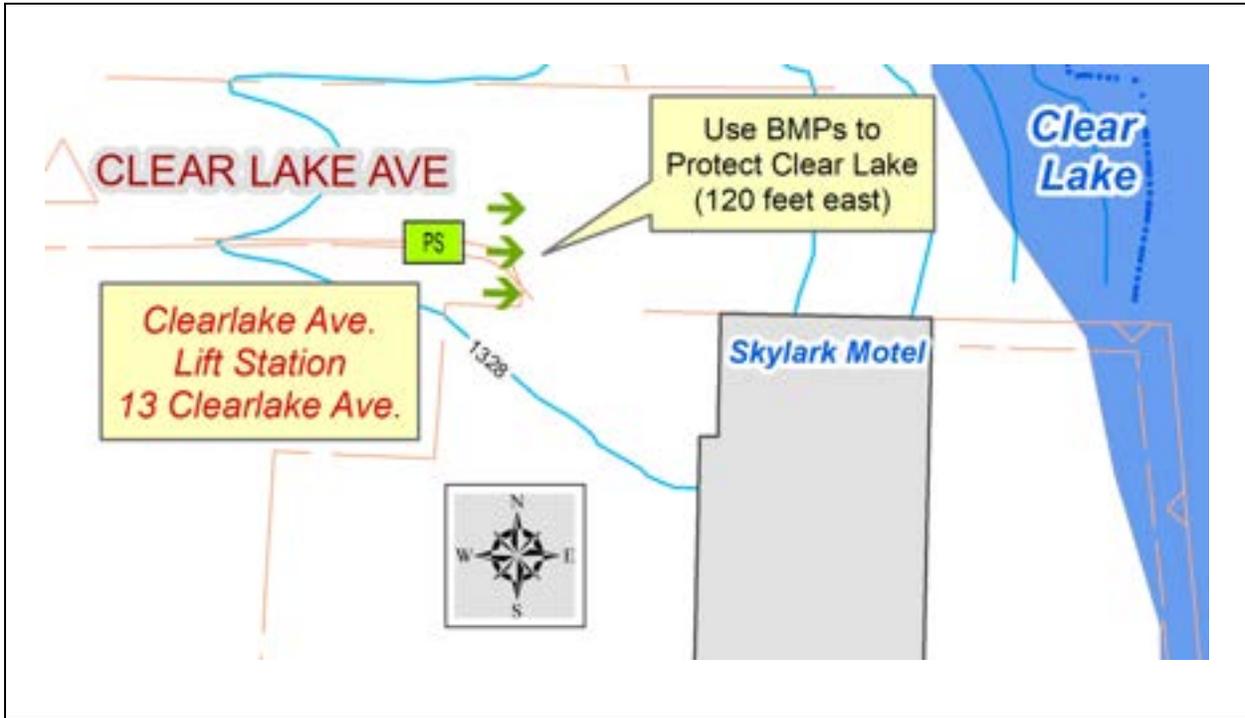
3. C Street Lift Station 36 C Street



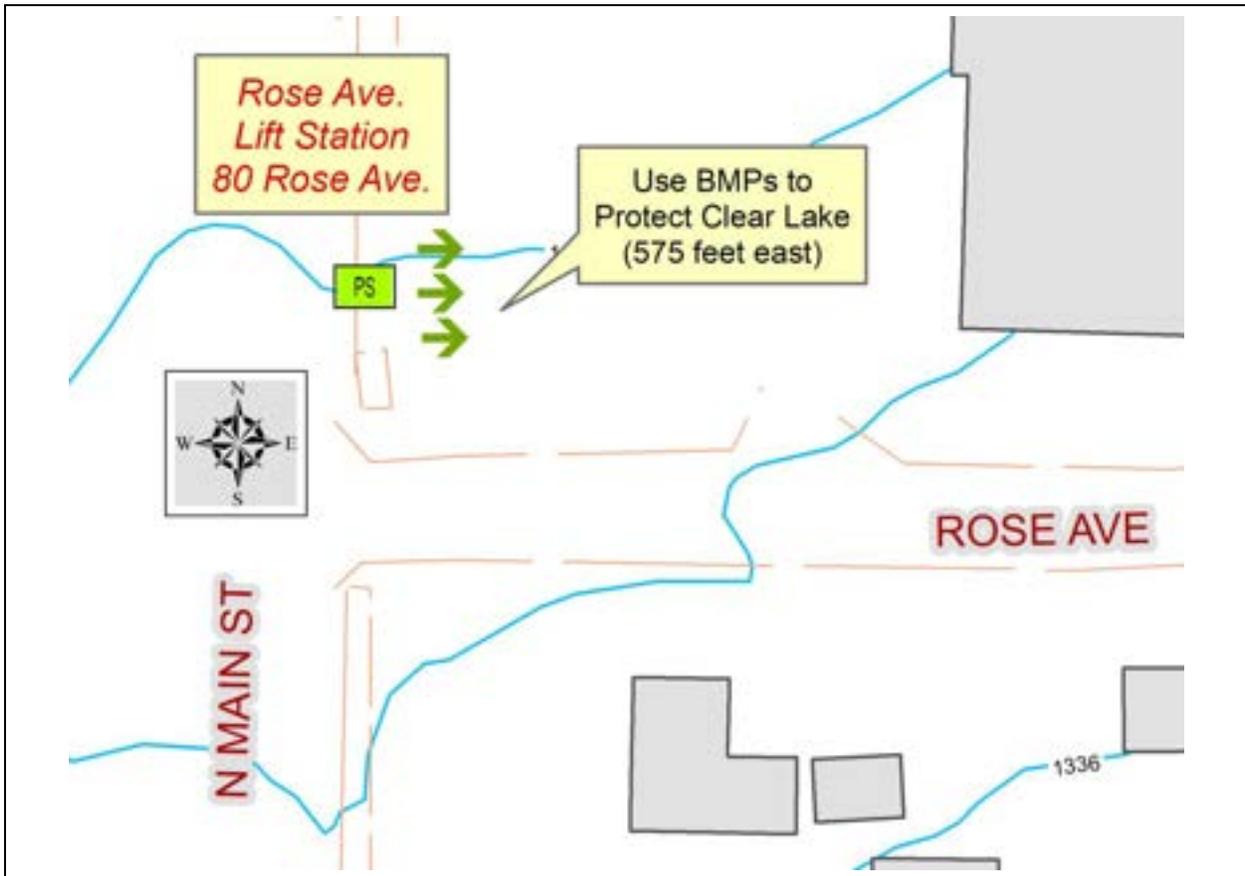
4. Martin Street Lift Station 601 Martin Street



5. Clearlake Avenue Lift Station 13 Clearlake Avenue



6. Rose Avenue Lift Station 80 Rose Avenue



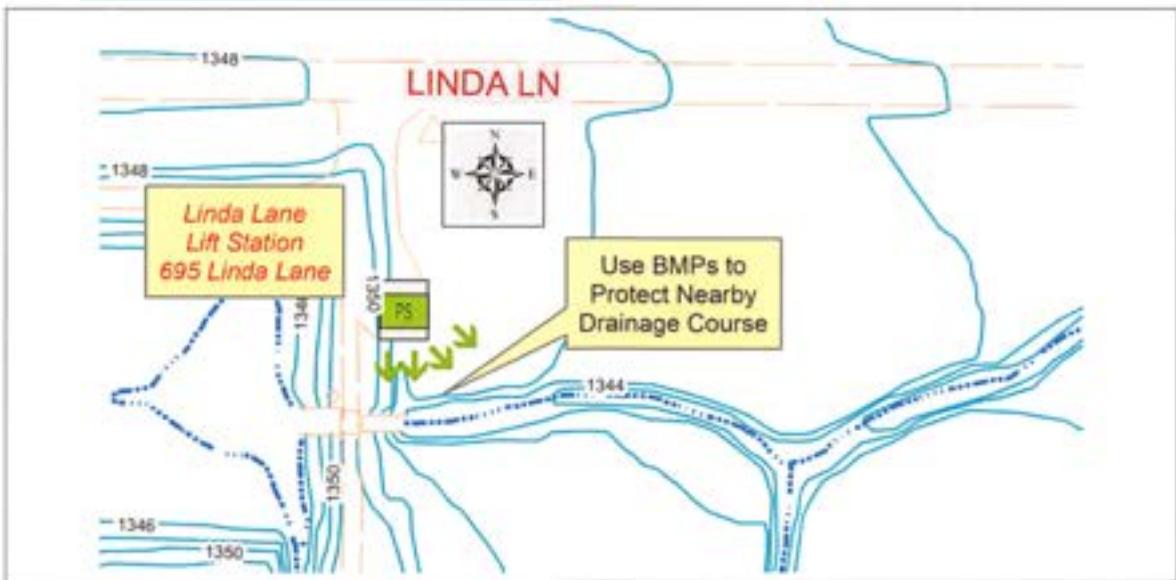
7. Lakeshore Blvd Lift Station

1949 Lakeshore Blvd



8. Linda Lane Lift Station

695 Linda Lane



Policy reviewed and approved by:

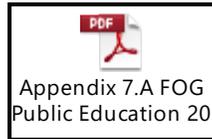
Paul Harris
Paul Harris
Utilities Superintendent

Date 12/13/17

APPENDIX 7

Appendix 7.A: FOG Informational/Educational Documents

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 7.A is attached on the following pages.

Appendix 7.B: Grease Trap/Interceptor Inspection Policy

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 7.B is attached on the following pages.

Appendix 7.C: FOG Program Variance Policy

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 7.C is attached on the following pages.



CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT

Over 100 years of community, pride, progress, and service.

FATS, OILS AND GREASE (FOG) PROGRAM

BEST MANAGEMENT PRACTICES (BMPs) FOR FOOD
SERVICE ESTABLISHMENTS

INSIDE THIS GUIDE

- 1 Why is FOG Important?
- 2 Simple Suggestions to Reduce FOG
- 3 Food Prep Spill Prevention
- 4 Maintenance
- 5 Oil and Grease Collection, Recycling and Food Donations
- 6 Grease Traps
- 7 Tips
- 8 BMP Summary

"The best way to manage FOG is to keep fats, oils, and grease out of the sewer system."

What is FOG and Why is it Important to My Business?

Residual fats, oils, and grease (FOG) are by-products that food service establishments must constantly manage. Typically, FOG enters a facility's plumbing system from ware washing, floor cleaning, and equipment sanitation. FOG will clog pipes and cause unsanitary spills or overflows to occur in food preparation areas, around a food service facility (e.g., in a parking lot or alleyway), or out on the street near a manhole or sewer access point. Spills and overflows are costly to clean up for businesses and the City, which means less profit for your restaurant, or other food service establishment, and possible fines and other penalties from the City.

Sanitary sewer systems are neither designed nor equipped to handle the FOG that accumulates on the interior of the municipal sewer collection system pipes. The best way to manage FOG is to keep fats, oils and grease out of the sanitary sewer systems.

Some Simple Suggestions to Reduce FOG

Training

Train kitchen staff and other employees about how they can help ensure BMPs are implemented. People are more willing to support an effort if they understand the basis for it. Through understanding, all subsequent BMPs will have a better chance of being implemented.



Dry Clean-Up

Practice dry clean-up. Remove food waste with “dry” methods such as scraping, wiping, or sweeping before using “wet” methods that use water. Wet methods typically wash the water and waste materials into the drains where it eventually collects on the interior walls of the drainage pipes. Do not pour grease, fats or oils from cooking down the drain and do not use the sink to dispose of food scraps. Likewise it is important to educate kitchen staff not to remove drain screens as this may allow paper or plastic cups, straws, and other utensils to enter the plumbing system during clean up.

The success of dry clean-up is dependent upon the behavior of the employee and availability of the tools for removal of food waste before washing. To practice dry clean-up:

- Use rubber scrapers to remove fats, oils and grease from cookware, utensils, chafing dishes, and serving ware.
- Use food grade paper to soak up oil and grease under fryer baskets.
- Use paper towels to wipe down work areas. Cloth towels will accumulate grease that will eventually end up in your drains from towel washing/rinsing.

“Do not pour grease, fats or oils from cooking down the drain and do not use the sink to dispose of food scraps.”

Signs

Post “No Grease” signs above sinks and on the front of dishwashers. Signs are a constant reminder to kitchen staff that something must be observed, such as those for hand washing or fire danger. Signs will help minimize the amount of material going into grease traps/interceptors and will reduce the cost of cleaning and disposal.

Water Temperature

Keep water less than 140°F in all sinks, especially in any pre-rinse sink in line before a mechanical dishwasher. Temperatures in excess of 140°F in any sink will dissolve grease and send it into the sewer. However, that grease will cool and eventually solidify somewhere down the line in your sewer lateral or the municipal collection system. This will create sewer blockages elsewhere, leading to spills at your facility or overflows nearby. By reducing water temperature, you will save costs for heating that water, reduce the risk of clogging up your sewer lateral, and will save the cost of hiring someone to clean out your pipes.



Food Prep Spill Prevention

Preventing spills reduces the amount of waste on food preparation and serving areas that will require clean up. A dry workplace is safer for employees in avoiding slips, trips and falls. For spill prevention:

- Empty containers before they are full.
- Use a cover to transport grease interceptor contents to a rendering barrel.
- Provide employees with the proper tools (ladles, ample containers, etc.) to transport materials without spilling.

“A dry workplace is safer for employees in avoiding slips, trips and falls.”

Maintenance

Maintenance is key to avoiding FOG blockages. Grease traps, interceptors or other FOG capturing equipment should be regularly maintained. All staff should be aware of, and trained to perform, correct cleaning procedures, particularly for under-sink interceptors that are prone to malfunction due to improper maintenance. A regular maintenance schedule is highly recommended. More beneficial maintenance suggestions include:

- Contract with a management company to professionally clean large hood filters. Small hoods can be hand-cleaned with spray detergents and wiped down with cloths for cleaning. Hood filters can be effectively cleaned by routinely spraying with hot water with little or no detergents over the mop sink, which should be connected to a grease trap/interceptor. After a hot water rinse (separately trapped), filter panels can go into the dishwasher. For hoods to operate properly in the removal of grease-laden vapors, the ventilation system will also need to be balanced with sufficient make-up air.
- Skim/Filter fryer grease daily and change oil when necessary. Use a test kit provided by your grocery distributor rather than simply a “guess” to determine when to change oil. This extends the life of both the fryer and the oil. Build-up of carbon deposits on the bottom of the fryer act as an insulator that forces the fryer to heat longer, causing the oil to break down sooner.

“Some facilities may require monthly cleaning of their grease traps or interceptors; others may need it less frequently.”



- Collect fryer oil in an oil rendering tank for disposal or transport it to a bulk oil rendering tank instead of discharging it into a grease interceptor or waste drain.
- Cleaning intervals depend upon the type of food establishment involved. Some facilities may require monthly cleaning of their grease traps or interceptors; others may need it less frequently. Establishments that operate a large number of fryers or handle a large amount of fried foods (such as chicken), along with ethnic food establishments, may need at least monthly cleanings. Full-cleaning of grease traps (removing all liquids and solids and scraping the walls) is a worthwhile investment. Remember, sugars, starches and other organics accumulate from the bottom up. If sediment is allowed to accumulate in the trap, it will need to be pumped more frequently.
- Develop a rotation system if multiple fryers are in use. Designate a single fryer for products that are particularly high in deposits, and change that one more often.

Oil and Grease Collection, Recycling and Food Donation

Get paid to recycle your yellow grease.

FOG, especially yellow grease, is a commodity that, if handled properly, should be treated as a valuable resource. Yellow grease, or "tallow," as it is sometimes referred to, is cooking grease. When heated and purified, it can be sold to soap, cosmetic, and animal feed companies. When handling your grease, consider the following:

- Some rendering companies will offer services free-of-charge and others will give a rebate on the materials collected. A list of registered grease haulers can be found in the *Grease Rendering Guide* or on the City's web site, www.cityoflakeport.com.
- Use 25-gallon rendering barrels with covers for onsite collection of oil and grease other than from fryers. Educate kitchen staff on the importance of keeping outside barrels covered at all times. During storms, uncovered or partially covered barrels allow storm water to enter the barrel resulting in oil running onto the ground and possibly into storm drains, and can contaminate an otherwise useful by-product.



*“Edible food waste
may be
donated....It helps
reduce disposal
costs....”*

- Use a 3-compartment sink for ware washing. Begin with a hot pre-wash, followed by a scouring sink with detergent, then a rinse sink.
- Make sure all drain screens are installed.
- Prior to washing and rinsing, use a hot water ONLY (no detergent) pre-rinse that is separately trapped to remove non-emulsified oils and greases from ware washing. Wash and rinse steps should also be trapped.
- Empty grill top scrap baskets or scrap boxes and hoods into the rendering barrel.
- Easy does it! Instruct staff to be conservative about their use of fats, oils and grease in food preparation and serving.
- Ensure that edible food is not flushed down your drains. Edible food waste may be donated to a local food bank. Food donation is a win-win situation. It helps restaurants reduce disposal costs and it puts the food in the hands of those who can use it. Contact the Lake County Department of Social Services at 995-4200 to learn more.

Grease Traps/Interceptors

The City's new sewer use ordinance requires all businesses that produce FOG to install, operate, and maintain a grease trap or interceptor. Installing or upgrading a grease trap or grease interceptor is a beneficial investment for any food service establishment, given the costly effects of FOG. But before doing so, the following should be considered:

- For grease traps to be effective, the unit(s) must be properly sized, constructed, and installed in a location to provide an adequate retention time for settling and accumulation of the FOG. If the unit(s) is too close to the FOG discharge and does not have enough volume to allow amassing of the FOG, the emulsified oils will pass through the unit without being captured. For information on properly locating, constructing, and sizing grease traps, contact the City's Compliance Officer or visit the City's web site at www.cityoflakeport.com



*Contact the City's
Compliance Officer
at 263-5615 for more
information.*

- Ensure all grease-bearing drains discharge to the grease trap. These include mop sinks, woks, wash sinks, prep sinks, utility sinks, pulpers, dishwashers, pre-rinse sinks, can washes, and floor drains in food preparation areas such as those near a fryer or tilt/steam kettle. No toilet wastes should be plumbed to the grease trap.
- If these suggested best management practices do not adequately reduce FOG levels, the operator may consider installing a second grease trap with flow-through venting. This system should help reduce grease effluent substantially.

Consumer Tip

Buyer beware! When choosing a method of managing your fats, oil, and grease, ensure that it does what the vendor says it will do. Some technologies or "miracle cures" don't eliminate the problem but result in grease accumulations further down the sewer line. "Out of sight" is not "out of mind." Check the vendor's references.

Contact Information

Please contact the City's Compliance Officer at 263-3578, or by E-mail at compliance@cityoflakeport.com, for more information or to discuss your particular FOG situation. We're here to help you succeed!

Mailing Address:

Lakeport City Hall
225 Park Street
Lakeport, CA 95453



SUMMARY BEST MANAGEMENT PRACTICES (BMPs) FOR FOOD RELATED FATS, OILS AND GREASE

BMPs	REASONING	BENEFITS
Train all staff on BMPs.	People are more willing to support an effort if they understand the reasons behind it.	Trained staff will be more likely to implement BMPs and work to reduce grease discharges to the sewer.
Post "No Grease" signs above sinks and on the front of dishwashers.	Signs serve as a constant reminder for staff working in kitchens.	Reminders help minimize grease discharge to the sewer or grease removal device.
Check grease interceptor solids depth routinely. The combined thickness of the floating grease and the bottom solids should not be more than 25% of the total interceptor depth.	Grease interceptors will not meet performance standards when solids and floating grease levels exceed 25%.	This will keep grease interceptor working at peak performance.
Collect and recycle waste cooking oil.	These actions reduce grease loading on grease removal devices and the sewer.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the system.
"Dry wipe" pots, pans, and kitchen equipment before cleaning.	"Dry wiping" will reduce the grease loading on grease removal devices and the sewer.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the drain.
Maintain a routine grease trap cleaning schedule.	If grease traps are not routinely cleaned, they do not work properly and do not prevent grease from entering the sewer. If the grease trap is not providing adequate protection, a grease interceptor may be required.	This reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
Use absorbent paper under fryer baskets.	This reduces the amount of grease during cleanup.	The amount of grease entering the drain is reduced, which protects the sewer system from grease blockages and overflows.
Use absorbents, such as paper towels and cat litter, to pick up oil and grease spills before mopping.	Decreases the amount of grease that will be put down the drain.	Reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
Do not use emulsifiers or solvents other than typical dishwashing detergents.	Emulsifiers and solvents will break down grease causing a problem downstream in the sewer.	Allows for proper removal of grease.



CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT

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FATS, OILS AND GREASE (FOG) PROGRAM

FREQUENTLY ASKED QUESTIONS (FAQs)

INSIDE THIS FAQ

- 1 Is grease a problem?
- 2 What is a grease trap and how does it work?
- 3 What is a grease interceptor?
- 4 How do I clean my grease trap?
- 5 Can you recommend a maintenance schedule?
- 6 Do I need a grease trap?
- 7 Is the grease trap I have adequate?
- 8 Who inspects grease traps/interceptors?
- 9 Who determines if I need a grease trap or interceptor?
- 10 What if I don't install a grease trap?
- 11 How can I get in compliance?

Is grease a problem?

In the sewage collection and treatment business, the answer is an emphatic "YES!" Grease is singled out for special attention because of its poor solubility in water and its tendency to separate from the liquid solution.

Large amounts of oil and grease in the wastewater cause trouble in collection system pipes. It decreases pipe capacity and, therefore, requires frequent cleaning and results in a shorter lifespan. Oil and grease also hamper effective treatment at the wastewater treatment plant.

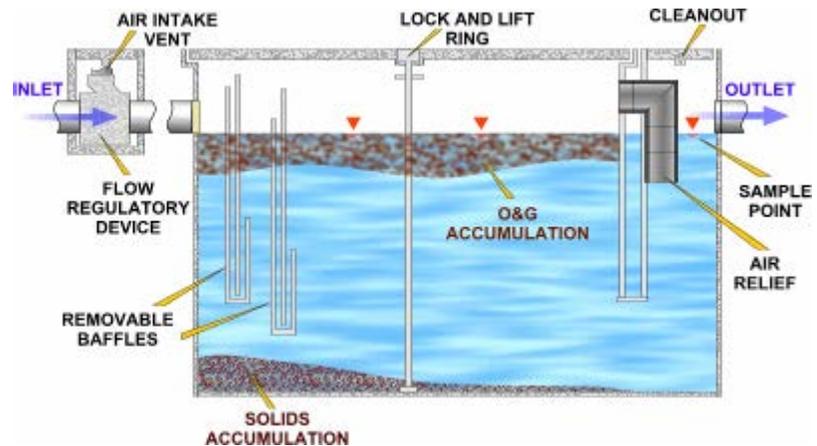
Problems caused by wastes from restaurants and other grease producing establishments have served as the basis for the City's new sewer ordinance, which governs the discharge of materials into the sewer system. It is also why the installation of grease traps or interceptors has become mandatory.

What is a grease trap and how does it work?

A grease trap is a small reservoir built into the wastewater piping, a short distance from a grease producing area. Baffles in the reservoir retain the wastewater long enough for the grease to congeal and rise to the surface. The grease can then be removed and disposed of properly. A diagram of a typical grease trap is presented in Figure 1 below.



Figure 1

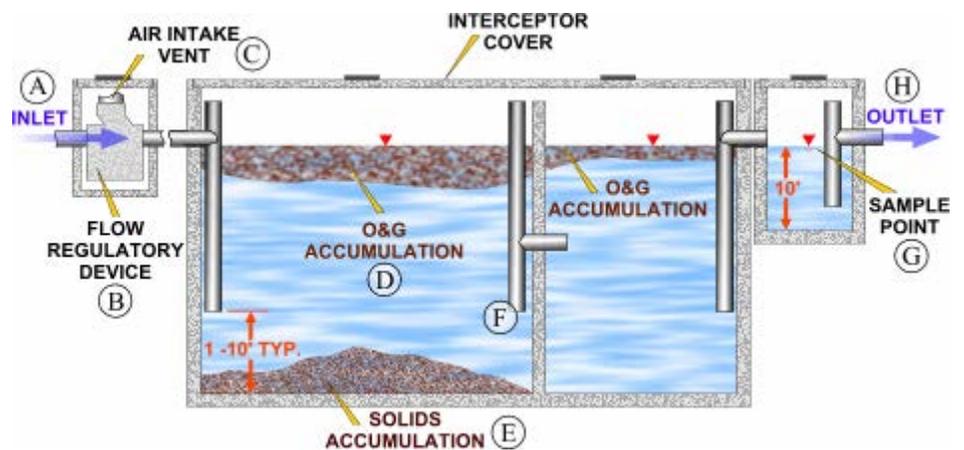


Grease trap maintenance is typically performed by maintenance staff or other employees. Grease interceptors are usually cleaned by grease haulers or recyclers.

What is a grease interceptor?

A grease interceptor is a vault with a minimum capacity of between 500 and 750 gallons, located on the exterior of the building. The capacity of the interceptor provides adequate residence time so that wastewater has time to cool, allowing the remaining grease not collected by the traps time to congeal and rise to the surface, where it accumulates until the interceptor is cleaned. Figure 2 illustrates a typical grease interceptor.

Figure 2





How do I clean my grease trap/interceptor?

Grease trap maintenance is typically performed by maintenance staff or other employees of a restaurant or other food service establishment/facility. Please refer to the *Grease Trap Maintenance Guide* for more information on how to clean and maintain your grease trap.

Refer to the "Grease Trap Maintenance Guide" for useful information about how to clean your grease trap.

Grease interceptors are usually cleaned by grease haulers or recyclers. Several vendors operate in the Lakeport area, providing both cleaning (grease removal) and disposal services. Please refer to the *Restaurant Oil and Grease Rendering Guide* for more information or check the local phone book for grease removal services.

Can you recommend a maintenance schedule?

All grease interceptors should be cleaned at least once every 60 days. Some establishments will find it necessary to clean their traps more often than that. If you find that you have to clean it often (every month), you may want to consider installing a larger trap or interceptor.

Be sure to record all of your maintenance activity on the *Maintenance Log*. A copy can be obtained from the City's Utilities Department or from the Lake County Department of Environmental Health.

Do I need a grease interceptor?

The short answer is yes. Pursuant to City code, any establishment that introduces grease or oil into the drainage and sewage system in quantities large enough to cause line blockages or hinder sewage treatment is required to install a grease interceptor. However, the size and type of interceptor may vary.

Interceptors *and* grease traps are usually required for high volume restaurants (full menu establishments operating 16 hours/day and/or serving 500+ meals/day) and large commercial establishments, such as hotels, hospitals, factories, or school kitchens.

However, even small volume (fast food or take-out restaurants with limited menus, minimum dishwashing, and/or minimal seating capacity) and medium volume establishments (full menu establishments operating 8-16 hours/day and/or serving 100-400 meals/day) can generate significant amounts of grease. In order to ensure that the sewer remains free of grease and fully functional, the City is requiring all establishments to install interceptors.

You can make money by recycling your used yellow (cooking) grease.



Is the grease trap/interceptor I have adequate?

It depends. The number of drains or fixtures connected to the trap and the maintenance schedule dictate whether a trap is effective at preventing grease from entering the sanitary sewer system. The bottom line: if grease is clogging your lateral or the City main near your establishment, most likely your trap is inadequate. Please feel free to contact the City's Compliance Officer at 263-3578 if you have concerns about your grease trap or would like to discuss your particular grease issue.

The County's Environmental Health Department will conduct an inspection of your grease trap/interceptor at least once a year during a regular health inspection.

Who inspects grease traps/interceptors and what are the criteria for those inspections?

The County's Environmental Health Department will identify your grease trap/interceptor at least once a year during a regular health inspection. The City's Compliance Officer is trained to inspect the unit(s), if needed. Inspections may be frequent depending on any identified issues or concerns related to FOG in the sanitary sewer that may be occurring in or around your facility.

For additional information about grease trap/interceptor inspections, please call the City's Compliance Officer at 263-3578 or by E-mail at compliance@cityoflakeport.com.

Who determines if I need a grease trap or interceptor?

Generally speaking, City Code requires every restaurant or other food service establishment that produces grease to install and maintain a grease trap/interceptor, unless a variance is requested.

If a variance is requested, a variance study will be performed, which will examine the feasibility of installing a grease trap at a subject location. The Community Development/Utilities Director, otherwise known as the CLMSD Director, will make the determination as to whether a grease trap is required or if it is infeasible.



What if I don't install a grease interceptor?

City code requires any establishment that introduces grease or oil into the drainage and sewage system in quantities large enough to cause line blockages or hinder sewage treatment is required to install a grease interceptor. Failure to do so may result in remuneration and fines up to \$25,000 or more. However, you may request a variance, if you feel your circumstance warrants consideration. There are fees associated with this request. Please contact the Compliance Officer for more information.

How can I get in compliance?

If your business does not have a grease interceptor, and you produce fats, oils and grease, you will need to request a grease trap/interceptor installation permit. Contact the City's Community Development Department at 263-3056 for more information and to request an application.

If you have a grease trap or interceptor and believe that it may be ineffective at keeping FOG out of the sanitary sewer (i.e. needs frequent cleaning, backups occurring in kitchen, etc.), you may need to upgrade or replace your existing grease trap/interceptor. A grease trap/interceptor installation permit will be required for this as well.

To assess your grease discharge practices and determine if your efforts to minimize FOG are adequate, complete a *Food Service Assessment Checklist*. Contact the City's Compliance Officer at 263-3578 to receive a copy or to discuss your particular grease trap or interceptor issue.

Contact Information

Please contact the City's Compliance Officer at 263-3578, or by E-mail at compliance@cityoflakeport.com, for more information or to discuss your particular FOG situation. We're here to help you succeed!

Mailing Address:

Lakeport City Hall
225 Park Street
Lakeport, CA 95453

(707) 263-3578 or via email compliance@cityoflakeport.com

*Contact the City's
Compliance Officer
at 263-3578 or email
[compliance@
cityoflakeport.com](mailto:compliance@cityoflakeport.com)
for more information.*



FOG BEST MANAGEMENT PRACTICES (BMPs) PROGRAM

BMPs	REASONING	BENEFITS
Check grease interceptor solids depth routinely. The combined thickness of the floating grease and the bottom solids should not be more than 25% of the total interceptor depth.	Grease interceptors will not meet performance standards when solids and floating grease levels exceed 25%.	This will keep grease interceptor working at peak performance.
Collect and recycle waste cooking oil.	These actions reduce grease loading on grease removal devices and the sewer.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the system.
“Dry wipe” pots, pans, and kitchen equipment before cleaning.	“Dry wiping” will reduce the grease loading on grease removal devices and the sewer.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the drain.
Maintain a routine grease trap cleaning schedule.	If grease traps are not routinely cleaned, they do not work properly and do not prevent grease from entering the sewer. If the grease trap is not providing adequate protection, a grease interceptor may be required.	This reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
Use absorbent paper under fryer baskets.	This reduces the amount of grease during cleanup.	The amount of grease entering the drain is reduced, which protects the sewer system from grease blockages and overflows.
Use absorbents, such as paper towels and cat litter, to pick up oil and grease spills before mopping.	Decreases the amount of grease that will be put down the drain.	Reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
Do not use emulsifiers or solvents other than typical dishwashing detergents.	Emulsifiers and solvents will break down grease causing a problem downstream in the sewer.	Allows for proper removal of grease.
No hot water over 140°F	Temperatures in excess of 140°F in any sink will dissolve grease and send it into the sewer.	By reducing water temperature, you will save costs for heating that water, reduce the risk of clogging up your sewer lateral, and will save the cost of hiring someone to clean out your pipes.



CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT

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FATS, OILS AND GREASE (FOG) PROGRAM

FOOD SERVICE ASSESSMENT CHECKLIST

FOOD SERVICE ASSESSMENT CHECKLIST

This checklist will help you as a manager /owner of a food services establishment/facility (FSE) identify sources of fats, oil and grease and how they are being managed. By completing this checklist, you will gain a better understanding of your current practices and if they are adequate to minimize FOG discharges to the City of Lakeport Municipal Sewer District (CLMSD). Improper FOG disposal can result in costly and unhealthy sewer overflows and backups directly into your facility.

Please take a moment to review this checklist and discuss it with your Health Inspector during your next scheduled inspection. Your inspector can answer many questions you may have about FOG and grease disposal. For additional information, please contact the City's Compliance Officer at 263-3578 or via email compliance@cityoflakeport.com.

General Food Service Establishment Information

1. Facility Name: _____ Date (MM/DD/YYYY): _____
2. Facility Address: _____
3. Facility Owner/Manager: _____
4. Type of food service operation: _____
5. Responsible person/organization: _____
6. Hours of operation: _____
7. Number of meals served/day: _____
8. Number of seats: _____

Fats, Oil and Grease Trap/Interceptor

1. Type (under the sink, in ground, mechanical): _____
2. Number of units: _____
3. Size (gallons): _____
4. Location: _____



Grease Trap/Interceptor Maintenance

1. Pump-out schedule (monthly, weekly, etc.) _____
2. Pump service provider: _____
3. Maintenance log available on-site? Yes No
4. Is grease trap/interceptor cleaning observed by management? Yes No
5. Does service include complete pumping/cleaning of the trap and sample box, not just removing the grease layer? Yes No
6. Is the vault refilled with clean water, not with water already filled out? Yes No
7. Are enzymes/bacteria used? If yes, vendor name? Yes No

Kitchen Equipment/Devices

Are the following kitchen devices plumbed to discharge to the grease trap/interceptor?

1. Dishwashers: Yes No
2. Pot sinks, multi-compartment sinks, mop sinks, pre-rinse sinks: Yes No
3. Floor drains: Yes No
4. Food streamers: Yes No
5. Food grinders/pulpers: Yes No
6. Steam kettle(s): Yes No
7. Can washer(s): Yes No

Comments: _____

Are the following cleaned or maintained periodically? Is the cleanup water discharged to the grease trap? If not, where is it discharged? _____

1. Exhaust hoods and filters: Yes No
2. Floor mats, floors and grill tops Yes No
3. Exterior of the grease traps/interceptors Yes No
4. Dumpsters/trash cans Yes No
5. Parking lots and sidewalks Yes No

Comments: _____

Dry Cleanup

1. Are serving wares, utensils or food preparation surfaces wiped before washing? Yes No
2. Do employees know not to allow FOG or food wastes into the drains? Yes No
3. Are employees provided the necessary training and tools (rubber scrapers, brooms, absorbent materials for spills) for dry cleanup? Yes No

**Spill Cleanup and Prevention**

1. Are cleanup kits in visible and accessible areas? Yes No
2. Are employees provided with adequate conveyance methods/tools (ladles, containers with lids, etc.) to prevent oil and grease spills while transferring from inside the restaurant to the outside storage bin? Yes No
3. Is there a designated employee(s) to manage/monitor cleanup? Yes No

Employee Awareness Training

1. Have employees received training in the Best Management Practices (BMPs) for handling oil and grease (i.e. spill prevention, dry cleanup, etc.)? Yes No
2. Are employees involved in keeping FOG out of the drains? Yes No
3. Are signs posted in key areas that remind staff to keep oils and grease out of the drains? Yes No
4. Are new employees trained on FOG BMPs and existing employees trained on a routine basis (e.g. quarterly, semi-annually, etc.)? Yes No

Grease Disposal

1. Are the outside oil and grease storage bins kept covered? Yes No
2. Are the outside storage bins located away from storm drains and catch basins? Yes No
3. Are dumpsters and grease recycling bins cleaned and checked for leaks often? Yes No
4. Is there a spill prevention plan, and are materials available in the event of a spill? Yes No

Grease Management Contractors

1. Does your hauler/renderer have the proper legal licenses and permits to handle the oil and grease waste? Yes No
2. Who do you contact when there is a problem? Yes No
3. Do you know where the waste grease is sent for final disposal? Yes No

For further information on proper management of oil and grease from your food service operations, contact the City's Compliance Officer at (707) 263-3578 or via email

compliance@cityoflakeport.com

How can we help?

Whether you have questions about grease rendering or need help identifying the best place to install a grease trap, we're here to offer assistance. Call to schedule an appointment to meet with the City's Compliance Officer or call for a consultation over the phone. Please visit the City's web site for more information.

www.cityoflakeport.com

The Benefits of Proper FOG Disposal

Eliminating FOG discharge to the sanitary sewer system is a win-win situation for the City, businesses, and the community as a whole. Just a few of the benefits associated with this effort include:

- Reduced operating costs
- More sewer capacity so the City can grow to meet the needs of your business
- Potential reimbursement for grease recycling
- Avoidance of penalties or fines imposed for clogging municipal sewer lines
- A cleaner environment for your patrons and the community to enjoy

...and so much more.

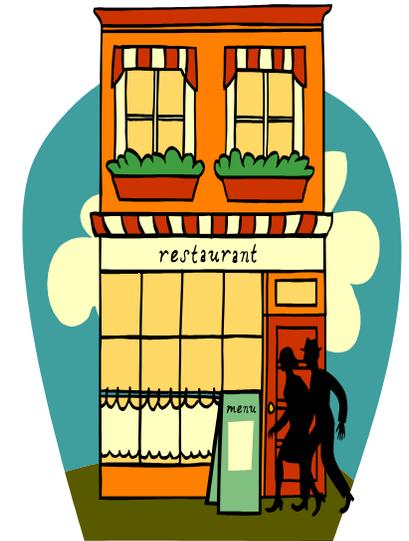


CLMSD CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT

For answers to your FOG questions or to discuss your particular grease issue, please contact the City's Compliance Officer for a one-on-one consultation over the phone, or contact the Compliance Officer or Community Development Department to schedule an appointment.

Compliance Officer
(707) 263-3578
compliance@cityoflakeport.com
Community Development Department
(707) 263-5613

FATS, OILS AND GREASE (FOG) PROGRAM

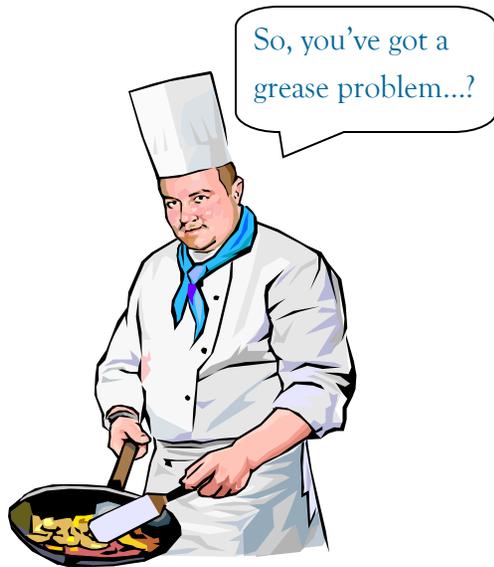


CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT

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City Hall
225 Park Street
Lakeport, CA 95453
(707) 263-3578
compliance@cityoflakeport.com

FOG AND YOUR BUSINESS



Are you noticing frequent or regular sink or toilet backups at your facility? Are you finding that you have to call the plumber more often than usual? Have you noticed sewer backups near or around your facility during rainy periods? You may have a FOG problem.

The discharge of fats, oil and grease (or FOG) into the sanitary sewer is a concern for everyone in the community. FOG sticks to the inside of sewer pipes and, over time, that material can build up and create a blockage. A blockage such as this can result in a sewer system overflow (SSO), which will release untreated wastewater onto our properties and into our waterways. Nasty!

Reducing that discharge is one of our top priorities. Together we can do it!

Best Management Practices (BMPs)

Below are a few tips to avoid putting fats, oil, and grease into the sanitary sewer.

BMPs	BENEFITS
Check grease interceptor solids depth routinely. The combined thickness of the floating grease and the bottom solids should not be more than 25% of the total interceptor depth.	This will keep grease interceptor working at peak performance.
Collect and recycle waste cooking oil.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the system.
"Dry wipe" pots, pans, and kitchen equipment before cleaning.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the drain.
Maintain a routine grease trap cleaning schedule.	This reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
Use absorbent paper under fryer baskets.	The amount of grease entering the drain is reduced, which protects the sewer system from grease blockages and overflows.
Use absorbents, such as paper towels and cat litter, to pick up oil and grease spills before mopping.	Reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
Do not use emulsifiers or solvents other than typical dish-washing detergents.	Allows for proper removal of grease.
No hot water over 140°F	By reducing water temperature, you will save costs for heating that water, reduce the risk of clogging up your sewer lateral, and will save the cost of hiring someone to clean out your pipes.

Looking for a grease hauler?

Here are few local vendors who may be able to clean your grease interceptor and haul your grease away....

BUSINESS NAME

Action Sanitary, Inc.
P.O. Box 492
Lower Lake, CA 95457
(707) 994-5068

Roto-Rooter of Lake County
P.O. Box 1340
Kelseyville, CA 95451
(707) 279-9461

Darling International Inc.
429 Amador St.
San Francisco, CA 94124
(800) 473-4890

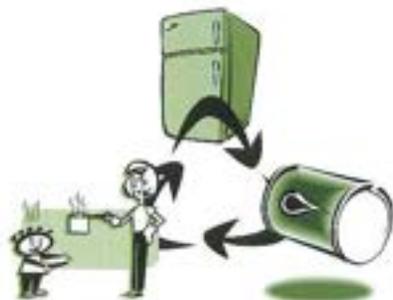
North State Rendering Company Inc.
15 Shippee Rd.
Oroville, CA 95965
(530) 343-6076

Sacramento Rendering Co.
11350 Kiefer Blvd.
Sacramento, CA 95830
(800) 339-6493



PLEASE dispose of your Fats, Oil & Grease the right way and prevent sewer lines from overflowing.

Don't Forget the Grease!



Help the CLMSD keep the
GREASE OUT
and the
WATER IN!

City of Lakeport

*Over 100 years of community pride, progress,
and service*



CLMSD
Corporation Yard
591 Martin Street
Lakeport, CA 95453
Tel: 707-263-3578

Can the Grease
Three simple steps can protect your
home and our environment

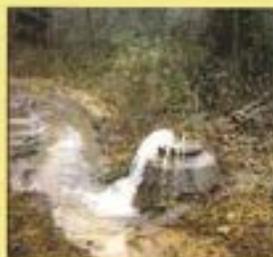
Fats, Oils and Grease...

What's the problem?

Too often, grease is washed into the plumbing system, usually through the kitchen sink. Grease sticks to the insides of sewer pipes (both on your property and in the streets). Over time, the grease can build up and block the entire pipe. Cooking grease in the form of lard, shortening and cooking oils can build up on the inside of sewer pipes causing line blockages, or worse, Sewer System Overflows (SSO's) (the discharge of untreated wastewater into the environment). The EPA has determined that SSO's are the number one cause of pollution in our national waterways.

Commercial additives, including detergents, which claim to dissolve grease, only pass grease down the line and cause problems in other areas. The results can be sewage overflowing in your home or your neighbor's causing expensive and unpleasant cleanups. This increases the potential risk to public health and the operation and maintenance costs for the CLMSD.

Sewer Blockage is the Problem!



Example of a Sewer
System Overflow (SSO)

What can you do?

The easiest way to solve the grease problem and prevent overflows of raw sewage is to keep this material out of the sewer system in the first place.

NEVER!!

pour grease
down sink
drains or
toilets



INSTEAD...

1.)

Pour or Scrape
Grease from
pots or pans
into a can



2.)

Cover and
refrigerate

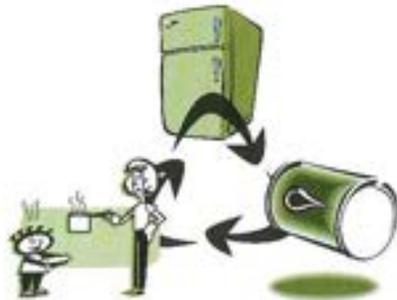


3.)

When chilled,
remove
grease can
and throw
away in trash



No se olvide de la grasa!



Ayúdenos a dejar la
GRASA FUERA
y el
AGUA DENTRO

City of Lakeport

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and service*



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Corporation Yard
591 Martin Street
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Tel: 707-263-3578

Ponga la grasa en una lata

Tres pasos simples pueden proteger su hogar y nuestro medio ambiente

Grasas y aceites?...

¿Cual es el problema?

Muy a menudo las grasas se echan por las cañerías, generalmente por el fregadero de la cocina. La grasa se pega a las paredes de las cañerías (en las de su casa y en las de la calle) y con el tiempo puede acumularse y atascar la cañería completamente.

Las grasas que se usan para cocinar, tales como la manteca (grasa de cerdo), aceite vegetal y otros aceites de cocinar, pueden acumularse dentro de las tuberías del desagüe ocasionando obstrucciones o algo peor, desbordamientos del alcantarillado (SSO, siglas en inglés) (el vertido de aguas residuales en el medio ambiente sin haber pasado por tratamiento primero). La EPA ha determinado que los SSO son la causa número uno de la contaminación en nuestros ríos y arroyos nacionales.

Los aditivos comerciales, incluidos los detergentes que dicen disolver la grasa, solamente la ayudan a pasar por la tubería causando problemas en otras áreas pudiendo resultar en el desbordamiento de aguas residuales en su casa o en la de su vecino, limpiezas caras y desagradables, posibles riesgos a la salud pública y un aumento en los costos de operación y mantenimiento para CLMSD que traen por consiguiente cuentas más altas a los clientes.

¡La obstrucción de las alcantarillas es el problema!



Desbordamientos del alcantarillado (SSO, siglas en inglés)

¿Qué puede hacer usted?

La manera más fácil de solucionar el problema de la grasa y ayudar a evitar los desbordamientos de las aguas negras, es impedir que este material entre en el alcantarillado en primer lugar.

¡NUNCA!

Vierta la
grasa por las
tuberías



En Cambio...

1.)

Vacíe o raspe
la grasa de las
hoyas y sartenes
en una lata



2.)

Cúbrala y
refrigérela



3.)

Cuando se
haya enfriado,
eche la lata a la
basura



INDOOR GREASE TRAP/ INTERCEPTOR SIZING GUIDE

Depending on your specific grease capturing needs, an indoor grease trap/interceptor may be an effective measure for preventing the discharge of fats, oils or grease into the sanitary sewer system. Manufactured interceptors come in varying sizes, usually based on a flow rate of gallons per minute, or GPM. We recommend consulting with a licensed plumber when determining the size of your interceptor. But for basic guidance, the following steps could be useful in determining the appropriate size of your new indoor grease trap/interceptor:

Step 1:

Determine the cubic size of your sink(s) by multiplying its length, width, and depth together (L x W x D).

Step 2:

Convert that number into gallons using the following conversion: 1 gallon = 231 cubic feet.

Step 3:

Estimate the capacity of the sink(s) measured in Step 1. Usually, 75% of the sink(s) will be filled with water, the remaining 25% will be dishes, utensils, etc. Multiply that factor as a percentage (e.g. 75% = 0.75, 25% = 0.25, etc.) by the number you calculated in Step 2. This will also serve as your flow rate.

Step 4:

Select a trap/interceptor that is the next size higher than your calculated flow rate. Example: your calculated flow rate is 78 GPM. Available interceptors are sized for 70 and 80 GPM. The most appropriate choice is the latter, an 80 GMP device.

Additional sizing guidelines can be found in the most recent addition of the California Plumbing Code. A licensed plumber will be familiar with its provisions and can offer solutions unique to your needs.

This guide and other helpful information can be found on the City's website: www.cityoflakeport.com.

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OUTDOOR GREASE INTERCEPTOR SIZING GUIDE

Outdoor, in-ground or above-ground grease interceptors are ideal for restaurants and other food service facilities that produce large amounts of fats, oil, and grease during food preparation. City Code allows for the use of two methods when sizing an outdoor interceptor. The first is based on criteria defined in the California Plumbing Code. A licensed plumber can provide excellent interceptor solutions to meet your needs based on this method. The second is the application of the Manning Formula, which is described here in greater detail:

The Manning Formula:

Interceptor Size (in gallons) = $\text{Flow rate (GPM)/sink or fixture} \times \text{sum of fixture Ratings} + \text{the Discharge rate from any mechanical washers (i.e. dishwashers, glass washers, laundry machines, etc.)} \times \text{a 24 minute retention Time}$.

Flow Rates	Fixture Ratings
0.5" pipe = 0.8 GPM/fixture	2,3, or 4 compartment sink = 1.0
1.0 " = 5.0 GPM/fixture	1 or 2 compartment meat prep sink = 0.75
1.5 " = 15 GPM/fixture	Pre-rinse sink = 0.5
2.0" = 33 GPM/fixture	1 or 2 compartment vegetable prep sink = 0.25
2.5" = 59 GPM/fixture	Can wash = 0.25
3.0" = 93 GPM/fixture	Mop sink = 0.25
	Floor drain = 0.00

Using the charts above, you can calculate the size of the interceptor you need. Just plug them into the Manning Formula:

Interceptor Size
 = $[(\text{Flow Rate}) \times (\text{Fixture Ratings})] + \text{Discharge Rate}] \times \text{24 minute retention time}$

Direct flow from dishwashers, laundry washers, glass washers, etc. is the discharge rate as determined by the manufacturer. This information should be available in your user's manual or by contacting the manufacturer directly.

24 minute retention time is the minimum amount of time needed for grease to cool, condense, and separate from liquid. It is a constant for the purposes of this calculation.

This guide and other helpful information (including calculation examples) can be found on the City's website: www.cityoflakeport.com.

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CITY OF LAKEPORT MUNICIPAL SEWER DISTRICT

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FATS, OILS AND GREASE (FOG) PROGRAM

GREASE RENDERING GUIDE

INSIDE THIS GUIDE

- 1 Grease Recycling
- 2 Benefits of Rendering
- 3 Renderers and Other Maintenance Vendors
- 4 Questions to Ask a Renderer

Grease Recycling

While pre-treating wastewater through the use of grease traps, skimmers, separators, and process flow treatment systems can greatly reduce FOG buildup in the sanitary sewer, source reduction of oil and grease must be the first course of action. Through dry cleanup, the development of an efficient collection system, and a rendering program, wastewater problems can be avoided.

Rendering companies or "grease recyclers" will accept oil, grease, and other animal byproducts (known as "yellow" or "tallow" grease), including deep fry fat and bones. In fact, they may even pay you to take it.

Waste oil and grease is tested for pesticides and other contaminants. Material is placed in a settling tank to remove solids, heated in a vacuum to volatilize impurities and is then sold to companies for use as animal feed additives, in soap production, oils, cosmetic and skin care products, and in composting.

Benefits of Rendering

There are many potential benefits of rendering or recycling your grease, including:

1. **Cost Avoidance:** The charge for pumping out a grease trap is considerably more than the service fee charged by a Renderer. With dry cleanup and other source reduction techniques, many restaurants are reducing their water consumption, sewer usage, and are saving money. Rendering also helps restaurants avoid discharge penalties and fines for sewer system overflows resulting from FOG.



"In some cases, rendering companies are willing to pay for restaurant oil and grease."

2. **Economic Incentives:** Renderers' service fees are low and often provided at no charge. In some cases, rendering companies are willing to pay for restaurant oil and grease.
3. **Environmental Savings:** Natural resources and energy are conserved through source reduction and recycling. FOG recycling keeps these materials from clogging municipal sewer lines, as well as using valuable landfill space, and diverts it to a useful purpose.
4. **Compliance:** The sewer use ordinance for the City of Lakeport strictly limits the type and amount of waste discharge into the system. Penalties may be levied against food service establishments (FSEs) when higher concentrations of fats, oils and grease are determined to be originating from a particular location. Rendering prevents grease from reaching the sewer system and, in so doing, helps FSEs maintain compliance and avoid costly penalties and fines, which range from \$50 for a minor violation to \$25,000 or more.

Renderers and Other Maintenance Vendors

A list of a few registered grease haulers based in Lake County is as follows:

Action Sanitary, Inc.

P.O. Box 492
Lower Lake, CA 95457
(707) 994-5068

Roto-Rooter of Lake County

P.O. Box 1340
Kelseyville, CA 95451
(707) 279-9461

The Following Companies Also Service Lake County

Darling International Inc.

429 Amador St.
San Francisco, CA 94124
(800) 473-4890

North State Rendering Company Inc.

15 Shippee Rd.
Oroville, CA 95965
(530) 343-6076

Sacramento Rendering Co.

11350 Kiefer Blvd.
Sacramento, CA 95830
(800) 339-6493



Penalties and fines resulting from noncompliance of the City's sewer use ordinance can range from \$50 to \$25,000 or more.

Choosing a Grease Renderer or Hauler

When selecting a grease disposal vendor, be aware that services and prices may vary. Minimum services should include:

1. Complete pumping and cleaning of the interceptor and sample box, rather than just skimming the grease layer.
2. Deodorizing and thoroughly cleaning affected areas, as necessary.
3. Disposal/reclamation at an approved location. You and your hauler should agree on an adequate cleaning frequency to avoid blockage of the line.

Questions to Ask a Renderer

When looking for an oil and grease renderer, it is important to ask the right questions, which may include:

1. Do you provide collection containers?
2. Do you provide transportation?
3. Can I expect revenue for my material? If not, what's your service fee?
4. What are your specifications? What constitutes contamination?
5. If there is a problem, who should I contact?

Remember that fats, oils, and grease are commodities and should be treated as valuable resources that can and should be recycled whenever possible.

Contact Information

Please contact the City's Compliance Officer at 263-3578, or by E-mail at compliance@cityoflakeport.com, for more information or to discuss your particular FOG situation. We're here to help you succeed!



CITY OF LAKEPORT UTILITIES DIVISION POLICY

Subject: FOG ABATEMENT PROGRAM: GREASE TRAP/INTERCEPTOR MAINTENANCE AND INSPECTIONS	Policy Number: U-9	
	Date Adopted: 1/15/2010	Date Revised: 3/5/2018

- Scope:** Applies to all personnel that are responsible for administering and enforcing the provisions of Lakeport Municipal Code (LMC) Chapter 13.20 (Sewer Use and Pretreatment).
- Purpose:** Establish guidelines and procedures for the maintenance and inspection of grease traps/interceptors serving any Food Service Establishment (FSE) located within the jurisdictional boundaries of the City of Lakeport.
- Proper maintenance of grease traps/interceptors helps prevent sanitary sewer overflows (SSOs) and/or sewer backups resulting from the collection of fats, oils, and greases (FOG) in the City's sewer system.
- Responsibility:** The Utilities Division shall be primarily responsible coordinating the inspection of grease traps/interceptors required by LMC Chapter 13.20.
- Program success is also dependent on ongoing communication and coordination with the City's Community Development Department.
- The Compliance Officer and/or Utilities Superintendent shall be responsible for any future revisions to this policy. The Community Development Director may also provide input.
- Reference:** City of Lakeport Utilities Division Policies. Yardshare Network location: <Y:\Utilities\Policies\Current Policies>

BACKGROUND:

City Ordinance No. 872 was adopted in 2008 and established a variety of regulations associated with the use of the City’s sanitary sewer system. The regulations were codified in Chapter 13.20 (Sewer Use and Pretreatment) of the Lakeport Municipal Code (LMC).

The goal of the regulations is to ensure the City’s sanitary sewer system is adequately maintained, including inspection and enforcement programs designed to ensure ongoing compliance with the adopted provisions. This policy is written to accomplish the following:

1. Establish guidelines and procedures for the maintenance and inspection of grease traps/interceptors maintained by any Food Service Establishment (FSE) in Lakeport.
2. Establish the roles and responsibilities of City staff involved in grease trap/interceptor inspection activities.

POLICY:

1. Inspectors shall be any City employee designated by, and including, the Utilities Superintendent, Compliance Officer or Chief Building Inspector.
2. All FSEs shall keep and update a maintenance log of their grease trap(s) and/or interceptor(s) and shall make that log available to any inspector from the City or County, as requested.
3. If, upon inspection, a grease trap/interceptor is found to be improperly maintained, undersized, incorrectly configured or installed, or is found to be deficient in preventing FOG from entering the City’s sewer system, the inspector shall provide the City’s Compliance Officer with all relevant information for review.
4. Inspectors should arrive in an official City vehicle, if possible; and present a business card, copy of an introductory letter, FOG program handout or similar material to clearly identify themselves and clarify the purpose of the site visit and inspection.
5. Inspections may be announced or unannounced. The Compliance Officer should be made aware of any FSE grease trap inspection by City staff.
6. If deemed essential to the FOG program’s efforts, the effluent from grease interceptors or grease traps can be sampled to determine the amount of FOG being discharged to the sewer system. A sample of the equipment effluent best represents the nature of the FSE’s discharge.
7. Inspectors should have the following equipment and materials available during an inspection:

Equipment	Paperwork
Maps (GIS)	Inspection checklist, FSE file
Manhole pick	List of local area plumbers
Depth probe	List of grease and oil recyclers
Ratchet set	Method of documenting inspection (i.e. cell phone camera/video, notepad, etc.)
Pipe wrench	BMP list and FOG brochures

Equipment	Paperwork
Mirror (for inspecting manholes and interceptors)	
Camera	
Steel-toed shoes	
PPE (gloves, safety vest, safety glasses, etc.)	
Sample bottles and sampling equipment	

PROCEDURE:

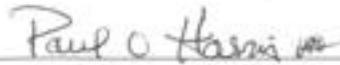
1. The following activities shall be carried out during each inspection, unless specific justification is given as to why they are not:
 - a. Request copies of receipts from grease handlers for services completed since the last visit.
 - b. Inspect grease removal equipment and cleaning logs to determine if the equipment is being operated and maintained properly.
 - c. Inspect connections to the grease trap or interceptor to ensure that only authorized equipment and fixtures discharge to the device.
 - d. Check for evidence of illicit dumping such as debris/loose screws in floor drains, missing or altered log entries, use of vegetable sink for washing dishes (vegetable sinks are not usually plumbed to a trap or interceptor).
 - e. Spot check for evidence of BMP implementation (scraper for dishes, spill kit, BMP poster, training log, drain screens, grease bins, etc.).
 - f. Collect samples for laboratory analysis of FOG concentration, if necessary.
 - g. Determine how waste grease is collected from work stoves, deep fat fryers, and grills.
 - h. Inspect grease barrels to determine if grease is being stored properly.
 - i. Determine how waste grease is collected from work stoves, deep fat fryers, and grills.
 - j. Discuss cleaning methods for roof vents and vent hoods. If they have a self-cleaning hood, where does the wash water discharge?

These activities are presented in Attachment A, FOG Inspection Checklist.

2. After an inspection is performed, the findings should be recorded immediately on a FOG Inspection Report Form, attached hereto as Attachment B, and reported to the Compliance Officer within twenty-four (24) hours. The Compliance Officer shall make a determination of compliance standing or request additional review for the FSE no later than thirty (30) days following receipt of said inspection form. An inspection summary letter or a copy of the inspection report may be sent to the FSE. If the FSE is in compliance, that determination should be stated. If the FSE is not in compliance, the

actions to be taken should be in accordance with the enforcement response plan [see Department Policy U-6, Notices, Penalties, Fines and Fees].

Policy reviewed and approved by:



Paul Harris
Utilities Superintendent

Date 3/21/18

ATTACHMENT A
UTILITIES DIVISION POLICY U-9
Maintenance and Inspection of Grease Traps/Interceptors
FOG Inspection Checklist

MS Word Document: Double-click the area below to open .PDF file.



.PDF File: Attachment A will be attached on following pages.

ATTACHMENT B
UTILITIES DIVISION POLICY U-9
Maintenance and Inspection of Grease Traps/Interceptors
FOG Inspection Report Form

MS Word Document: Double-click the area below to open .PDF file.



.PDF File: Attachment B will be attached on following pages.



CITY OF LAKEPORT UTILITIES DIVISION

FOG INSPECTION CHECKLIST

General Information

- Give a copy of CLMSD FOG pamphlet to FSE owner/manager or staff.

Floor Drains

- Check for the presence of floor drains.
- Check for cleaning procedures for floor mats, serving carts, or any other equipment.
- Check procedure for hoods cleaning.
 - Check for caustics and other solvents
- Check that dishwasher is poured into a utility sink or curbed cleaning facility that drains to the sewer.

Sinks, Drains, and Solids

- Check for a pre-wash sink as well as regular sinks.
- Check for screening devices in sinks.
- Discuss limited use of under-the-sink garbage disposal units to reduce solids to sewer.
- Encourage employees to scrape food and grease off pots, pans, plates and cooking utensils.
- Encourage employees to wipe utensils clean of any excess fats, oil and grease with paper towels.
- Encourage employees to discard food scraps, FOG, and paper towels in solid waste receptacles.
- Encourage employees to discard grill-cleaning residuals in grease storage container or solid waste bin.

Dishwasher

- Check for an automatic dishwasher and its drainage connections.



CITY OF LAKEPORT UTILITIES DIVISION

FOG INSPECTION REPORT FOR FOOD SERVICE ESTABLISHMENTS

Facility Name: _____							
Facility Address: _____						Facility Phone: _____	
Owner or Authorized Person (manager, supervisor, etc.): _____							
Inspection Date: _____				Inspection Time: _____			
Inspection Type (circle one): Routine Monitoring Enforcement Follow-up							
Facility email: _____							
Type of Facility							
Restaurant	Fast Food	Grocery/Market	Bakery/Deli	Coffee	Cafeteria	Ice Cream	Other
Grease Removal Device/System							
Type	Recycle Bin	Trap/Vault	Interceptor	Big Dipper	Manual	Other	None
# of Units							
Size (gallons)							
Condition							
Cleanliness							
Plumbing Condition							
Foreign Objects							
Fecal Matter							
Garbage Disposal Unit		Yes	No	Method of Solids Disposal: _____			
Grease Storage Unit		Location (In or Out) _____		Covered & Bermed? _____	Discharge to Sewer? _____		
Equipment Washing Procedures							
Location of cleaning mats (indoors/outdoors): _____				_____			
If outdoors, is area covered and bermed? _____				_____			
Discharge to grease trap/vault? _____				Yes	No	_____	
Discharge to City storm water system? _____				Yes	No	_____	
Grease Trap/Interceptor Maintenance Log							
Log available at facility?		Yes	No	Comments: _____			
Name of cleaning firm or hauler: _____							
Date last serviced: _____							
Grease removal on schedule?		Yes	No	If yes, what is schedule? _____			
Samples collected?		Yes	No	Describe: _____			
NOV Issued?		Yes	No	Date violation to be corrected by: _____			
Required Action/Comments: _____							
Signature of Inspector: _____ Date: _____							
Name (printed): _____							
Title: _____							



CITY OF LAKEPORT UTILITIES DIVISION POLICY

Subject: FOG PROGRAM: VARIANCES	Policy Number: U-4	
	Date Adopted: 9/22/2008	Date Revised: 1/25/18

- Scope:** Applies to all personnel that are responsible for administering the provisions of the City's Fats, Oils and Grease (FOG) Program (LMC Sections [13.20.600](#) et seq.).
- Purpose:** Establish guidelines and procedures to be followed during the processing and review of requests for Variances of the FOG requirements set forth in the Lakeport Municipal Code.
- Responsibility:** The Utilities Division shall be primarily responsible for the review and final determination of requests for Variances of the FOG requirements. Initial Variance application and fee intake and review will likely be the responsibility of the Community Development Department due to preexisting contact with Food Service Establishments.
- The Compliance Officer, Utilities Superintendent and/or Community Development Director shall be responsible for any future revisions to this policy.
- Reference:** City of Lakeport Utilities Division Policies. Yardshare Network location: [Y:\Utilities\Policies\Current Policies](#)

BACKGROUND:

[Lakeport Municipal Code \(LMC\) Section 13.20.610](#) requires all food service establishments (“FSEs”) within the City of Lakeport Municipal Sewer District to take measures to prevent the discharge of materials that can inhibit the function of, or cause damage to, the sanitary sewer system. Such measures include the installation and maintenance of a grease interceptor to prevent the discharge of fats, oil and grease into the sanitary sewer system. These requirements are components of the City’s FOG Program.

FSE owners or authorized representatives (“Users”) may submit a Variance for Cause request to the City if they feel their situation warrants exception to the requirements. Full details regarding the FOG variance process (applications, review, approval/denial, revocation, appeals, etc.) are set forth in [LMC Section 13.20.650](#).

This policy is written to accomplish the following:

1. Establish guidelines for the review and judgment of a Variance for Cause to vary from the requirements LMC Section 13.20.610; and
2. Establish guidelines for the review and judgment of a Variance for Cause request for grease interceptor installation as set forth in LMC Section 13.20.650
3. Establish procedures which the Department and the public should follow when requesting a variance.

POLICY:

1. The Utilities Superintendent (“Superintendent”), or his/her designee, shall make judgment on any Variance Study, resulting from a Variance for Cause request by an entity subject to the Fog Program.
2. The Superintendent may approve or deny a Variance for Cause request at his/her discretion.
3. The Superintendent or designee shall be available by appointment to speak with any affected User about issues related to the FOG Program.
4. From date of approval of a Variance for Cause request, and receipt of the \$500.00 Variance Study fee, the City shall make every reasonable effort to complete a Variance Study and make a judgment on the necessity or feasibility of complying with any part of LMC Section 13.20.610 within ninety (90) days.
5. A Variance Study may be terminated at any time if it is determined that continuation of the Study adversely affects the sanitary sewer collection system or treatment works (LMC Section 13.20.650 A. 2.).
6. Per District Resolution No. 2316 (2008), the \$500.00 Variance Study fee is non-refundable.
7. Unless sufficient evidence can be found that the FOG Program requirements create an unreasonable hardship, the Superintendent may deny a Variance for Cause request at his discretion.
8. The Superintendent or designee is responsible to commission and complete variance studies.
9. The Superintendent or designee may approve any variance at his/her discretion based on the results of the Variance Study.

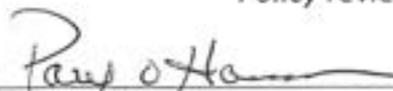
10. Users requesting a variance from the FOG Program must submit a Variance for Cause Request Form within six (6) months of receipt of notice to install a grease interceptor. If a variance is not granted by the Superintendent or his/her designee, the FSE shall have six (6) months from the date of the variance denial notice to comply with the FOG requirements.
11. Users may petition the Superintendent, or his/her designee, to reconsider a decision by the Compliance Officer to deny a variance, if submitted in writing within thirty (30) days of the notice of variance denial.
12. The Superintendent, or his designee, may deny a petition to reconsider a variance decision by not acting on the petition (LMC Section 13.20.650 D. 4.).
13. Granted variances are effective in perpetuity from the date granted by the Superintendent or his/her designee.
14. Any granted variance may be revoked by the Utilities Superintendent at the recommendation of the Compliance Officer, based on one or more of the criteria detailed in LMC Section 13.20.650 C.

PROCEDURE:

1. Variance for Cause requests must be submitted to the City in writing using the Variance for Cause Request Form, attached hereto as Attachment A. The form shall be made available at the Community Development Department at City Hall.
2. Upon receipt of a Variance for Cause Request Form, it shall be date-stamped immediately, entered into the appropriate tracking software application, and submitted to the Utilities Superintendent for review. The Superintendent, or designee, shall have thirty (30) days from receipt of the Form to approve or deny the request.
3. Following approval or denial of a Variance for Cause request, the requesting party shall be notified of the decision in writing by the Utilities Division. If the request is approved, a Consent to a Variance Study Form, attached hereto as Attachment B, will be included with the notice. It must be signed and returned to the Superintendent by the User with the \$500.00 Variance Study fee before the Study is commissioned. If the request is denied, an explanation must be included in the notice.
4. Per District Resolution No. 2316 (2008), a fee of \$500.00 must be collected from the User before a Variance Study is commissioned.
5. Upon receipt by the Utilities Division of a Consent to a Variance Study Form, and the \$500.00 Variance Study fee, it shall be date-stamped immediately and submitted to the Utilities Superintendent for review. The Superintendent or designee shall commission the study, assign a study number, and is responsible for its completion.
6. A Variance Study shall consist of the completion of a Variance Study Report Form, attached hereto as Attachment C. The Report requires comments from the Compliance Officer, City Building Inspector, and a County Health Inspector or representative from the Lake County Environmental Health Department. Additional comments may be required at the discretion of the Superintendent. Unless justified, a granted variance will require the approval of the Utilities Superintendent, City Building Inspector, and County Environmental Health official.

7. In the event that the Utilities Superintendent, Building Inspector, or County Environmental Health official is unable to complete their component of a Variance Study, the Superintendent may waive that component or assign it to another reviewer for comment.
8. The Utilities Superintendent shall be responsible for conducting Variance Studies and passing judgment no later than sixty (60) days after the Department receives the Consent to a Variance Study Form and \$500.00 Variance Study Fee.
9. Variance Studies submitted to the Superintendent, or his designee, for review may include a staff report detailing the background and condition of the case in question.
10. The Utilities Superintendent, or his/her designee, shall make judgment on a Variance for Cause request no later than thirty (30) days from receipt of a fully completed Variance Study.
11. A notice shall be sent to the User from the Utilities Division indicating the decision whether to grant or deny a variance, the results of the variance study, and the reasons why a variance was granted or denied.
12. If denied a variance, a User may petition the Superintendent, or his designee, to reconsider the variance decision. A "Petition for Reconsideration of Determination or Enforcement Action" form, attached hereto as Attachment D, must be submitted to the Utilities Division within thirty (30) days of the notice of variance denial. The Form should be date-stamped immediately, entered into the appropriate tracking software application, and submitted to the Superintendent for review.

Policy reviewed and approved by:



Paul Harris
Utilities Superintendent

Date 1/29/18

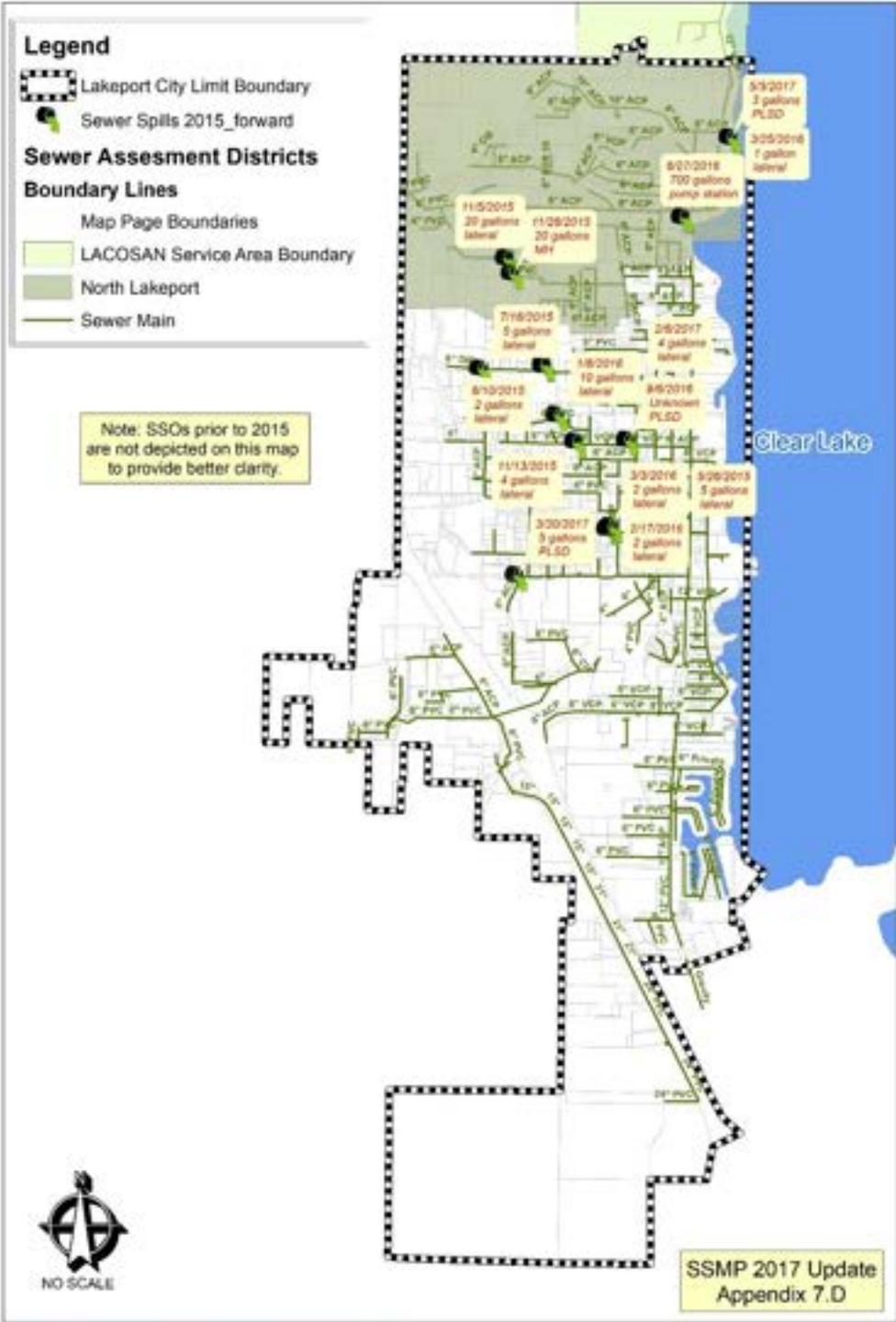
**ATTACHMENTS A through D
UTILITIES DIVISION POLICY U-4
FOG Program Variances**

MS Word Document: Double-click the area below to open .PDF file.



.PDF File: Attachments A through D will be attached on following pages.

Appendix 7.D: FOG & SSO GIS Map



APPENDIX 8

Appendix 8.A: CIP Project Timetable

Scope and Schedule

Item No.	Project Name	Description	Schedule		
			By 2013	By 2018	By 2023
1	Main Street Sewer Replacement	12" Sewer replacement, 6th Street to Clear Lake Ave	X	X	
2	Chlorination Gas System Replacement	Hypochlorite System installation at treatment plant	X		
3	Inspection and Cleaning of Chlorine Contact Pipe	Inspect/restore chlorine contact pipe capacity at treatment plant	X		
4	Modify Recycle Pump Station No. 1	Modify pump station for time-of-use operation at treatment plant	X		
5	Linda Lane Lift Station Odor Control	Install larger blower	X		
6	Lift Station Radio Telemetry and SCADA Improvements	Install radio telemetry in 5 lift stations, update SCADA		X	
7	I&I Reduction Program - Initial Target Areas	Initial target areas are indicated in Master Plan		X	
8	Lakeshore Blvd and N. High Street Parallel Sewer	8" parallel sewer		X	
9	Clearlake Liftstation Replacement	Replacement		X	
10	Repair Aeration Basins and Remove Sludge	Both aeration basins will be drained, the sludge will be allowed to dry, and the bottom will be scraped		X	
11	Main Street Parallel Sewer	15" parallel sewer installation		X	
12	N. High Street Sewer Replacement	8" replacement sewer		X	
13	Martin Street Parallel Sewer	8" parallel sewer		X	
14	I&I Reduction Program - High I&I Areas	as indicated in the Master Plan			X
15	10th Street Parallel Sewer	8" parallel sewer			X
16	Intallation of 20" Chlorine Contact Pipe	Will increase PWWF chlorine contact time at treatment plant			X
17	Martin Street Lift Station Capacity Improvements	Increase effectiveness at pump station			X
18	Russell Street Sewer Replacement	8" replacement sewer			X

Appendix 8.B: CIP Project Funding Source Schedule

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 8.B is attached on the following pages.

Appendix 8.B

Revenue Plan

Item No.	Project Name	Cost Estimate	FY 08/09		FY 09/10		FY 10/11		FY 11/12		FY 12/13		FYs 14-18		FYs 19/23		Unfunded Balance
			Funding Source	Funding Amount	Funding Source	Funding Amount											
1	Main Street Sewer Replacement	\$220,000			Sewer Use Fees	\$20,000	Sewer Use Fees	\$60,000	Sewer Use Fees	\$30,000	Sewer Use Fees	\$110,000					\$0
2	Chlorination Gas System Replacement	\$300,000	Sewer Use Fees	\$90,000	Sewer Use Fees	\$105,000	Sewer Use Fees	\$105,000									\$0
3	Inspection and Cleaning of Chlorine Contact Pipe	\$80,000			Sewer Use Fees	\$80,000											\$0
4	Modify Recycle Pump Station No. 1	\$25,000					Sewer Use Fees	\$25,000									\$0
5	Linda Lane Lift Station Odor Control	\$12,000	Sewer Use Fees	\$12,000													\$0
6	Lift Station Radio Telemetry and SCADA Improvements																
	Radio Telemetry Installation	\$30,000										Sewer Use Fees	\$30,000				\$0
	SCADA Upgrades	\$250,000										Sewer Use Fees	\$250,000				\$0
7	I&I Reduction Program - Initial Target Areas	\$1,014,000	Sewer Use Fees	\$202,800					\$0								
8	Lakeshore Blvd and N. High Street Parallel Sewer	\$180,000											Funding TBD*	\$0			(\$180,000)
9	Clearlake Liftstation Replacement	\$205,000											Funding TBD*	\$0			(\$205,000)
10	Repair Aeration Basins and Remove Sludge	\$200,000											Sewer Use Fees	\$200,000			\$0
11	Main Street Parallel Sewer	\$715,000											Funding TBD*	\$0			(\$715,000)
12	N. High Street Sewer Replacement	\$60,000											Funding TBD*	\$0			(\$60,000)
13	Martin Street Parallel Sewer	\$250,000											Funding TBD*	\$0			(\$250,000)
14	I&I Reduction Program - High I&I Areas	\$962,000												Sewer Use Fees	\$962,000		\$0
15	10th Street Parallel Sewer	\$192,000												Funding TBD*	\$0		(\$192,000)
16	Intallation of 20" Chlorine Contact Pipe	\$170,000												Sewer Use/Expansion	\$170,000		\$0
17	Martin Street Lift Station Capacity Improvements	\$60,000												Funding TBD*	\$0		(\$60,000)
18	Russell Street Sewer Replacement	\$81,000												Funding TBD*	\$0		(\$81,000)
Total Estimated Costs as of June 2008		\$5,006,000		\$304,800		\$387,800		\$352,800		\$262,800		\$232,800		\$590,000		\$1,132,000	(\$1,743,000)
I&I Reduction Costs		\$1,976,000															(\$1,976,000)
Sewer System Rehabilitation Costs		\$2,255,000															(\$2,255,000)
Treatment Plant Improvements		\$775,000															(\$775,000)

*Funding to be determined (TBD)

APPENDIX 9

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APPENDIX 10

Appendix 10.A: Audit Report Template

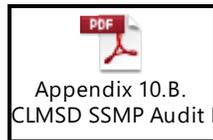
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.PDF File/hard copy: Appendix 10.A is attached on the following pages.

Appendix 10.B: 2016 Audit Report

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 10.B is attached on the following pages.



City of Lakeport Municipal Sewer District Sewer System Management Plan

20XX Audit Report Form

The purpose of the SSMP Audit is to evaluate the effectiveness of the Lakeport Municipal Sewer District's SSMP and to identify any needed improvements.

Directions: Please check **YES** or **NO** for each question. If **NO** is answered for any question, describe the updates/changes needed and the timeline to complete those changes.

		YES	NO
ELEMENT 1 - GOALS			
A.	Are the goals stated in the SSMP still appropriate and accurate?		
Discussion:			
ELEMENT 2 - ORGANIZATION			
A.	Is the List of District Staff Responsible for SSMP, Table 2-1 current?		
B.	Is the Sanitary Sewer Overflow Responder List current?		
C.	Is Figure 2-1 of the SSMP, the District Organization Chart, current?		
D.	Are the position descriptions as accurate portrayal of staff responsibilities?		
E.	Is Table 2-2 in the Chain of Communication for Reporting and Responding to SSOs section accurate and up-to-date?		
Discussion:			
ELEMENT 3 - LEGAL AUTHORITY			
Does the SSMP contain current references to the District Ordinances documenting the District's legal authority to:			
A.	Prevent illicit discharges?		
B.	Require proper design and construction of sewers and connections?		
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?		
D.	Limit discharges of fats, oils and grease?		
E.	Enforce any violation of its sewer ordinances?		
F.	Were any changes or modifications made in the past year to District Sewer Ordinances, Regulations or standards?		
Discussion:			
ELEMENT 4 - OPERATIONS AND MAINTENANCE			
Collection System Maps			
A.	Does the SSMP reference the current process and procedures for maintaining the District's wastewater collection system maps?		

		YES	NO
B.	Are the District's water collection system maps complete, current and sufficiently detailed?		
C.	Are storms drainage facilities identified on the collection system maps? If not, are SSO responders able to determine locations of storm drainage inlets and pipes for possible discharge to waters of the state?		
Prioritized Preventive Maintenance			
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?		
E.	Based upon information in the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?		
Scheduled Inspections and Condition Assessments			
F.	In there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?		
Contingency Equipment and Replacement Inventory			
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and documents the procedures of inventory management?		
H.	Are contingency and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?		
Training			
I.	Does the SSMP document current training expectations and programs?		
Outreach to Plumbers and Building Contractors			
J.	Does the SSMP document outreach efforts to plumbers and building contractors?		
Discussion:			
ELEMENT 5 - DESIGN AND PERFORMANCE STANDARDS			
A.	Does the SSMP reference current design and construction standards for the installation for new sanitary sewer systems, pump stations and other appurtenances and for rehabilitation and repair for existing sanitary sewer systems?		
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps and other appurtenances and the rehabilitation and repair of existing sewer lines?		
Discussion:			

		YES	NO
ELEMENT 6 - OVERFLOW AND EMERGENCY RESPONSE PLAN			
A.	Does the District's Sanitary Sewer Overflow Emergency Response Plan establish procedures for the emergency response, notification, and reporting of SSOs?		
B.	Is District staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow Emergency Response Plan?		
C.	Considering SSO performance data, is the Sanitary Sewer Overflow Emergency Response Plan effective in handling SSOs in order to safeguard public health and the environment?		
D.	Are all SSO and claims reporting forms current or do they require revisions or additions?		
E.	Does all SSO event recordkeeping meet the GWDT requirements? Are all SSO event files complete and certified in the CIWQS system?		
F.	Is all information in the CIWQS system current and correct? Have periodic reviews of the data been made during the year to assure compliance with GWDR? Have all Technical Report and Water Quality Sampling requirements been met and uploaded to the CIWQS data management system?		
Discussion:			
ELEMENT 7 - FATS, OILS AND GREASE (FOG) CONTROL PROGRAM			
A.	Does the FOG Control Program include efforts to educate the public on proper handling and disposal of FOG?		
B.	Does the FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?		
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the District's FOG Control Program?		
D.	Does the District have sufficient legal authority to implement and enforce the FOG Control Program?		
E.	Is the current FOG program effective in the minimizing blockages of sewer lines resulting from discharges of FOG to the system?		
F.	Was required training on SSMP and OERP completed and documented? Were field exercises with field staff on SSO volume estimation conducted and documented?		

		YES	NO
G.	Did all public improvement plans and specifications that could impact collection system operations include requirements for OERP training or were contractor OERP programs at least as stringent as the District OERP? Were regular items included in project meeting agendas to discuss emergency response procedures and communications?		
Discussion:			
ELEMENT 8 - SYSTEM EVALUATION AND CAPADISTRICT ASSURANCE PLAN			
A.	Does the District Sanitary Sewer Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long-term District enhancement and improvement projects?		
B.	Does the District's Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?		
Discussion:			
ELEMENT 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A.	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?		
B.	Is the District able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?		
C.	Were the consent decree performance metrics met?		
Discussion:			
ELEMENT 10 - SSMP AUDITS			
A.	Will the SSMP Audit be completed, reviewed and filed in Appendix B?		
Discussion:			
ELEMENT 11 - COMMUNICATION PROGRAM			
A.	Does the District effectively communicate with the public and other agencies about the implementation of the SSMP and continue to address any feedback?		
B.	Did the District Council receive and review the Annual Sewer System Report? Was the annual report uploaded to the District Sewer Section website and added to Appendix C?		

		YES	NO
C.	Did District staff conduct and document meetings with satellite collection systems? Are all agreements with satellite systems current or are changes necessary to these agreements?		
Discussion:			
CHANGE LOG			
A.	Is the SSMP Change Log current and up to date?		
Discussion:			

Audit Team: _____

Prepared By: _____

Reviewed By: _____

Approved for Filing on: _____



City of Lakeport Municipal Sewer District

Sewer System Management Plan

2016 Audit Report

The purpose of the SSMP Audit is to evaluate the effectiveness of the Lakeport Municipal Sewer District's SSMP and to identify any needed improvements.

See Element 10 of the SSMP which describes the District's process for biennial audits and evaluating the level of conformance with the requirements outlined in the SSMP and the State's General Waste Discharge Requirements.

Introduction and Background:

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General WDRs). These requirements are set forth in Water Quality Order No. 2006-0003-DWQ, which states all public wastewater collection system agencies in California with sewer systems greater than one mile in length must to be regulated under General Waste Discharge Requirements (GWDR). The General WDRs apply to all public agencies that own or operate a sanitary sewer system that is comprised of more than one mile of sewer pipes or lines that convey wastewater to a publicly owned treatment facility. The General WDRs refer to these public agencies as "enrollees."

The Monitoring and Reporting Program associated with the General WDRs was revised in 2013 via Water Quality Order No. WQ 2013-0058-EXEC. The Lakeport Municipal Sewer District (CLMSD) applied for coverage under the General WDRs by submitting a Notice of Intent to comply with the terms of the WDRs, and commenced development of the required Sewer System Management Plan (SSMP).

The City's Compliance Officer led the efforts to prepare the SSMP which was adopted in April 2010. The document contained all of the elements required by the SWRCB including: goals; organization; legal authority; operations and maintenance program; design and performance standards; overflow emergency response plan; fats, oils, and grease control program; system evaluation and capacity assurance plan; monitoring, measurement, and program modifications; program audits; and a communication program.

The General WDRs and Element 10 of CLMSD's SSMP outline the requirements for biennial internal audits after adoption of the SSMP. A review of Utility Division records indicate that no audits have been completed since the adoption of the SSMP in 2010. The first audit was due in 2012. It should be noted that the Utility Division was restructured shortly after the adoption of the SSMP and the Compliance Officer was transferred to a different City department. The position was not re-filled until 2015.

A thorough review of the 2010 SSMP revealed that the document needed significant revisions to reflect current District personnel, policies, procedures, etc. It was determined that it would be prudent to complete an SSMP audit covering the preceding two-year period (June 2014 through May 2016) before initiating a complete update of the SSMP in 2016.

The District's goal is to continue to work toward a downward trend in the number of sanitary sewer overflows (SSOs). Based on the table pasted below, the District's SSO rate during the audit period was above the industry standard of six per year per one hundred miles of pipe. The total length of the

collection system maintained by the District is approximately 33 miles and a total of 13 SSOs were reported from June 2014 to May 2016:

Event ID	Spill Date	Category	Spill Volume	Location
811352	12/11/14	Category 1	990	North Forbes St btwn Ninth & Tenth Sts
811559	12/17/14	Category 3	1	540 First St
815425	5/26/15	Category 3	5	540 First St
816645	7/16/15	Category 3	5	840 Central Park
817257	8/10/15	Category 3	2	1601 Mellor Drive
819337	11/5/15	Category 1	20	765 Sixth Street
819339	11/5/15	Category 3	3	555 First Street
819446	11/13/15	Category 3	4	985 Page Drive
819697	11/28/15	Category 3	50	870 11th Street
820854	1/8/16	Category 3	10	1151 11Th Street, Lakeport CA. 95453
822059	2/17/16	Category 3	2	170 1st Street
822619	3/3/16	Category 3	2	1120 Main Street
824443	5/9/16	Category 3	3	Lakeshore - Between Lange & Beach

Based on these figures, the ratio of SSOs during the above period was approximately 18 per year per 100 miles of sewer pipe. The majority of the reported spills (9 of 13, 70%) were minor and involved less than 10 gallons of spill volume. Furthermore, of the 13 SSOs in the above table, only two were Category 1 spills resulting in a discharge that reached surface water, a drainage channel (dry or wet) or to the storm drain system. These are the most significant types of spills according to the General WDRs.

The District is confident that it can meet the goal of a downward trend in the number of sanitary sewer overflows (SSOs) in the future due to the renewed efforts of current District personnel and the pending update of the entire SSMP.

Please review the table and discussion on the following pages for the remainder of the 2016 SSMP audit report.

Directions: Please check **YES** or **NO** for each question. If **NO** is answered for any question, describe the updates/changes needed and the timeline to complete those changes.

ELEMENT 1 - GOALS			
		YES	NO
A.	Are the goals stated in the SSMP still appropriate and accurate?	✓	
Discussion:			
ELEMENT 2 - ORGANIZATION			
		YES	NO
A.	Is the District Staff Directory, Appendix 2.A of the SSMP, current?		✓
B.	Is the District Organization Chart, Figure 2.A., current?		✓
C.	Is the CLMSD Contact List, Figure 2.B., current?		✓
D.	Are the position descriptions as accurate portrayal of staff responsibilities?		✓
E.	Is the SSO Reporting and Response Chain of Communication information in Figure 2.C. accurate and up-to-date?		✓
Discussion: All out of date information contained in Element 2 will be updated as part of the pending SSMP update.			
ELEMENT 3 - LEGAL AUTHORITY			
		YES	NO
Does the SSMP contain current references to the District Ordinances documenting the District's legal authority to:			
A.	Prevent illicit discharges?	✓	
B.	Require proper design and construction of sewers and connections?	✓	
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?	✓	
D.	Limit discharges of fats, oils and grease?	✓	
E.	Enforce any violation of its sewer ordinances?	✓	
F.	Were any changes or modifications made in the past year to District Sewer Ordinances, Regulations or standards?		✓
Discussion:			
ELEMENT 4 - OPERATIONS AND MAINTENANCE			
Collection System Maps			
		YES	NO
A.	Does the SSMP reference the current process and procedures for maintaining the District's wastewater collection system maps?	✓	

		YES	NO
B.	Are the District's water collection system maps complete, current and sufficiently detailed?		✓
C.	Are storms drainage facilities identified on the collection system maps? If not, are SSO responders able to determine locations of storm drainage inlets and pipes for possible discharge to waters of the state?	✓	
Prioritized Preventive Maintenance			
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?	✓	
E.	Based upon information in the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	✓	
Scheduled Inspections and Condition Assessments			
F.	In there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	✓	
Contingency Equipment and Replacement Inventory			
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and documents the procedures of inventory management?	✓	
H.	Are contingency and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	✓	
Training			
I.	Does the SSMP document current training expectations and programs?	✓	
Outreach to Plumbers and Building Contractors			
J.	Does the SSMP document outreach efforts to plumbers and building contractors?		✓
<p>Discussion: Maps: GIS program includes detailed collection system maps and related information. Not all data is current and a data maintenance agreement with County of Lake GIS staff is pending. Default Annual SSO Reports are the SSO incident data accessed via CIWQS.</p> <p>SSMP does not include any details regarding outreach efforts to plumbers and building contractors. This information will be provided as part of the pending SSMP update.</p>			
ELEMENT 5 - DESIGN AND PERFORMANCE STANDARDS			
A.	Does the SSMP reference current design and construction standards for the installation for new sanitary sewer systems, pump stations and other appurtenances and for rehabilitation and repair for existing sanitary sewer systems?	✓	
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps and other appurtenances and the rehabilitation and repair of existing sewer lines?	✓	
<p>Discussion: Adopted sewer system design/construction standards address service laterals and cleanouts, manholes, rodding inlets and discharge lines from private lift stations. New public lift stations are designed/constructed to meet the needs of the service area. As such there are no uniform design standards.</p>			

ELEMENT 6 - OVERFLOW AND EMERGENCY RESPONSE PLAN			
		YES	NO
A.	Does the District's Sanitary Sewer Overflow Emergency Response Plan establish procedures for the emergency response, notification, and reporting of SSOs?	✓	
B.	Is District staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow Emergency Response Plan?	✓	
C.	Considering SSO performance data, is the Sanitary Sewer Overflow Emergency Response Plan effective in handling SSOs in order to safeguard public health and the environment?	✓	
D.	Are all SSO and claims reporting forms current or do they require revisions or additions?		✓
E.	Does all SSO event recordkeeping meet the State's current General Waste Discharge Requirements? Are all SSO event files complete and certified in the CIWQS system?	✓	
F.	Is all information in the CIWQS system current and correct? Have periodic reviews of the data been made during the year to assure compliance with GWDR? Have all Technical Report and Water Quality Sampling requirements been met and uploaded to the CIWQS data management system?	✓	
G.	Did all public improvement plans and specifications that could impact collection system operations include requirements for SSOERP training or were contractor SSOERP programs at least as stringent as CLMSD's SSOERP? Were items included in project meeting agendas to discuss emergency response procedures and communications?	✓	
<p>Discussion: SSO investigation and documentation forms need to be revised to include: additional methods to determine and document spill volumes; new form to analyze collection system failures resulting in SSOs; new protocols regarding water quality sampling and public notification (signage) in the event of a large SSO reaching surface waters. Needed revisions will be completed as part of the pending SSMP update.</p>			
ELEMENT 7 - FATS, OILS AND GREASE (FOG) CONTROL PROGRAM			
		YES	NO
A.	Does the FOG Control Program include efforts to educate the public on proper handling and disposal of FOG?	✓	
B.	Does the FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	✓	
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the District's FOG Control Program?	✓	
D.	Does the District have sufficient legal authority to implement and enforce the FOG Control Program?	✓	

E.	Is the current FOG program effective in the minimizing blockages of sewer lines resulting from discharges of FOG to the system?	✓	
		YES	NO
F.	Was required training on SSMP and OERP completed and documented? Were field exercises with field staff on SSO volume estimation conducted and documented?		
G.	Did all public improvement plans and specifications that could impact collection system operations include requirements for SSOERP training or were contractor OERP programs at least as stringent as CLMSD's SSOERP? Were regular items included in project meeting agendas to discuss emergency response procedures and communications?	✓	
<p>Discussion: FOG Control Program public education materials must be updated to reflect current personnel and contact information. Updates will be completed as part of the pending SSMP update. Existing program is generally effective but can be improved with enhanced outreach and documentation verifying that local food service establishments are maintaining their collection system equipment in accordance with the City's FOG</p>			
ELEMENT 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN			
		YES	NO
A.	Does the District's Sanitary Sewer Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long-term District enhancement and improvement projects?	✓	
B.	Does the District's Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	✓	
<p>Discussion: The District continues to rely on the 2008 Master Sewer Plan which evaluated the District's sewer system, it's capacity, and outlined strategies for accommodating future growth in the Lakeport area. The District acknowledges that the Master Sewer Plan is approximately 10 years old and needs to be updated. An updated plan is expected to be completed prior to 2020.</p>			
ELEMENT 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
		YES	NO
A.	Does the SSMP contain up-to-date information about the City and District's data collection and organization procedures?	✓	
B.	Are the data collection and organization procedures in the SSMP sufficient to evaluate the effectiveness of the SSMP and the related sanitary sewer	✓	
<p>Discussion:</p>			

ELEMENT 10 - SSMP AUDITS			
		YES	NO
A.	Have biennial SSMP Audits been completed, reviewed and filed as described in Element 10 of the SSMP?		✓
<p>Discussion: See Introduction and Background section of this report for more information regarding the lack of prior audits. This audit covers the preceding two-year period (June 2014 through May 2016). It has been prepared prior to initiating a complete update of the SSMP later this year.</p>			
ELEMENT 11 - COMMUNICATION PROGRAM			
		YES	NO
A.	Does the SSMP contain up-to-date information about the District's public education activities?		✓
B.	Did the District Council receive and review the Annual Sewer System Report? Was the annual report uploaded to the District Sewer Section website and added to Appendix C?		✓
C.	Does the SSMP include the current Mutual Aid Agreement with Lake County Special Districts?	✓	
<p>Discussion: SSMP must be updated to include current District personnel, contact information and details about the District's enhanced use of social media (via City of Lakeport outlets) to educate the public, plumbers, building contractors, etc. about the SSMP document and the importance of complying with the related regulations and guidelines.</p>			
CHANGE LOG			
		YES	NO
A.	Is the SSMP Change Log current and up to date?		✓
<p>Discussion: The current SSMP does not include a change log form. A form will be included in the updated SSMP slated to be completed in 2017.</p>			

Audit Team: Andrew Britton, Paul Harris

Prepared By: Andrew Britton, Compliance Officer

Reviewed By: Paul Harris, Utilities Superintendent

Approved for Filing on: August 23, 2016

Appendix 10.C: Utilities Division Policy No. U-1

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 10.C is attached on the following pages.

Appendix 10.D: SSMP Change Log

MS Word Document: Double-click the area below to open .PDF file.



.PDF File/hard copy: Appendix 10.D is attached on the following page.



CITY OF LAKEPORT
UTILITIES DIVISION POLICY

Subject: SEWER SYSTEM MANAGEMENT PLAN (SSMP) ADMINISTRATION	Policy Number: U-1	
	Date Adopted: 8/14/2008	Date Revised: 12/7/17

- Scope:** Applies to all personnel that are responsible for administering the City’s Sewer System Management Plan (SSMP).
- Purpose:** Establish the roles and responsibilities of City staff in maintaining and updating the SSMP.
- Responsibility:** The Public Works Director, Utilities Superintendent and Compliance Officer shall be responsible for ensuring the SSMP is implemented, maintained, audited and updated consistent with mandates established by the State Water Resources Control Board
- The Compliance Officer and Utilities Superintendent shall be responsible for any future revisions to this policy.
- Reference:** City of Lakeport Utilities Division Policies. Yardshare Network location: <Y:\Utilities\Policies\Current Policies>

BACKGROUND:

On May 2, 2006, the State Water Resource Control Board (SWRCB) adopted [Water Quality Order No. 2006-0003-DWQ](#), which required all public wastewater collection agencies in California, with a wastewater collection system greater than one mile in length, to be regulated under the Statewide General Waste Discharge Requirement (GWDR). The intent was to reduce sewer system overflows (SSOs) across the State.

The Order also required such public collection system agencies to prepare a Sewer System Management Plan (SSMP) and report SSOs using an electronic reporting system maintained by the State (CIWQS).

In 2013 the State Water Resources Control Board issued [Order No. WQ 2013-0058-EXEC](#) which amended the monitoring and reporting program for statewide general waste discharge requirements for sanitary sewer systems. Major components are included in this Order's Attachment A, including the establishment of a third category for SSO events and other amendments related to reporting and record keeping requirements.

The purpose of this Utilities Division policy is to clearly outline the roles and responsibilities of City staff in maintaining and updating the SSMP.

POLICY:

1. The SSMP shall be revised, audited and updated in accordance with State Water Resources Control Board Order No. 2006-0003 (included herein as Attachment A), or succeeding GWDR.
2. The SSMP Program shall be audited once every two (2) years based on the date of final certification to the State (May 2, 2010). The audit report shall be kept on file for a minimum of six (6) years.
3. The SSMP must be updated every five (5) years from the date of final certification to the State and must include any significant program changes.
4. Re-certification by the CLMSD Board of Directors is required in accordance with
5. A copy of the GWDR and the final certified SSMP shall be maintained at the office of the Compliance Officer and the office of the Utilities Superintendent. An electronic copy shall be uploaded to the City's website and maintained on the City's shared computer network.

PROCEDURE:

1. Certification of the SSMP and its elements can be completed through the SWRCB Online SSO Database. The completed Certification Questionnaire must be printed and signed by the Public Works Director, Utilities Superintendent or Compliance Officer and sent to:

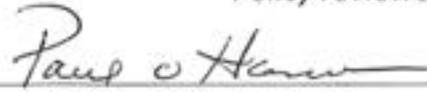
State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812

2. All reports and information submitted to the SWRCB shall be certified using the following statement:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

3. Updates to the SSMP may be reviewed by the City Council/CLMSD Board at the discretion of the Utilities Superintendent or Public Works Director. The SSMP shall be re-certified when significant updates are made as required by SWRCB Order No. 2006-0003.

Policy reviewed and approved by:



Paul Harris
Utilities Superintendent

Date 1/29/18

**ATTACHMENT A
UTILITIES DIVISION POLICY U-1
SSMP ADMINISTRATION**

**STATE WATER RESOURCES CONTROL BOARD ORDER NO. 2006-0003-DWQ
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER
SYSTEMS**

MS Word Document: Double-click the area below to open .PDF file.



.PDF File: Attachment A will be attached on following pages.

CLMSD

City of Lakeport Municipal Sewer District



Sewer System Management Plan 2018

Prepared by
Andrew Britton
Compliance Officer II

March 2018

CITY OF LAKEPORT 6TH CYCLE HOUSING ELEMENT



**2019-2027 HOUSING ELEMENT FINAL
ADOPTED JULY 7, 2020**

Prepared for:

City of Lakeport
225 Park Street
Lakeport, CA 95453

Prepared by:

De Novo Planning Group

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Figure 4-1: Inventory of Residential Sites

APPENDICES

Appendix A – Inventory of Residential Sites

Appendix B – Survey Response Data

Appendix C – Stakeholder List

CHAPTER ONE – INTRODUCTION

The State of California has declared that "the availability of housing is of vital statewide importance and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order." Recognizing the importance of providing adequate housing, the State has mandated a Housing Element within every General Plan since 1969. This Housing Element (2019-2027) was created in compliance with State General Plan law pertaining to Housing Elements. It was provided for community review and comment in May and June 2020 and is planned for adoption in late June/early July 2020

Broad based community participation is essential to preparing an implementable and locally meaningful housing policy and action program. The programs included in this document evolved through a workshop with local residents and outreach efforts with housing stakeholders and representatives of agencies which provide housing and other social service assistance to city, county and regional residents, as well as analysis of local population characteristics, households, housing stock, and economic conditions.

Contents

Consistent with state law, this Housing Element consists of the following major components:

- Evaluation of the 2014 Housing Element. The Evaluation of the 2014 Housing Element chapter evaluates accomplishments under the 2014 Housing Element in order to determine the effectiveness of the previous housing element, the City's progress in implementing the 2014 Housing Element, and the appropriateness of continuing the housing goals, objectives, and policies.
- Population and Housing Data. The Population and Housing Data chapter includes an analysis of population and employment trends, the City's fair share of regional housing needs, household characteristics, and the condition of the housing stock.
- Land and Infrastructure. The Land and Infrastructure chapter identifies resources available for the production and maintenance of housing, including an inventory of land suitable for residential development. This chapter also discusses availability of infrastructure and environmental constraints associated with development of the inventory of land.
- Constraints. The Constraints chapter reviews governmental constraints, including land use controls, fees, and processing requirements, as well as non-governmental constraints, such as construction costs, availability of land and financing, physical environmental conditions, and units at-risk of conversion, that may impede the development, preservation, and maintenance of housing. This chapter describes federal, state, and local financial resources and programs available to address the City's housing needs and goals.
- Housing Program. The Housing Program chapter identifies the City's housing goals and provides policies and implementation programs to address the City's housing needs.

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- **Community Participation.** The Community Participation chapter describes how the City engaged the public, including City residents, businesspeople, and interested parties, including housing and special needs advocates, in development of the Housing Element.

Relationship to the General Plan

State Law requires that "...the general plan and elements and parts thereof comprise an integrated, internally consistent, and compatible statement of policies...". The purpose of requiring internal consistency is to avoid policy conflict and provide a clear policy guide for the future maintenance, improvement and development of housing within the City. The City is required to update the General Plan from time to time to address requirements of State law; recent requirements include addressing safety and conservation issues in conjunction with or following the Housing Element Update. As the City updates the General Plan to ensure compliance with State law, it reviews any amendments against the adopted elements to ensure the document is internally consistent.

All elements of the General Plan have been reviewed for consistency in coordination with this update to the Housing Element. The following paragraphs outline the relationship of the Housing Element and its policies to other elements of the City of Lakeport's adopted General Plan. Development of housing consistent with the City's housing needs and programs as identified in this Housing Element would be required to be consistent with all relevant policies and programs of the other elements of the General Plan.

LAND USE

The Housing Element is most affected by development policies contained in the Land Use Element of the General Plan. The Land Use Element establishes the location, type, intensity, and distribution of land uses throughout the City. As such, the Land Use Element sets the upper limit of acreage which will be used for housing. The standards set in the Land Use Element determine the density to which residential areas can be developed and sets the upper limit for the number of housing units which can be developed in the City. The Land Use Element also addresses the development of other land uses such as industrial, commercial and professional offices which create demand for housing in the City. The housing sites identified in Chapter 4, Land and Infrastructure, are consistent with the land use designations and land use map identified in the Land Use Element.

URBAN BOUNDARY

The Urban Boundary Element defines the limits for extending City services and infrastructure in order to accommodate new development anticipated by the General Plan. The Urban Boundary Element is also intended to provide guidance related to future annexation of land from the City's Sphere of Influence. This Housing Element does not provide for growth outside of the Urban Boundary limit.

TRANSPORTATION

The Transportation Element describes the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities. The purposes of the Transportation Element are to coordinate the transportation and circulation system with planned land uses; promote the efficient transport of goods and the safe,

effective movement of all segments of the population; make efficient use of existing transportation facilities; and promote and protect environmental quality and the wise and equitable use of economic and natural resources. In carrying out these purposes the Transportation Element attempts to create a convenient living environment for residents of Lakeport. The City's Transportation Element discusses issues for the City and its Sphere of Influence.

COMMUNITY DESIGN

A Community Design Element was developed for the City of Lakeport because of its anticipated population growth. The challenge will be to maintain the City's quality of life and small town character as this change occurs. The Community Design Element is concerned with how the City looks and feels, and how to maintain a sense of place during a period of rapid growth.

In addition to providing a substantial portion of county resident support and retail services, pursuant to meeting housing quantity needs, the City strives to preserve and enhance the historic and cultural resources of the city, and ensure that new development demonstrates quality, excellence of design and sensitivity to the character of the surrounding neighborhood.

ECONOMIC DEVELOPMENT

The Economic Development Element provides guidance for economic development to attain an economically viable and self-sustaining community. In this sense, economic viability means providing a range of housing and employment opportunities that meet the needs of both residents and workers, attracting families and businesses to create demand for planned land uses and establishing and funding public service levels that preserve and enhance Lakeport's quality of life. The Housing Element would provide for a variety of housing types with a broad range of affordability, including units affordable to the workforce.

CONSERVATION

The Conservation Element focuses on the method by which water, soils, rivers, beaches and mineral resources may be used and preserved. The purposes of the Conservation Element are as follows: To promote the protection, maintenance and use of the community's natural resources, with special emphasis on scarce resources and those that require special control and management; prevent the wasteful exploitation, destruction, and neglect of natural resources; and, recognize that the natural resources of the community should be maintained for their ecological value as well as for their direct benefit to people. The Conservation Element should maintain and enhance the natural living environment of the people of Lakeport. In addition, it provides means to help determine those areas which should not be developed for housing or other land uses but should be preserved as a natural resource.

OPEN SPACE, PARKS AND RECREATION

The Open Space, Parks and Recreation Element is in many ways similar to the Conservation Element. The purposes of the Open Space, Parks and Recreation Element are to: assure that open space be recognized as a scarce resource to be preserved; coordinate state and regional conservation plans at the local level; preserve unique or strategic natural resources for future generations; and, preserve land uniquely suited to the production of food and fiber. The interrelationship between the Open Space Element and other elements of the General Plan is one

1. INTRODUCTION

of the clearest. Among other things, state law specifies that building permits, subdivision maps or other projects may not be approved if they are not consistent with the Open Space Element. In addition, the Open Space Element also includes requirements for the dedication of land or payment of in-lieu fees to provide needed open space. These requirements can increase the cost of residential development. The sections relative to parks emphasizes preservation and recognizes the City's need to provide parks and recreation opportunities to meet the needs of the community.

NOISE

The purpose of the Noise Element is to identify the location and relative intensity of noise in the environment and to identify land use policies and other controls to restrict the exposure of sensitive receptors to excessive levels of ambient noise. Policies exist in the Noise Element which limit the development of residential land uses to areas of existing or projected noise level less than 60 dB(A). In areas where this is not possible, proposed residential uses are required to include noise attenuation features which reduce the level of interior ambient noise to a maximum of 45 dB(A). These policies will mitigate the impact of noise sources on residential development and create a more pleasant living environment in the City. However, they also decrease the land available for residential development and increase the cost of construction.

SAFETY

The Safety Element of the General Plan identifies hazards to public safety and appropriate mitigation measures to mitigate, to the fullest degree possible, the loss of property and life resulting therefrom. The Safety Element identifies hazards related to fire, geologic hazards, flooding, crime and storage of hazardous materials. The Safety Element identifies hazards resulting from earthquake activity, and appropriate mitigation measures. Finally, the Safety Element identifies and discusses areas subject to flooding and areas located within the 100-year flood plain. The effect of the Safety Element on the Housing Element is an indirect one related to the increase in cost of housing due to California Building Code requirements and the required mitigation measures.

Application and Flexibility of the Document

This Housing Element is a dynamic document that may be subject to change as a result of significant shifts in demographics and/or housing needs during the planning period. It is the intent of the City of Lakeport to achieve the fair share allocation and estimated quantified objectives through the implementation of some or all of the Housing Element programs, as deemed appropriate by the City staff and City Council. The City will monitor implementation on an annual basis and make appropriate adjustments as needed throughout the planning period. Specific possible programs are identified that would achieve the desired objectives; however, the City recognizes that funding and resource allocations may change over the planning period and other options may need to be explored to achieve the identified goals.

Community Participation

To be effective, housing policy must reflect the values and priorities of the community. Lakeport's Housing Element Update program included community outreach through a community-wide survey and a stakeholder survey (the initial public workshop was cancelled due to Covid-19 as discussed in Chapter 7 so a comprehensive survey effort was undertaken to

receive input representative of all segments of the community), one Planning Commission workshop, one Planning Commission public hearing, and one City Council public hearing and a 30-day review period for input from the public. During the public review period, the State Housing and Community Development Department (HCD) also reviewed the Housing Element Update. The surveys, public workshop, and public hearings were advertised through media releases to the local newspapers, postings on the City website, social media outlets (Facebook and Twitter), and phone calls and emails to community stakeholders, including service providers for special needs populations and housing advocates. Community participation efforts are described in detail in Chapter 7.

Future Housing Needs

HCD is required to allocate each region's share of the statewide housing need based on Department of Finance (DOF) population projections and regional population forecasts used in preparing regional transportation plans. HCD provided the Lake County/City Area Planning Council (APC) with the allocation for Lake County. The APC then allocated housing needs by income group to each jurisdiction: City of Clearlake, City of Lakeport, and the unincorporated county.

REGIONAL HOUSING NEEDS ALLOCATION

A Regional Housing Needs Allocation was developed by the APC in conformance with State requirements to address and allocate housing needs equitably. The intent of the RHNA is to ensure that local jurisdictions address not only the needs of their immediate areas but also accommodate their fair share of housing needs for all economic segments. The RHNA is developed to ensure that adequate sites and zoning are provided to address existing and anticipated housing demands during the planning period and that market forces are not inhibited in addressing the housing needs for all facets of a particular community.

In 2018, Lakeport was allocated a new construction need of 132 housing units in the Lake County Regional Housing Needs Plan adopted by the APC for the 2018 to 2027 period. Of the allocated housing units, 16 are identified for extremely low income households, 15 for very low income households, 21 for low income households, 21 for moderate income households, and 59 for above moderate income households. Table 1-1 provides the RHNA target for the planning period 2014 to 2019 for each of the five household income groups for the City of Lakeport.

1. INTRODUCTION

Table 1-1: Lakeport Regional Housing Needs Allocation 2018-2027

Income Ranges*	Allocated Units	Maximum Home Sale Price*	Max. Monthly Rent or Housing Cost*
Extremely Low Income** (up to \$25,750)	16	\$85,714	\$643
Very Low Income (\$25,751- \$32,400)	15	\$109,310	\$810
Low Income (\$32,401- \$46,300)	21	\$176,826	\$1,296
Moderate Income (\$46,301 - \$69,500)	21	\$265,115	\$1,943
Above Moderate (\$69,501 +)	59	\$265,115+	\$1,943+
TOTAL	132		

Source: APC, 2018

*Annual income ranges and associated rents/housing costs are based on a four-person household. Assumes \$3,000 downpayment for extremely low, \$5,000 down payment for very low, \$10,000 down payment for low, and \$15,000 downpayment for moderate. Assumed 3.5% closing costs, 30-year loan with 5% interest rate, and monthly housing costs (utilities, taxes, etc.) at 8.5% of monthly income.

**Extremely low income is half of the Very Low Income allocation

Sources

Multiple sources of information have been used to document recent demographic and housing trends in Lakeport. The primary source of information was the Lake County 6th Cycle Housing Element Data Package prepared by HCD. Data from the 2000 and 2010 U.S. Census, and the U.S. Census American Community Survey (ACS) tabulations were used for comparative purposes for many of the tables in this report. Other sources of data include the State Department of Finance (DOF) population, household, and housing projections for 2019, Employment Development Department (EDD) labor and employment data, and information from the APC, Lake County Association of Realtors, other elements of the General Plan, and various other data resources.

CHAPTER TWO - EVALUATION OF THE 2014 HOUSING ELEMENT

Accomplishments under the 2014 Housing Element are evaluated in this chapter in order to determine the effectiveness of the previous housing element, the City's progress in implementing the 2014 Housing Element, and the appropriateness of the housing goals, objectives, and policies. This evaluation is conducted pursuant to Government Code Section 65588.

Effectiveness of the Previous Housing Element

The 2014 Housing Element program strategy focused on the accomplishment of policies and implementation of programs in support of four goals. Each goal and associated policies are identified below; programs that support each policy are identified in parentheses following the policy. Table 2-1 summarizes the housing production during the planning period in comparison to the City's regional housing need allocation for each income group. Table 2-2 summarizes the implementation programs associated with each goal and, where applicable, the quantified objectives associated with the implementation programs. Table 2-2 also identifies whether each implementation program was implemented, the result, if it was successful, and whether it should be kept, modified, or removed in this update to the Housing Element.

Goal 1: Conserve and Improve Lakeport's Existing Neighborhoods and Housing Supply

- Policy 1A** The City shall encourage the maintenance and improvement of its residential areas.
- Policy 1B** The City shall encourage the preservation of its affordable housing supply, including extremely low, very low, and low income units, through regulation of condominium and mobile home park conversions, proactive noticing of at-risk units, and seeking funding to retain and improve lower income units.
- Policy 1C** The City shall discourage conversion of housing to non-residential uses, unless there is a finding of clear public benefit and equivalent housing can be provided for those who would be displaced by the proposed conversion.
- Policy 1D** The City shall require developers to provide relocation assistance to residents displaced from mobile home parks converted to other uses.

Goal 2: Facilitate and Encourage Development of Housing to Meet the Regional Housing Needs Allocations

- Policy 2A** The City shall encourage additional housing to meet the City's Regional Housing Need Allocations by maintaining an inventory of adequate sites to meet the City's housing needs, by actively encouraging and assisting the construction of multifamily housing, by promoting a range of housing types, and by encouraging utilization of density bonuses in support of affordable housing.
- Policy 2B** The City shall pursue county, state and federal programs and funding sources that provide housing opportunities for extremely low, low, and moderate-income households.
- Policy 2C** The City shall facilitate the development of residential uses in existing and new commercial areas where the viability of the commercial activities would not be adversely affected.

2. EVALUATION OF THE 2014 HOUSING ELEMENT

- Policy 2D** The City shall continue to facilitate the construction of second dwelling units and permit accessory residential units by right in the R-1 zoning district.
- Policy 2E** The City shall retain its Housing Specialist staff position or provide a comparable position.
- Policy 2F** The City shall expedite processing of affordable housing projects.
- Policy 2G** Encourage developers of lower income and special needs housing to use available incentives, including the City's density bonus ordinance.

Goal 3: Expand Housing Opportunities for the Elderly, the Handicapped, Households with Very-Low to Moderate Incomes and for Persons with Special Housing Needs

- Policy 3A** The City shall encourage and facilitate housing types and programs for senior citizens, the disabled, including developmentally disabled, large families, and other groups identified as having special housing needs.
- Policy 3B** The City shall continue to encourage the development and expansion of housing opportunities for the elderly and disabled through techniques such as smaller unit sizes, reduced fees (water/sewer) for smaller units, parking reduction, common dining facilities, and fewer but adequate amenities.
- Policy 3C** The City shall facilitate housing opportunities for the homeless and households at-risk of homelessness, including allowing emergency shelters in specified zone(s) and maintaining an inventory of adequate sites to accommodate homeless housing needs.
- Policy 3D** The City shall work with private, county, and state agencies to provide emergency housing for the homeless.
- Policy 3E** The City shall require developers using public or tax-exempt financing to include language in agreements with the City permitting persons and households eligible for HUD Section 8 rental assistance or similar assistance to apply for below market rate units provided in the development.
- Policy 3F** The City shall continue to identify and provide incentives to encourage development of extremely low income, senior, disabled, large family, and other special needs housing types.

Goal 4 - Promote Housing Opportunities for All Persons Regardless of Race, Age, Marital Status, Ancestry, National Origin or Color

- Policy 4A** The City shall actively support fair housing opportunities for all persons regardless of race, sex, marital status, ancestry, national origin, or color.
- Policy 4B** The City shall encourage and support public participation in the formulation and review of the City's housing and development policies.
- Policy 4D** The Planning Commission and City Council shall annually review progress in implementing the Housing Element including the progress in achieving its objectives and meeting its share of regional housing needs.

The 2014 Housing Element provided clear direction and support for the City's efforts to rehabilitate existing housing, encourage new housing affordable to a range of income levels, providing housing for special needs groups, remove constraints to housing where appropriate, and encourage fair housing opportunities. The City continues to be affected by the Great Recession, including a continued slump in market rate development and a slow recovery from significantly reduced property values and consumer spending. A detailed description of the effectiveness of each program is described in Table 4-2. It is recognized that the City has continued to make every effort to support affordable housing and to assist households in need, with much of the City's efforts expended to address multiple disasters that occurred during the planning period which affected the City's revenues, expenditures, and staffing, including significant flooding in 2017, which displaced 42 households and caused significant damage, flooding in 2019, which caused further damage, and two separate regional wildfires, the River and Ranch Fires, that resulted in citywide evacuations during 2018.

In summary, the City's accomplishments during the 5th Housing Element cycle included:

- Development of 24-unit Martin Street Apartments, with 18 very low, 5 low, and 1 moderate (manager's unit) and units for large households, including streamlining and expediting approvals (General Plan Amendment, rezone, and design review) and successful HOME grant (2015) to provide financial assistance;
- Entitling, permitting, and assistance with securing funding for the 48-unit Martin Street Apartments II, with including streamlining and expediting approvals (General Plan Amendment, design review);
- 10 new single family units, including a mobile home affordable to a very low income household, 1 home affordable to moderate income households, and the remaining units affordable to above moderate income households;
- Rehabilitation of 1 low income units;
- Weatherization assistance to 2 very low income households;
- Assistance to 1 low income first time homebuyer;
- Upgrades to the City's water and sewer system to increase reliability and provide additional capacity;
- A 2018 CDBG Planning and Technical Assistance grant for \$100,000 to design street and stormwater improvements to assist in the rehabilitation and improvement of the Forbes Creek neighborhood, an area identified as having aging housing and infrastructure conditions in need of revitalization and investment;
- Rezoned and approved a tentative subdivision map for 5.39 acres from R-5 to R-1, while this rezone reduced the potential density on the site, the site had been approved for a 95-lot single-family subdivision (Victorian Village). Only the first phase (14 lots) of Victorian Village was recorded and the lots to accommodate the remaining units were never recorded due to lack of demand and the constraints associated with a significant portion of the site being located within the 100-year flood zone. It is anticipated that the three residential

2. EVALUATION OF THE 2014 HOUSING ELEMENT

parcels provided by the rezone and associated tentative subdivision map will encourage the marketing of smaller, more manageable phases of development and help provide additional market-rate single family homes, which have been a difficult product for developers to market and sell in the City despite the availability of finished single family lots; and

- Processing City-initiated rezones to address General Plan and zoning consistency. Rezones will not remove any sites from the R-3 district and include 6.4 acres identified for rezoning to R-3 district to accommodate multifamily development at 29.0 units per acre:
 - o 520 Smith Street (3.4-acre underutilized site with single family home), and
 - o 1320 11th Street (3.0 acres of the 5.5-acre site which currently has a single family home).

RHNA PROGRESS

During the 2014-2019 period, 1 mobile home affordable to very low income households, 9 single family homes, and 24 multifamily units (including 18 very low, 5 low, and 1 moderate (manager's unit) units) were constructed.

Table 2-1: Comparison of RHNA to Housing Production

Category	Very Low	Low	Moderate	Above Moderate	TOTAL
RHNA - 5th Cycle	34¹	22	27	64	147
Units Constructed (2014-2019)	19 ²	5	1	9	34

¹Includes 17 extremely low income units

SHORTCOMINGS OF THE PREVIOUS HOUSING ELEMENT

The 2014 Housing Element was very effective. The City implemented policies and programs as discussed below. While the City continued to have limited staffing and funding, housing production increased and the City continued to accommodate and encourage housing. The City did not complete several programs, as discussed in Table 4-2. Where these programs continue to be necessary and applicable, the programs are revised to encourage better implementation in the 6th Cycle.

It is noted that market-rate single-family housing production continues to occur at a very slow pace. This reflects market conditions rather than a shortcoming of the Housing Element, as demonstrated by the slow pace of single family development despite over 35 finished residential lots (13 in Parkview, 10 in Victorian Village, 9 in the Fairview/Forest/Robles neighborhood, 3 on Alden Lane) available in existing subdivisions as well as over 40 infill lots throughout the central area of the City that have been available for individual single family homes for the previous two Housing Element cycles but have not been developed. While the Housing Plan includes a program to encourage market rate development, the City already has quick permitting times and low impact fees and no significant constraints to the development of single family housing.

Appropriateness of Housing Goals, Policies, and Programs

Table 2-2 identifies the effectiveness of the City’s housing goals, policies, and associated implementation programs. Based on this review, 13 programs will be kept in this Housing Element, two programs will be eliminated, and three programs will be modified as described in Table 2-2. See Chapter 6 for the goals, policies, and programs of this Housing Element.

The current goals, policies, and programs continue to be appropriate to address the City’s housing needs. Many programs have been implemented and will be removed from the Housing Element. Programs that have been successful will continue to be implemented.

In some cases, there were not adequate staff or funding resources to implement various programs following the adoption of the 2014 Housing Element. Some of these programs will be implemented concurrently with the adoption of this Housing Element or as funding is available. The remaining programs will be implemented during the 6th Cycle planning period.

The Housing Plan, which consists of the goals, policies and implementation measures within the Housing Element, will be revised to update the goals, policies, and programs to reflect the changes identified in Table 2-2. This will ensure that the policies that the City will use to guide its decision-making and the measures that the City will implement to achieve its goals and carry out policies will continue to be effective and appropriate.

2. EVALUATION OF THE 2014 HOUSING ELEMENT

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
GOAL 1: CONSERVE AND IMPROVE LAKEPORT'S EXISTING HOUSING SUPPLY			
<p><u>1-1 Maintain Existing Residential Zoning:</u> Retain existing residential zoning and discourage non-residential uses in these zones. Maintain zoning limitations on non-residential uses and home occupations.</p>	<p>Maintain residential zones. No quantified objectives.</p>	<p>This program has been successful in maintaining residential zoning. The City has continued to limit non-residential uses on residential lands and has approved minimal rezones to non-residential uses. In 2018, the City initiated rezoning on two sites to increase the areas designated for high density residential uses and also approved an applicant-initiated General Plan Amendment in 2017 to accommodate two multifamily projects.</p>	<p><input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program</p>
<p><u>1-2 Housing Rehabilitation Program.</u> Continue and expand the City's Housing Rehabilitation Program, which provides assistance to extremely low, very low, and low income units, including lower income households with special needs, through the following activities:</p> <ul style="list-style-type: none"> • Continue to provide a dedicated staff position which administers and implements the Housing Rehabilitation Program, as well as other housing programs. • Submit applications, when warranted, to appropriate funding sources (CDBG, HOME, and other programs) to increase program funding. Use associated administration funds to maintain staff support and increase program support, if necessary. • Community Development and Housing staff shall coordinate to identify areas of the City with a high incidence of homes with deferred maintenance and target these areas for code enforcement. • Continue to make program pamphlets available at City Hall, the public library, other public 	<p>Code enforcement – 15 units/year; Housing rehabilitation – 5-10 rehabilitation loans/year</p>	<p>This program continues to be successful, although fewer homes were rehabilitated than planned. Due to budget constraints, the City's was not able to maintain a dedicated Housing Specialist position to oversee the City's housing programs but plans to reestablish the position and program once the City has an adequate increase in dedicated housing funds.</p> <p>The City continues to conduct code enforcement as needed and connects home owners in need of assistance with the City's housing staff in order to assist with rehabilitation and emergency improvements.</p> <p>During the Housing Element cycle, the City focused its grant funding on supporting new affordable multifamily development to meet the urgent need for adequate affordable housing. Applications for housing rehabilitation assistance were low and the City funded three rehabilitation projects for very low and low income households. The City is seeking CDBG funding as part of the 2020 funding cycle to re-implement the City's housing rehabilitation program.</p> <p>The City makes program information readily available to the public, has had success with public outreach, and targets program assistance to housing exhibiting need for</p>	<p><input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program</p>

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
<p>facilities, and on the City's website.</p> <ul style="list-style-type: none"> Distribute program information in conjunction with continuing building code enforcement. 		<p>rehabilitation.</p> <p>The City also secured funds to make improvements to the Forbes Creek neighborhood, which has been targeted for revitalization and investment.</p>	
<p><u>1-3 Capital Improvement Program</u>: Identify priorities for capital improvements in the City's older residential neighborhoods, including street maintenance, curbs, gutters, and sidewalks, storm drainage facilities, and street lighting. Where improvements are identified in lower income areas, seek state funding for the improvements. Update the City's Capital Improvement Program (CIP) to include capital improvements that are identified as a high priority and to ensure that areas needing improvement are scheduled for funding at a specific time in the future.</p>	<p>3 capital improvement projects in aging neighborhoods</p>	<p>This program has been successful. Through the Capital Improvement Program, the City has continued to complete capital improvement projects in aging neighborhoods. The City together with the County and regional transportation organization, Lake Area Planning Council (Lake APC), recently completed a countywide pedestrian needs study which documents existing pedestrian infrastructure and prioritizes where needed improvements is necessary. The City is using the study as part of Capital Improvement Project planning with a focus of integrating ADA and general sidewalk improvements with all ongoing roadway improvement projects. This included improvements to ADA parking on Third Street, and sidewalk improvements along Second and Sixteenth streets associated with scheduled road maintenance activities. Additionally, the City in partnership with Lake APC also completed a Multimodal Access Study for the entire Eleventh Street Corridor, a principal gateway corridor in the City addressing pedestrian, bicycle and transit operations and is implementing the study's recommendations through the Hartley Street sidewalk improvements projected funded through a Caltrans Active Transportation grant. The City plans to continue seeking available funds to continue implementing the study's recommendations.</p> <p>The City is also currently addressing infrastructure deficiencies in the Forbes Creek neighborhood, which includes infrastructure improvements funded through a 2018 CDBG grant. This program has been successful and continues to be appropriate to support investment in the City's older neighborhoods to maintain and improve</p>	<p><input checked="" type="checkbox"/> Keep Program</p> <p><input type="checkbox"/> Eliminate Program</p> <p><input type="checkbox"/> Modify Program</p>

2. EVALUATION OF THE 2014 HOUSING ELEMENT

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
		infrastructure and community facilities.	
<p>1-4 Conversion of Affordable Units: Conserve affordable units through the following activities:</p> <ul style="list-style-type: none"> • When an affordable housing development is at-risk of converting, assist the owners in identifying resources, including funding, for the continued provision of affordable units. • Upon receipt of notice of a proposed conversion of assisted affordable housing, the City will contact qualified entities and encourage their involvement in the acquisition of the units. • Tenant Education - The City will work with tenants of at-risk units and provide them with education regarding tenant rights and conversion procedures. The City will also provide tenants in at-risk projects information regarding Section 8 rent subsidies through HUD (special vouchers for existing tenants in Section 8 projects), the Housing Authority, and other affordable housing opportunities in the City. 	Preservation of 25 affordable units.	While no at-risk housing units began the process of converting from affordable to market rate during the planning period and it is anticipated that the City’s potential at-risk units will remain affordable, this program remains appropriate to continue addressing the potential for at-risk units in the City to convert to market rate.	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program
<p>1-5 Energy Conservation Retrofit: Encourage and assist in implementing energy conservation measures including, but not limited to, weatherization, siding, and dual pane windows in conjunction with housing rehabilitation programs. Coordinate with North Coast Energy Services to provide weatherization improvements, where applicable.</p>	5 units/year	During this reporting period the City adopted the 2019 California Building Code. The City plans to seek grant funding through the 2020 CDBG NOFA for housing rehabilitation funding with an emphasis on addressing critical deferred maintenance related projects for low income households which includes energy conservation upgrades. While the City no longer has a dedicated staff person administering housing programs, the City’s housing rehabilitation program did provide energy efficiency and weatherization improvements to several units during the planning period and the City continues to coordinate with North Coast Energy Services to provide weatherization	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
		<p>improvements. North Coast Energy Services assisted with multiple energy improvements, including water heater tank replacements, during the planning period.</p> <p>Private property owners also undertook significant energy conservation improvements, including roofing, window replacement, HVAC replacement, and solar energy systems and battery packs. The City saw a strong increase in solar energy systems occurring in the latter half of the planning period and continues to encourage such measures. This program continues to be appropriate. See Program 2-3 for a discussion of energy conservation related to new development.</p>	
GOAL 2: FACILITATE AND ENCOURAGE DEVELOPMENT OF HOUSING TO MEET THE REGIONAL HOUSING NEEDS ALLOCATIONS			
<p><u>2-1 Below Market Rate Units:</u> Consider adoption of a below market rate (BMR) housing program. The BMR program may be in the form of a development impact fee or an ordinance that requires developers of residential developments to dedicate a portion of their units at rents or purchase prices affordable to very low, low, and moderate income households. The program should be reviewed for conformance with the California Mitigation Fee Act and should establish the nexus between new housing development and the BMR requirement. In determining whether a BMR program is appropriate, the City should consider whether a BMR program would unduly constrain the development of market rate housing, the anticipated effectiveness of a BMR program, and the potential cost of implementing a BMR program. The program may:</p> <ul style="list-style-type: none"> Identify a specific percentage of very low, low, 	<p>Revision to Zoning Ordinance; approval of a specified percentage of affordable units based on market rate units approved from October 2011 through 2014</p>	<p>This program has not been implemented due to the downturn in the housing market and limited staffing resources. However, there have not been any large single family developments approved since 2009 and it is not anticipated that this program would have yielded any affordable housing. It is noted that the City adopted updates to its density bonus provisions which provided for additional incentives for affordable housing and the City entitled 72 affordable housing units during the planning period.</p>	<p><input type="checkbox"/> Keep Program</p> <p><input checked="" type="checkbox"/> Eliminate Program</p> <p><input type="checkbox"/> Modify Program</p> <p>The program will be removed as the City has had very limited market-rate housing produced during the planning period and the previous planning period and this type of program could further constrain affordable housing production. Further, the City has had significant success in facilitating affordable housing without the assistance of this program.</p>

2. EVALUATION OF THE 2014 HOUSING ELEMENT

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
<p>and moderate income units,</p> <ul style="list-style-type: none"> • Allow for the development of units off-site, • Allow for the contribution of in-lieu fees of comparable value, • Allow alternative measures, such as preservation of units converting from affordable to non-affordable or purchase of existing vacant housing and conversion to affordable housing, and • Provide density bonus or other incentives to projects that construct the BMR units rather than pay inlieu fees. 			
<p><u>2-2 Affordable Housing Resources:</u> Encourage the interest of development community, including Rural Communities Housing Development Corporation, in providing additional affordable housing and seek additional affordable housing resources through, for example, developer agreements, mortgage revenue bonds, tax credits, and the California Housing Rehabilitation Program. This program shall include the following actions:</p> <ul style="list-style-type: none"> • Regularly contacting housing stakeholders group, including affordable housing developers, to identify potential housing projects, including affordable new construction, special needs housing, and first time homebuyer assistance, and prioritize potential funding efforts. • Provide interested developers and other potential housing partners with information regarding affordable housing resources and incentives (include information from Program 2 -1 and Zoning Ordinance Chapter 17.39) and provide 	<p>2 applications for funding for affordable new housing construction projects; 40 new affordable units</p>	<p>This program has been successful in supporting development of two affordable housing projects. Martin Street Apartments was completed in 2019 and provides 24 units affordable to the extremely low, very low, and low income groups and includes three bedroom units appropriate for large families. Martin Street Apartments II was entitled and received building permits during the planning period and will provide 48 units affordable to the extremely low, very low, and low income groups and includes three bedroom units appropriate for large families. The City streamlined the review and approval of these projects, including fast-tracking a General Plan Amendment and rezone necessary to allow the multifamily uses, and assisted with procuring HOME and LIHTC funding. The City continues to make information available regarding its affordable housing resources and incentives, both through a brochure and information on the City’s website.</p>	<p><input checked="" type="checkbox"/> Keep Policy</p> <p><input type="checkbox"/> Eliminate Policy</p> <p><input type="checkbox"/> Modify Policy</p>

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
<p>the brochure to applicants interested in affordable and/or multifamily housing, and</p> <ul style="list-style-type: none"> • Seek funding or support funding applications that would provide new affordable units, including extremely low income units. 			
<p><u>2-3 Energy Conservation:</u> Continue and expand the City's encouragement of alternative design for energy conservation by regularly updating brochures and information regarding City policies and programs, particularly as they pertain to affordable housing. Policies C.5.1, C.5.2, C.6.1, and C.6.2 and associated programs in the Conservation Element provide direction and implementation measures for energy efficiency and conservation.</p>	Fact Sheet	<p>The City provides a fact sheet detailing available water efficiency conservation measures and provides information regarding green building measures, which address energy efficiency as well as other sustainability measures. This information is available at City Hall and on the City's website. Energy efficient units consistent with building code requirements (CalGreen/Title 24) and the subdivision ordinance are required in all new developments. Martin Street Apartments was developed as an energy-efficient project, designed to meet CalGreen requirements and include energy-saving appliances and features. This has been a successful policy, as shown by the energy efficient new development as well as the weatherization/energy-efficiency improvements (window replacements, water heater replacements, solar energy panel installation, battery packs, etc.) made by private households during the planning period. The City will continue to prepare fact sheets and provide information on recommended water and energy conservation measures and available resources, such as PG&E rebates and loans, for property owners to make energy-efficient improvements.</p>	<p><input checked="" type="checkbox"/> Keep Program</p> <p><input type="checkbox"/> Eliminate Program</p> <p><input type="checkbox"/> Modify Program</p>

2. EVALUATION OF THE 2014 HOUSING ELEMENT

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
GOAL 3: EXPAND HOUSING OPPORTUNITIES FOR THE ELDERLY, THE HANDICAPPED, HOUSEHOLDS WITH VERY-LOW TO MODERATE INCOMES AND FOR PERSONS WITH SPECIAL HOUSING NEEDS			
<p><u>3-1 Removal of Constraints to Housing for Special Needs Groups</u>: Continue to assess and update the Zoning Ordinance, Municipal Code, and City procedures to remove constraints and address changes in state law, particularly regarding housing for special needs groups, including seniors, the disabled (consistent with requirements of SB 520), large families, farmworkers, and homeless.</p>	None quantified.	<p>This has been a successful policy, with many updates to the Zoning Ordinance to address housing needs (residential care, emergency shelters, increased incentives for affordable special needs housing, and reasonable accommodation for persons with disabilities) were adopted concurrently with the 2014 Housing Element. The City will continue to review and amend the Zoning Ordinance to address housing for special needs groups. During the planning period, the City undertook a review of the Zoning Ordinance and Zoning Map to identify potential revisions to further accommodate the City's housing needs and identified several parcels appropriate for R-3 zoning. The rezone effort for these parcels is currently in process. As part of this Housing Element Update, the City has identified several additional changes to the Zoning Ordinance, as described in Chapter 6.</p> <p>This program continues to be appropriate to support the review of City requirements and regulations and removal of constraints, when identified.</p>	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program
<p><u>3-2 Special Needs Housing Coordination</u>: Assist other agencies serving Lakeport to address special needs housing, as needed and feasible. Provide a handout that identifies available housing programs for lower income households and special needs groups and make the handout available at City Hall, the library, and the City website.</p>	None quantified.	<p>The City coordinates with other agencies and housing developers to encourage development of housing and provision of services for lower income households and special needs groups. The City has partnered with Lake County and the City of Clearlake through the Lake Economic Development Corporation (Lake EDC) to provide special housing assistance to various special needs groups. This includes the administration of the USDA Rural and Single Family Home Loan Program and Rural Home Loans Direct Program. Additionally, Lake EDC regularly hosts housing fairs throughout the County targeting developers of affordable housing, most specifically farmworker housing.</p>	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
		The City has continued to provide information regarding its available housing programs on the City's website and provides various housing-related brochures at City Hall. This program continues to be appropriate.	
<p><u>3-3 Incentives for Extremely Low Income, Senior, Disabled, Large families, and Special Needs Housing:</u> Continue to provide incentives for special needs housing and extremely low income housing, prioritizing development of extremely low income housing. Housing for extremely low income households, including Single Room Occupancy, shared housing, and housing with supportive services, will be incentivized through expedited development processing, density bonuses, and a reduction in development standards, such as lot coverage, parking, and/or setbacks (see Zoning Ordinance Chapter 17.39). Senior and disabled housing can be incentivized through flexible parking, setback, lot coverage and other standards, where found to be consistent with maintaining the character of the surrounding neighborhood. Large family housing (three or more bedrooms) can be incentivized through reduced setbacks or a density bonus for projects, particularly multifamily, with 20 percent or more large units.</p>	None quantified.	<p>In 2014, following the completion of this Housing Element, the City of Lakeport adopted Ordinance 891 adding Chapter 17.39 to the Zoning Ordinance providing density bonuses and development standard reductions (parking, setbacks, lot coverage, etc.) to qualifying development proposals including low income, senior and other special needs housing proposals. This Ordinance has been utilized for several development projects including the Martin Street Apartments Phase I & II. The City provided various incentives for the Martin Street Apartments and Martin Street Apartments II, including expedited processing and assistance with obtaining HOME and LIHTC funding. Both projects provide large family units and Martin Street Apartments II will include units affordable to extremely low income housing.</p> <p>This program continues to be appropriate to support the City's housing needs and will be continued.</p>	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program
<p><u>3-4 Seek Site and Funding for Affordable Housing:</u> Identify several parcels of land suitable for an affordable housing project, considering sites that may be appropriate for affordable family housing, special needs housing, and/or senior housing funded by a HUD 202 or a similar program. Contact developers to identify interest in developing an affordable housing project, with emphasis on housing that includes units to accommodate</p>	None quantified.	<p>A site was located and the City worked to facilitate the General Plan designation and rezoning of the site to support multifamily development. The City's efforts resulted in the development of the 24-unit Martin Street Apartments and the 48-unit Martin Street Apartments II which are currently under construction. The City is continuing to work with this developer to begin the land use entitlement process for an affordable senior housing project.</p> <p>In addition, the City is in the process of rezoning additional</p>	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program

2. EVALUATION OF THE 2014 HOUSING ELEMENT

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
extremely low income and/or special needs households, and, if there is interest, facilitate obtaining funding and construction of the affordable housing.		sites to accommodate R-3 densities. The City also partners with Community Development Services through the Lake EDC to actively solicit potential housing developers in Lake County. This program will be revised to support the City’s current rezoning effort and continues to be appropriate to support the City’s housing needs.	
<u>3-5 Seek Available Funding:</u> Seek and aggressively pursue available State and Federal assistance for City and non-profits (CDBG, HOME, etc.) to develop affordable housing for seniors, large-families, households with children, and others with specialized housing needs when there is a request from a developer for an affordable housing project appropriate for the City. If no new affordable housing construction projects are identified, the City will pursue funding for First Time Homebuyer, housing rehabilitation, and other programs that will provide housing assistance but may not result in the development of housing for special needs groups.	None quantified.	This program has been very successful. The City is currently partnered with Community Development Services through the Lake Economic Development Corporation to actively solicit potential housing developers in Lake County. Community Development Services has sponsored several housing fair’s over the past two years. Additionally, the City has had great success over the past few years in obtaining HOME, CDBG and TCAC funding to support the construction of 72 affordable housing units and other supportive infrastructure, including the 2018 CDBG funding for off-site development improvements such as sidewalk and sewer, in support of the Martin Street Apartments development. The City also intends to apply for funding through the 2020 CDBG NOFA to re-establish its housing rehabilitation program and address critical deferred maintenance issues such as re-roofing and weatherization activities which currently threaten the overall health of the City’s existing housing stock.	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program
<u>3-6 Farmworker Housing:</u> Monitor population increases within the City during elevated farming seasons. If un-housed issue identified, pursue partnership with County to address documented need.	None quantified.	The City monitors special needs populations, including farmworkers, to the extent information is available. There has not been an increase in farming activities in the city and no new farmworker housing needs were identified. The City is currently partnered with Community Development Services through the Lake EDC to actively solicit potential housing developers in Lake County, including providers of farmworker housing.	<input type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input checked="" type="checkbox"/> Modify Program How? This program will be revised to provide general support for

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
			farmworker housing and to coordinate with Lake EDC and affordable housing developers to identify opportunities for farmworker housing development.
<p><u>3-7 Group Homes:</u> Revise the Zoning Ordinance to address approval of group homes pursuant to state law including, but not limited to, Health and Safety Code 1267.8 requiring to specify siting and permit requirements for small group homes, including maximum spacing for specific facilities, intermediate care facilities for the developmentally disabled, serving six or fewer persons in any residential zone. Clearly stated requirements for approval of group homes will give greater certainty to an applicant and remove an impediment to fair housing choice for elderly, disabled or persons with special needs.</p>	Zoning Ordinance Revisions	This program has been implemented and the Zoning Ordinance provides for approval of group homes (residential care homes) in accordance with the requirements of State law.	<input type="checkbox"/> Keep Program <input checked="" type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program This program will be removed as it has been implemented.
<p><u>3-8 Maintain Ongoing Estimates of the Demand for Emergency Housing.</u> Consult annually with local churches, North Coast Opportunities, other service providers and the County's Social Services Department to maintain ongoing estimates of the demand for emergency housing. Include findings in the annual report prepared under Program 4-2.</p>	Annual Report	This program has been successful and the City works regularly with service providers to identify the demand for emergency housing. The City has participated in annual coordination to document homeless needs and services, including the review of services/beds and Point in Time surveys, to ensure that the City's homeless population and associated needs are monitored. The City of Lakeport has also worked with local non-profit homeless advocates to provide of a community warming center. This program continues to be appropriate.	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program

2. EVALUATION OF THE 2014 HOUSING ELEMENT

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
<p><u>3-9 Reasonable Accommodation for Persons with Disabilities.</u> Establish reasonable accommodation procedures to provide exception in zoning and land-use for housing for persons with disabilities protected under fair housing law. This will include, but not be limited to, procedures to address accessibility improvements, including the installation of ramps, walkways, grab bars, raised counters, and lighting, and shall identify improvements that are exempt from building permit requirements. Reasonable accommodation will be permitted through a ministerial process, provided: 1) the requested accommodation would not impose an undue financial or administrative burden on the City, and 2) the requested accommodation would not require a fundamental alteration in the nature of the City's land-use and zoning program.</p> <p>The City shall prepare handouts to provide information to all interested parties regarding accommodations in zoning, application of building codes, and permit processes for persons with disabilities.</p>	Municipal Code Revisions	The City of Lakeport adopted Ordinance 893 in conjunction with the approval of the 2014 Housing Element adding Chapter 17.40, Reasonable Accommodation for Persons with Disabilities to the Zoning Ordinance. The component of this program providing for dissemination of information regarding City processes to accommodate persons with disabilities remain relevant and should be kept in the Housing Element.	<input type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input checked="" type="checkbox"/> Modify Program This program will be modified to remove the requirement to establish reasonable accommodation procedures, as that portion of the program has been implemented and is no longer needed.
GOAL 4: PROMOTE HOUSING OPPORTUNITIES FOR ALL PERSONS REGARDLESS OF RACE, AGE, MARITAL STATUS, ANCESTRY, NATIONAL ORIGIN, OR COLOR			
<p><u>4-1 Equal Housing Opportunity:</u> Facilitate equal housing opportunity by continuing to designate the Community Development Director as the City's Equal Opportunity Coordinator. The City's Equal Opportunity Coordinator shall refer complaints to the State Department of Fair Employment & Housing for investigation and resolution of complaints. Information regarding equal housing opportunity laws and the City's Equal Housing Opportunities Coordinator shall be prepared and</p>	Annual Report	No complaints have been received. The City provides information regarding fair housing laws at City Hall. The City also partners with Lake EDC to support housing services and fair housing and has participated in several housing fairs over the past three years, which have assisted in educating the community about fair housing laws and rights.	<input type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input checked="" type="checkbox"/> Modify Program This program will be modified to have the City's Equal Housing Opportunity Coordinator refer complaints to

Table 2-1: Effectiveness and Appropriateness of 2014 Housing Element Policies and Programs

POLICY / IMPLEMENTATION PROGRAM	QUANTIFIED OBJECTIVES	ACCOMPLISHMENTS	KEEP, ELIMINATE, OR MODIFY FOR THE NEW HOUSING ELEMENT?
distributed to the public at City Hall and other public and quasi-public places. A log of complaints related to equal housing opportunities will be kept and a summary of complaints shall be included in the annual report, in conjunction with Program 4-2.			the State Department of Fair Employment & Housing in order to ensure that any complaints are addressed consistently with the requirements of State law.
<u>4-2 Annual Report:</u> Prepare an Annual Report to the City Council and Planning Commission which describes 1) implementation of Housing Element programs to date, 2) the amount and type of housing activity as related to the Housing Element's goals, policies, and programs, and 3) an updated summary of the City's housing needs. Submit this report to the Department of Housing and Community Development within 30 days after review by the City Council.	Annual Report	The City has prepared and submitted annual reports to HCD since adoption of the Housing Element, with annual reports submitted in 2018, and 2019. City staff provides regular updates to the City Council and Planning Commission on housing related issues and construction of housing units within the community. Annual reports provided to HCD are also provided to City Council and Planning Commission. This program continues to be appropriate to comply with State law related to annual reporting required for Housing Elements as well as to ensure the decision-makers and community are aware of the City's housing efforts.	<input checked="" type="checkbox"/> Keep Program <input type="checkbox"/> Eliminate Program <input type="checkbox"/> Modify Program

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CHAPTER THREE – HOUSING NEEDS ASSESSMENT

In order for the City’s housing strategy to be successful, the City’s demographics and housing trends must be assessed to identify current conditions and needs. This section discusses the components of housing need, which include recent trends in Lakeport’s population, households, employment base and the type of housing units available. In most instances, countywide data is included for comparative analysis.

The analysis that follows is divided into four major subsections. **Population Characteristics** examines the City of Lakeport in terms of individual persons and identifies population trends that may affect future housing needs. **Household Characteristics** explores Lakeport by families, households, or living groups, to see how past and expected household changes will affect housing needs. **Employment** denotes primary income sources and levels by occupation. A review of the **Housing Stock** discloses the housing environment in Lakeport as a whole and details availability, affordability, and condition. Such information is invaluable to help identify needed programs that ensure that existing and future housing stock meets the shelter needs of every segment of the City’s population. Analysis in each of these subsections provides a database upon which decisions concerning programs and policies for the provision of adequate housing in the City are made.

The primary data source for the 2019 Housing Element Update is the Lake County Housing Element Data Package (6th Cycle Data Package) prepared by HCD staff. Additional data sources include the US Census Bureau (2010 Census, and 2013-2017 American Community Survey (ACS)), California Department of Finance (DOF), California Employment Development Department (EDD), and other sources as noted in the document. Data from the 2013-2017 ACS are referred to as “2017” data. Due to the use of multiple data sources, there are slight variations in the total population and household numbers for 2017. However, these variations do not significantly affect the discussion of overall housing trends and changes.

Population Characteristics

The population of Lakeport in 2019 was 4,806 persons, a decrease of approximately 0.3% over the past two decades. During this same time period (2000-2019), the County population increased by 11.6%. Since 2010, the City has experienced a slight increase from 4,753 persons to the current population of 4,806 persons, an increase of approximately 1.1%.

Table 3-1: Population Trends 2000-2019

Jurisdiction	2000 Population	2010 Population	2019 Population	Percent Change 2000 to 2019
Lakeport	4,820	4,753	4,806	-0.3%
Lake County	58,325	64,665	65,071	11.6%

Source: 2000, & 2010 U.S. Census, HCD, 6th Cycle Data Package, California DOF E-5 Report

AGE CHARACTERISTICS

Changes in a community’s age groups can indicate future housing needs. Table 3-2 compares Lakeport’s 2012 to 2017 populations by age group. The number of children under 5 years increased by 22.7%, while youth and young adults aged 5 to 19 decreased by 21%. The 20 to 44 age group experienced a modest increase of 6.4%, while middle-aged and older adults from 45 to 64 decreased by 17.2%. The most significant increase was in the senior age group (65 and over)

3. HOUSING NEEDS ASSESSMENT

which increased by 39.7%. The majority of Lakeport's population (55.4%) is 45 years of age or older. The median age in Lakeport increased from 47.5 in 2010 to 51.7 in 2017. During this 2012 to 2017 time period, the most significant increase in new development in the City was the senior multifamily development with 48 units in 2013, which likely has attracted seniors and contributed to the increase in the senior population.

Table 3-2: Age Distribution (2012-2017)

Lakeport	2012		2017		2012-2017 % Change
	Number	Percent	Number	Percent	
Under 5	172	3.6%	211	4.4%	22.7%
5 to 19	961	20.2%	759	15.9%	-21.0%
20 to 44	1,087	22.8%	1,156	24.3%	6.4%
45 - 64	1,595	33.5%	1,321	27.7%	-17.2%
65 and Over	944	19.8%	1,319	27.7%	39.7%
Total	4,759	100%	4,766	100%	0.1%
Lakeport Median Age	47.5		51.7		8.8%
County Median Age	44		47		6.8%

Source: 2008-2012 ACS; 2013-2017 ACS

RACE/ETHNICITY CHARACTERISTICS

Table 3-3 shows the ethnic composition of Lakeport's population. Between 2010 and 2017, the City's racial composition, as reported by ACS, has changed. The largest increases occurred in the Asian, Native Hawaiian, and Pacific Islander group (531.6%), the American Indian and Alaskan Native group (291.1%), and the 'some other race' group (185.2%). All other races experienced a decrease with the largest decrease in the Black or African American group (97.6%) followed by two or more races group (82.8%) and the White group (4.9%). Persons of Hispanic origin, whom may be of any race, increased by 114.4%. It is noted that there is a margin of error with the ACS data, which reflects a sample of the City's population rather than a 100% count of all persons. For example, the Black or African American population appears to have dropped significantly from 2012 to 2017, but a review of the 2016 ACS data (61 persons) and 2018 ACS data (24 persons) indicates that the reduction in the Black or African American population may be less than that reduction shown by just the 2012-2017 data.

Table 3-3: Race and Ethnicity (2012-2017)

Race	2012		2017		Change
	Number	Percent	Number	Percent	
White	4,079	85.7%	3,879	81.4%	-4.9%
Black or African American	83	1.7%	2	0.0%	-97.6%
American Indian and Alaskan Native	45	0.9%	176	3.7%	291.1%
Asian, Native Hawaiian, Pacific Islander	38	0.8%	240	5.0%	531.6%
Some Other Race	142	3.0%	405	8.5%	185.2%
Two or More Races	372	7.8%	64	1.3%	-82.8%
Total	4,759	100%	4,766	100%	0.1%
Hispanic Origin (of any race)	390	8.2%	836	17.5%	114.4%

Source: 2008-2012 ACS; 2013-2017 ACS

Household Characteristics

In 2019, there were 2,105 households in Lakeport, an average annual increase of 0.6% since the 2010 Census. In the previous 2000-2010 decade, households increased modestly (1.8%). It is noted that the number of households has increased despite a decrease in population. This is reflected in the smaller average household size and is likely related to the increased average age of the population.

Table 3-4: Household Trends (2000-2019)

	2000	2010	2019
Lakeport	1,967	2,002	2,105
<i>Change</i>	-	35	103
<i>Percent Change</i>	-	1.8%	5.1%
<i>Annual Percent Change</i>	-	0.2%	0.6%

Source: 2000 and 2010 U.S. Census; DOF, 2019

HOUSEHOLD TYPE

Information collected on household type provides a good base for the analysis of a community's housing needs. The U.S. Census Bureau defines a household as all persons who occupy a housing unit. This may include single persons living alone, families related by blood or marriage, as well as unrelated individuals living together. Persons living in retirement or convalescent homes, dormitories or other group living situations are enumerated separately and are not counted in household population.

Table 3-5 shows household characteristics for the City of Lakeport. As Table 3-6 indicates, family households represented 55.5% of households in 2017, with married-couple families accounting for 38.7% of total households. Non-family households represent 44.5%, with householders living alone representing 37.3% of total households.

Table 3-5: Household Type Characteristics (2017)

Household Type	Number	Percent
Family households (families)	1,190	55.5%
<i>Married-couple families</i>	831	38.7%
Non-family households	955	44.5%
<i>Householder living alone</i>	801	37.3%
Households with person 65+	564	26.3%

Source: 2013-2017 ACS

HOUSEHOLD SIZE

Trends in household size can indicate the growth pattern of a community. Average household size will increase if there is an influx of larger families or a rise in the local birth rate such as may be attributed to more children in a single family or teenage parents living at home. Household size will decline where the population is aging, or when there is an immigration of single residents outside childbearing age.

3. HOUSING NEEDS ASSESSMENT

Table 3-6 shows Lakeport’s households by size in 2017. The average household size in 2017 was 2.15 persons per household for Lakeport and 2.40 persons per household for the County, indicating that larger or extended family/households are increasing at a faster pace in Lake County than in Lakeport. The average household size of Lakeport’s homeowner households is slightly larger (2.19) than renter households (2.10).

Table 3-6: Households by Size (2017)

Household Size	Owner		Renter		TOTAL	
	Number	Percent	Number	Percent	Number	Percent
1 person	426	34.2%	375	41.8%	801	37.3%
2 person	561	45.0%	236	26.3%	797	37.2%
3 person	125	10.0%	64	7.1%	189	8.8%
4 person	12	1.0%	153	17.0%	165	7.7%
5 person	106	8.5%	57	6.3%	163	7.6%
6 person	0	0.0%	13	1.4%	13	0.6%
7 persons or more	17	1.4%	0	41.8%	17	0.8%
TOTAL	1,247	58.1%	898	41.9%	2,145	100%
Average Household Size	2.19		2.10		2.15	

Source: 2013-2017 ACS

HOUSEHOLD INCOME CHARACTERISTICS

Household income level is probably the most significant factor limiting housing choice. Therefore, income patterns have been examined carefully to assess the extent of housing need. Certain population groups (elderly, female householders, farmworkers, etc.) fall disproportionately into low-income groups, so they have been given special attention.

Income Groups

The California Department of Housing and Community Development (HCD) publishes household income data annually for areas in California. Table 3-7 shows the maximum annual income (AMI) level for each income group adjusted for household size for Lake County. Maximum annual incomes for each income group are shown below by household size for Lake County.

Table 3-7: State Income Limits – Lake County (2019)

Income Group	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Extremely Low 0-30% AMI	\$13,650	\$16,910	\$21,330	\$25,750	\$30,170	\$34,590	\$39,010	\$42,800
Very Low 30-50% AMI	\$22,700	\$25,950	\$29,200	\$32,400	\$35,000	\$37,600	\$40,200	\$42,800
Low 50-80% AMI	\$36,300	\$41,500	\$46,700	\$51,850	\$56,000	\$60,150	\$64,300	\$68,450

Moderate 80-120% AMI	\$54,450	\$62,200	\$70,000	\$77,750	\$83,950	\$90,200	\$96,400	\$102,650
Above Moderate 120% + AMI	\$54,450+	\$62,200+	\$70,000+	\$77,750+	\$83,950+	\$90,200+	\$96,400+	\$102,650+

Source: HCD, 2019

Median and Per Capita Income

Median income is the amount that divides the income distribution into two equal groups: one group having incomes above the median, and the other having incomes below. Median household income indicates the income of all individuals in a household, including persons living alone or with unrelated individuals. Per capita income indicates the average annual earnings of an individual.

The median income and per capita data provides a comparison of current income levels in the City of Lakeport and Lake County. Other data, such as lower income, which is defined as 80% of the median County income level, and poverty level income, which is based on federal household and income data, add insight as they relate to households in the bottom one-half of the income distribution. Calculations based on these two measures are used to determine eligibility for most housing subsidy programs.

Table 3-8 identifies 2010 and 2017 per capita and median household income for Lakeport and Lake County. Median household income in Lakeport decreased 0.7% from 2010 to 2017 to total \$39,578. Median household and per capita income in Lakeport were higher than Lake County in 2010 and 2017. Lakeport's median household income in 2017 was 2.2% lower than Lake County's median household income.

Table 3-8: Per Capita and Median Household Income

Year	Lakeport		Lake County	
	Per Capita	Median Household	Per Capita	Median Household
2010	\$27,234	\$39,877	\$21,845	\$38,147
2017	\$28,792	\$39,578	\$23,345	\$40,446
Percent Change	5.7%	-0.7%	6.9%	6.0%

Source: 2010 U.S. Census; 2013-2017 ACS

Lower Income

In 2016, 52.7% of Lakeport's households were in the lower (low, very low and extremely low) income groups, which all earn below 80% AMI as shown in Table 3-7. Of the lower income households, the majority are renters (80% of renter households) versus 30% of owner households. It is noted that the HUD CHAS data used to determine the number of households in each income group does not provided data for the moderate income category (80-120% of median income), but rather provides data for the median (80 to 100%) and above median (above 100%) income groups. Almost three-quarters of Lakeport's owner-occupied households (69.7%) were in the moderate and above moderate income groups. 5.2% of owner households are extremely low income and

3. HOUSING NEEDS ASSESSMENT

14.7% are very low income. As noted, renter households had lower incomes, with 19.5% in the extremely low income group and 37.9% in the very low income group. Just less than a fifth (19.4%) of renter households were in the median and above median income groups.

Table 3-9: Households by Income Group – Lakeport (2016)

Income Group	Renters		Owners		Total*	
	Number	Percent	Number	Percent	Number	Percent
Extremely Low	185	19.5%	60	5.2%	245	11.6%
Very Low	360	37.9%	170	14.7%	530	25.2%
Low	215	22.6%	120	10.4%	335	15.9%
Median	65	6.8%	55	4.8%	120	5.7%
Above Median	120	12.6%	750	64.9%	870	41.3%

Source: 2012-2016 HUD CHAS

Poverty Level Income

Poverty level incomes are computed on a national basis as a part of the U.S. Census. A national index of poverty has been developed considers factors such as family size, number of children, farm/non-farm residences, and income. The definition classifies a family at poverty level if its total income amounts to less than approximately three times the cost of an economic food plan as determined by the U.S. Department of Agriculture. Table 3-10 identifies the number of Lakeport and Lake County families and individuals with incomes below the poverty level. Families and individuals experiencing the most severe income deficiencies are those with incomes that fall below this poverty level and those most likely to need some form of housing assistance.

The 2013-2017 ACS indicates that 173 or 14.5% of all Lakeport families had poverty level incomes or less in 2017, while, in 2010, 115 or 9.0% had poverty level incomes or less. Approximately 17.8% of all Lake County families were classified at or below the poverty level in 2017 and 16.3% were so classified in 2010. The percentage of individuals at or below poverty level in Lakeport in 2010 was 13.4% compared to the County, which had 23.7% of individuals at or below poverty level.

Larger families, low-wage employment, and higher costs of goods and services have fueled the rise in number of families and individuals falling below the level of poverty. Some of the nation's impoverished choose to live in typically less expensive unincorporated areas. However, living within a City allows closer access to goods, services, schools and employment, lessening the need for added transportation and associated costs.

Table 3-10: Families and Individuals Below Poverty Level

Income Group	Poverty Status in 2017			
	Families	%	Individuals	%
Lakeport	173	14.5%	810	17.6%
Lake County	2,853	17.8%	14,398	22.8%

Source: 2013-2017 ACS

EMPLOYMENT

One of the factors that can contribute to an increase in demand for housing is expansion of the employment base. The HCD 6th Cycle Data Package classified 1,997 civilian and non-civilian persons in the Lakeport labor force. Table 3-11 shows the employment and unemployment rates for persons 16 years and older that were in the labor force in 2017. In 2017, the unemployment rate in Lakeport was 6.8%.

Table 3-12 shows 2018 employment by industry for Lakeport and Lake County. In Lakeport, the Educational, Health and Social Services industry employed the most people at 24.2%, followed by Arts, Entertainment, Recreation, Accommodation, and Food Services (10.7%) and Retail Trade (10.6%). Countywide, the Education, Health, and Social Services industry is the largest employment industry (24.2%) followed by Retail Trade (17.4%) Public Administration (15.0%).

Table 3-11: Employment Status for Labor Force - Lakeport (2017)

	Number	Percent
Total Persons In Labor Force	2,114	100%
Employed	1970	93.2%
Unemployed	144	6.8%

Source: 2013-2017 ACS

Table 3-12: Employment by Industry, 2016

Industry	Lakeport		Lake County	
	Number	Percent	Number	Percent
Employed persons 16 years and Over	1,997	100%	22,432	100%
Agriculture, Forestry, Fishing and Hunting, and Mining	144	6.4%	1,445	7.2%
Construction	111	7.8%	1,760	5.6%
Manufacturing	33	4.7%	1,055	1.7%
Wholesale Trade	16	2.5%	571	0.8%
Retail Trade	348	10.6%	2,377	17.4%
Transportation and Warehousing, and Utilities	60	5.1%	1,143	3.0%
Information	32	1.2%	280	1.6%
Finance, Insurance, Real Estate, and Rental and Leasing	138	4.2%	939	6.9%
Professional, Scientific, Management, Admin. and Waste Management	77	8.5%	1,913	3.9%
Educational, Health and Social Services	484	24.8%	5,559	24.2%
Arts, Entertainment, Recreation, Accommodation, and Food Services	172	10.7%	2,403	8.6%
Other Services (Except Public Administration)	82	5.7%	1,276	4.1%
Public Administration	300	7.6%	1,711	15.0%

Source: HCD, 6th Cycle Package

Housing Stock

Table 3-13 identifies total housing units for Lakeport and Lake County in 2000, 2010, and 2019. The rate of construction of housing units in Lakeport is less than the County. While the rate of growth of housing in Lakeport slowed dramatically between 2005 and 2010, as noted in the City’s 5th Cycle Housing Element, the pace of housing production has increased with an increase of 47 units from 2010 to 2019. It is noted that from 2010 to 2019, there have been multiple regional disasters, including flooding and wildfires, that have resulted in damaged and lost housing stock, this has resulted in a Countywide reduction in housing units as shown in Table 3-13.

Table 3-13: Total Housing Units (2000-2019)

Jurisdiction	2000	2010	2019	Percent Change 2000-2019
Lakeport	2,394	2,395	2,442	2.0%
Lake County	32,528	35,492	34,409	-3.1%

Source: 2000 U.S. Census; DOF, 2019

OCCUPIED HOUSING UNITS

Table 3-14 shows total occupied housing units and owner-occupied and renter-occupied housing units for 2010 and 2016. The 2010 U.S. Census reported that the total number of occupied housing units in the City was 2,035, including 1,230 (60.4%) owner-occupied housing units and 805 (39.6%) renter-occupied housing units. In 2016, the percentage of owner-occupied housing units decreased to 54.8%, while renter-occupied housing units saw an increase of approximately 5.6% over the same time period.

Table 3-14: Occupied Housing Units, 2010-2016

Tenure	Lakeport		Lake County	
	Number	Percent	Number	Percent
2010				
Owner	1,230	60.4%	16,737	65.2%
Renter	805	39.6%	8,917	34.8%
2016				
Owner	1,154	54.8%	16,548	63.2%
Renter	951	45.2%	9,646	36.8%

Source: 2010 U.S. Census; HCD, 6th Cycle Data Package

HOUSING UNITS BY TYPE

DOF’s 2019 data indicates that the majority of housing units in Lakeport are single family homes (60.9%). Mobile homes account for 17.3% of the housing stock, while attached single family units account for 4.5% and multifamily units account for 17.3% of the housing stock.

Table 3-15: Housing by Unit Type (2000-2019)

	2000		2019	
	Units	Percent	Units	Percent
Total Housing Units	2,395	100.0%	2,442	100.0%
1-Unit Detached	1,488	62.1%	1,487	60.9%
1-Unit Attached	108	4.5%	109	4.5%
2 – 4 Units	183	7.6%	183	7.5%
5 or More	192	8.0%	240	9.8%
Mobile Home	423	17.7%	423	17.3%

Source: DOF, 2019

VACANCY RATES

The vacancy rate in a community indicates the percentage of units that are vacant and for rent/sale at any one time. It is desirable to have a vacancy rate that offers a balance between a buyer and a seller. The state uses five percent as a rule-of-thumb for a desirable total vacancy rate. A total vacancy rate of less than four percent could represent a shortage of housing units. This is not the case in Lakeport.

In 2017, Lakeport’s total vacancy rate was 16.7% (407 units, see Table 3-16) compared to 16.4% (393 units) in 2010. Lakeport’s vacancy rate is high, compare because there are 155 (6.3%) vacant units “For Seasonal, Recreational, or Occasional Use.” Of the total vacant units in 2019, 0 were for rent, 45 were for sale, 56 were rented or sold but not yet occupied, 155 were for seasonal, recreational, or occasional use, and 151 were classified as other vacant. The percentage of vacant units for rent and vacant units for sale both slightly decreased from 2010-2019. Discounting the vacant units for seasonal, recreational, or occasional use, Lakeport’s vacancy rate would be approximately 10%.

Table 3-16: Vacancy by Type (2010-2017)

	2010		2017	
	Units	Percent	Units	Percent
Total Vacant Units	393	16.4%	407	16.7%
For rent	74	3.1%	0	0.0%
For sale only	65	2.7%	45	1.8%
Rented or sold, not occupied	16	0.7%	56	2.3%
For seasonal, recreational, or occasional use	158	6.6%	155	6.3%
Other vacant ¹	80	3.3%	151	6.2%

Source: 2010 U.S. Census; 2013-2017 ACS

¹ If a vacant unit does not fall into any of the categories specified above, it is classified as “other vacant.” For example, this category includes units held for occupancy by a caretaker or janitor, and units held for personal reasons of the owner.

AGE OF HOUSING STOCK

As illustrated in Table 3-17, approximately 36% of Lakeport’s housing stock was built prior to 1970. Approximately 85% of the City’s current housing stock is over 30 years old. The decade

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with the most building activity was 1970 to 1979 when 671 (26%) of homes were built between 1970 and 1979. In recent years, the pace of building has decreased, with only 63 homes constructed from 2000 to 2009 and 87 constructed from 2010 through 2019. This could indicate the potential need for rehabilitation and general maintenance of these and older units. Between 2010 and 2019, approximately 82 new housing units were constructed, which represent 6.4% of the housing stock in the City.

Table 3-17: Age of Housing Stock

Year Structure Built	Number	Percent
2010 to 2019	87	3.4%
2000 to 2009	63	2.5%
1990 to 2000	223	8.8%
1980 to 1989	571	22.5%
1970 to 1979	671	26.4%
1960 to 1969	300	11.8%
1940 to 1959	434	17.1%
1939 or Earlier	190	7.5%
Total	2,552	100%

Source: 2013-2017 ACS; Lake County assessor data, 2020; City permit data, 2020

BUILDING PERMIT TRENDS

From 2010 through January 2020, the City issued building permits for 82 new residential units, including 21 single family homes, 5 second units, 4 duplexes (8 units), and 48 apartment units (see Table 3-18).

Table 3-18: Recent Construction Trends (2007 – January 2020)

Year Permitted	Single-Family	2-3 units	5+ Units	TOTAL
2010	0	0	0	0
2011	0	0	0	0
2012	1*	0	0	1
2013	1*	0	48	49
2014	2	0	0	2
2015	1	0	0	1
2016	2	0	0	1
2017	0	0	0	0
2018	1	0	0	1
2019	3	0	24	28
Totals	9 single family units 2 secondary units	0	72	83

*Second units

Source: City of Lakeport, 2020

EXISTING HOUSING CONDITIONS

The U.S. Census provides limited data that can be used to infer the condition of Lakeport's housing stock. The Census reports on whether housing units have complete plumbing and kitchen facilities and whether units lack a source of household heat. Since only a very small percentage of all housing units in Lakeport lack complete plumbing facilities, kitchen facilities, or a household fuel source (see Table 3-19), these indicators do not reveal much about overall housing conditions. Further, these indicators may overlap meaning that units that lack complete kitchen facilities may also lack complete plumbing or a heating source.

Table 3-19: Age of Housing Stock & Housing Stock Conditions

	Number	Percent
Total Housing Units	2,552	100%
Built 1970 or earlier	924	36.2%
Units Lacking Complete Plumbing Facilities	456	2.3%
Units Lacking Complete Kitchen Facilities	456	2.3%
No house heating fuel or wood fuel only	17	0.6%
Median Year Built (Total Housing Stock)	1975	

Source: US Census ACS, 2013-2017

Since housing stock age and condition are generally correlated, one Census variable that provides an indication of housing conditions is the age of a community's housing stock. As shown in Table 3-19, as of 2017, the median year built for all housing units in Lakeport was 1975. Over 6.3 percent of Lakeport's housing stock was built after 2000 and 8.7 percent was built between 1990 and 1999. The age of housing stock often indicates the potential for a unit to need rehabilitation or significant maintenance. Most of Lakeport's housing stock (approximately 85 percent) is more than 40 years old and likely needs moderate to significant rehabilitation. It is estimated that approximately 24 percent of the City's housing stock built prior to 1960 may need significant repairs including replacement or refurbishing of roofs, siding, and windows as well as interior improvements including replacing or upgrading the plumbing and electric wires and outlets.

The City's code enforcement staff has indicated that while the majority of homes in the City are in good condition and many older homes have been well-maintained, the City's older housing stock needs maintenance and there are several neighborhoods that need investment. Citywide, it is estimated about 25% of homes built prior to 1995 need roof maintenance or replacement and approximately 25 to 30% of homes built prior to 1990 would benefit from energy upgrades, including insulation and window maintenance or replacement. The Forbes Creek neighborhood and Beach Lane area both have housing units that exhibit deferred maintenance and require rehabilitation and re-investment. The City is in the process of providing infrastructure improvements for the Forbes Creek neighborhood and conducting additional analysis to determine the extent of housing needs.

OVERCROWDED HOUSING UNITS

Although there is more than one way of defining overcrowded housing units, the definition used in the Housing Element is 1.01 or more persons per room, the same definition used in the U.S. Census. It should be noted that kitchenettes, strip or Pullman kitchens, bathrooms, porches, balconies, foyers, halls, half-rooms, utility rooms, unfinished attics, basements, or other space for storage are not defined as rooms for Census purposes.

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Overcrowded households are usually a reflection of the lack of affordable housing available. Households that cannot afford housing units suitably sized for their families are often forced to live in housing that is too small for their needs, which may result in poor physical condition of the dwelling unit.

The City of Lakeport had no units of overcrowded housing based on the HCD 6th Cycle Data Package, compared to 86 units of overcrowded housing in 2000 and 35 units in 2010. It is noted that the ACS data does not represent a 100% count of the City’s population and there is a margin of error associated with the ACS data, resulting in the potential for overcrowded units to be undercounted. However, the data from 2000 through 2016 shows a trend in reduced household sizes and a reduction in overcrowded units.

Table 3-20: Overcrowded Housing Units (2016)

	Total Number	Total Percent	Owner-Occupied		Renter-Occupied	
			Number	Percent	Number	Percent
Occupied Housing Units	2,105	100%	1,154	100%	951	100%
Occupants Per Room						
1.00 or Less	2,105	100.0%	1,154	100.0%	951	100.0%
1.01 to 1.50	0	0.0%	0	0.0%	0	0.0%
1.51 or More	0	0.0%	0	0.0%	0	0.0%

Source: HCD, 6th Cycle Data Package

Housing Costs

Several types of data are available that can be used to assess changing housing prices. They include median housing value, rental cost and rental cost in terms of available income. Other types of data include costs of housing production (including land and materials, development costs, City fees, etc.), housing sale prices for new and existing homes, the cost of financing, and financing options. Lakeport’s housing costs are discussed later in this chapter.

HOUSING VALUE

Table 3-21 indicates median housing value for homes in Lakeport and Lake County. Value is defined as the amount for which property, including house and lot, would sell if it were on the market at a given point in time. As shown in Table 3-22, the median value for housing units in Lakeport during 2010 was \$251,400. Lake County had a lower median (\$200,500). In 2017, the reported median home value in Lakeport decreased to \$199,900, which represents a 20% decrease from 2010. Lake County saw a similar decrease in home values (9%).

Table 3-21: Median Home Value - Lakeport and Lake County (2000-2017)

Area	2000	2010	2017	2010-2017 Increase (%)
Lakeport	\$116,219	\$251,400	\$199,900	-20%
Lake County	\$105,602	\$200,500	\$182,000	-9%

Source: 2013-2017 ACS

Table 3-22 indicates the value of specified owner-occupied housing units within Lakeport in 2017. Of the 731 owner-occupied units, approximately 13% were in the \$99,999 and under price range, 454 (62.1%) were in the \$100,000 to \$299,999 price range, 175 (23.9%) were in the \$300,000 to \$499,999 price range, and 11 units were valued at \$1,000,000 or more.

Table 3-22: Value of Specified Owner-Occupied Housing Units (2017)

Value of Owner-Occupied Housing Units	Number of Units	Percent of Total
Less than \$50,000	53	7.3%
\$50,000 to \$99,999	38	5.2%
\$100,000 to \$299,999	454	62.1%
\$300,000 to \$499,999	175	23.9%
\$500,000 to \$999,999	0	0.0%
\$1,000,000 or More	11	1.5%

Source: 2013-2017 ACS

Table 3-23 includes sales data Based on a review of housing data on Zillow.com for residential sales in Lakeport and Lake County from 2013 through 2019. During the 2013-2019 time period, median home prices in Lakeport reached a high of \$296,952 in 2019 and a low of \$184,300 in 2014. In 2013, the average home sales price was \$204,000 in Lakeport and \$183,600 in Lake County.

Table 3-23: Residential Sales (2013-2019)

Area	Units Sold	Average Sales Price	% Change in Median Price from Previous Year
2013			
Lakeport	188	\$204,000	--
Lake County	1,227	\$183,600	--
2014			
Lakeport	165	\$184,300	-9.7%
Lake County	1,078	\$159,300	-13.2%
2015			
Lakeport	173	\$184,500	0.1%
Lake County	1,185	\$167,600	5.2%
2016			
Lakeport	193	\$194,200	5.3%
Lake County	1,358	\$217,400	29.7%
2017			
Lakeport	189	\$199,900	2.9%

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Lake County	1,356	\$182,000	-16.3%
2018			
Lakeport	181	\$222,900	11.5%
Lake County	1,260	\$245,700	35.0%
2019			
Lakeport	191	\$296,952	33.2%
Lake County	1,164	\$254,252	3.5%

Source: Zillow, 2020

RENTAL HOUSING COSTS

Based on a review of rental ads on Zillow.com, the median rent in Lakeport is \$1,400 per month. Rents range from \$1,350 to \$1,600, with the majority of units under \$1,500. The range of rents and median rates by unit size is shown in Table 3-24.

Table 3-24: Lakeport Rental Costs (2020)

Bedroom Type	Units Surveyed	Range	Median Rent (2020)
1 bed	2	\$725 - \$850	\$787.50
2 bed	12	\$875 - \$1,500	\$1,057.50
3 bed	5	\$1,095-\$1,600	\$1,500

Source: Zillow (1/7/2020, 5/16/20)

HOUSING AFFORDABILITY

Table 3-25 identifies the maximum monthly housing costs affordable to households in Lakeport by income group. Affordability is based on a household paying up to 30% of their monthly income toward housing.

Tables 3-25 and 3-26 show the maximum rents and sales prices, respectively, that are affordable to very low, low, moderate, and above moderate-income households. Affordability is based on a household spending 30% or less of their total household income for shelter. Affordability is based on the maximum household income levels established by HCD (Table 3-7). Maximum affordable sales price is based on the following assumptions: 5% interest rate, 30-Year Fixed loan, downpayment on a sliding scale of \$3,000 to \$15,000 based on income, 1.15% property tax, 3.5% closing costs, and homeowners insurance.

Compared to the rental rates in Table 3-24, the median rents in Lakeport are not affordable to extremely low and very low income households (four person households and smaller). The large majority of available rental units in Lakeport are two and three bedroom units, with median rents of \$835/mo and \$1,200/mo, respectively. These units are generally affordable for low income households with four or more persons and all moderate and above moderate income households. The median sales price in 2013 was affordable to larger low income households and to all moderate and above moderate income households. However, there is limited inventory of for sale units and often the least expensive units require repair or rehabilitation.

As shown in Table 3-27, 66.3% of renters in Lakeport overpay for housing, with 16.2% of renters in the extremely low income group severely overpay for housing (over 50% of their monthly income). Approximately 31.6% of all home owners in Lakeport overpay for housing, with 66.7% of extremely low income and 55.9% of very low income home owners severely overpaying for housing.

**Table 3-25: Maximum Monthly Housing Costs by Income Group
Lake County (2019)**

	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Extremely Low	\$341	\$422	\$533	\$643	\$754	\$864	\$975	\$1,070
Very Low	\$567	\$648	\$730	\$810	\$875	\$940	\$1,005	\$1,070
Low	\$907	\$1,037	\$1,167	\$1,296	\$1,400	\$1,503	\$1,607	\$1,711
Moderate	\$1,361	\$1,555	\$1,750	\$1,943	\$2,098	\$2,255	\$2,410	\$2,566
Above Moderate	\$1,361+	\$1,555+	\$1,750+	\$1,943+	\$2,098+	\$2,255+	\$2,410+	\$2,566+

Source: De Novo Planning Group, 2020

Table 3-26: Housing Affordability by Income Group

	One Person		Two Person		Four Person		Six Person	
	Max. Home Sale Price	Max. Monthly Rent or Housing Cost	Max. Home Sale Price	Max. Monthly Rent or Housing Cost	Max. Home Sale Price	Max. Monthly Rent or Housing Cost	Max. Home Sale Price	Max. Monthly Rent or Housing Cost
Extremely Low	\$46,883	\$341	\$57,331	\$422	\$85,714	\$643	\$100,000	\$864
Very Low	\$77,967	\$567	\$88,414	\$648	\$109,310	\$810	\$126,078	\$940
Low	\$126,653	\$907	\$143,421	\$1,037	\$176,829	\$1,296	\$203,529	\$1,503
Moderate	\$190,044	\$1,361	\$215,068	\$1,555	\$265,115	\$1,943	\$305,359	\$2,255
Above Moderate	\$190,044+	\$1,361+	\$215,068+	\$1,555+	\$265,115+	\$1,943+	\$305,359+	\$2,255+

Source: De Novo Planning Group, 2020

*Assumes \$3,000 downpayment for extremely low, \$5,000 down payment for very low, \$10,000 down payment for low, and \$15,000 downpayment for moderate. Assumed 3.5% closing costs, 30-year loan with 5% interest rate, and monthly housing costs (utilities, taxes, etc.) at 8.5% of monthly income.

Table 3-27: Households by Income Level and Overpayment

Income Group	Owners	Renters	Total
Extremely Low	60	185	245
Percent with Cost Burden >30%	91.7%	64.9%	95.0%
Percent with Cost Burden >50%	66.7%	16.2%	37.8%
Very Low	170	360	530

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Income Group	Owners	Renters	Total
Percent with Cost Burden >30%	82.4%	93.1%	89.6%
Percent with Cost Burden >50%	55.9%	34.7%	41.5%
Low Income	120	215	335
Percent with Cost Burden >30%	62.5%	67.4%	65.7%
Percent with Cost Burden >50%	20.8%	0%	7.5%
Total Extremely Low, Very Low, and Low Income Households Paying >30%	77.1%	78.9%	78.4%
Moderate and Above Moderate	805	185	990
Percent with Cost Burden >30%	11.8%	16.2%	12.6%
Percent with Cost Burden >50%	1.9%	0%	1.5%
Total Households	1,155	950	2,105
Percent with Cost Burden >30%	31.6%	66.3%	47.3%
Percent with Cost Burden >50%	15.2%	16.3%	15.7%

Source: HUD, 2012-2016 CHAS

Affordability and Overpayment – Renter Households

Further insight into the rental situation in Lakeport is provided through 2013-2017 ACS data when reviewing the number of households identified as paying more than 30% of their income for rent. Table 3-28 illustrates that a condition of overpayment exists in every age group. It is noted that this data was not computed for 25% of households, so may undercount overpayment for householders aged 35-64 and 65 and over, so these groups may have a higher rate of overpayment than is reported.

Table 3-28: Renters Overpaying - By Age Group, 2017

Age of Householder	Total Renters	Number paying over 30%*	Percent of Total
15-24	106	106	100%
25-34	282	193	68.4%
35-64	274	140	51.1%
65 and over	236	79	33.5%

*Overpayment was not computed for 19% of 35-64 and 6% of 65 and over age householders
Source: 2013-2017 ACS

Table 3-29 underscores the commonly accepted reality that overpayment conditions occur most frequently for lower-income households. The majority of households earning less than \$35,000 per year overpay for housing, with the highest incidence of overpayment (90.9%) among households earning \$20,000 to \$34,999 per year.

Table 3-29: Renters Overpaying by Household Income (2017)

Income Range	Total Renters	Percent Paying Over 30%
Less than \$20,000	306	71.6%
\$20,000 - \$34,999	307	90.9%
\$35,000 - \$49,999	44	0%
\$50,000 - \$74,999	94	17.4%
\$75,000 and up	80	16.3%

Source: 2013-2017 ACS

Affordability and Overpayment – Owner Households

As with most communities, the location of the home is one of the biggest factors with regards to price. Compared to the rest of the state, housing in Lakeport is still relatively affordable. However, housing is not affordable for all income levels, particularly the very-low and low-income households. According to the 2013-2017 ACS, 392 owner-occupied households are paying 30% or more of their income toward their mortgage and other ownership expenses such as taxes and insurance. Table 3-30 shows that the most affected age group (percentage) is the 65 and over age group, which includes the largest number and the largest percentage of households overpaying.

Table 3-30: Owners Overpaying by Age Group, 2017

Age of Householder	Total Owners	Paying Over 30%	Percent of Total
15-24	0	0	0%
25-34	30	0	0%
35-64	606	191	31.5%
65 and Over	611	201	32.9%

Source: 2013-2017 ACS

Table 3-31 shows that the majority of owner-occupants paying more than 30% of their income on owner-costs earn less than \$50,000 annually, with the highest rate of overpayment (89.4%) occurring among households earning less than \$20,000 per year.

Table 3-31: Owners Overpaying by Household Income, 2017

Income Range	Total Owners	Percent Paying over 30%
Less than \$20,000	217	89.4%
\$20,000 - \$34,999	104	56.7%
\$35,000 - \$49,999	143	60.8%
\$50,000 - \$74,999	204	16.2%
\$75,000 and up	579	3.3%

Source: 2013-2017 ACS

Alternatives to traditional single-family housing

New housing alternatives often evolve into the market when the traditional housing supply cannot meet the needs of all segments of the population. Until the late 1970's, single-family housing had been in demand across the country as an investment, a hedge against inflation, and as a preferable place to raise a family. However, with the changing economy, including high interest rates, moderate and lower income groups and first-time homebuyers were priced out of the traditional single-family housing market in the early 1980's. The interplay of these factors led to a search for alternatives to traditional single-family housing. Condominiums, mobile homes, and manufactured housing are among the alternatives that are present today.

TOWNHOMES AND CONDOMINIUMS

Townhomes and condominiums have been offered as a moderately priced, low-maintenance housing alternative for single, retired persons, "empty nesters," and households desiring less maintenance than a traditional single-family home. This type of housing has enabled a larger segment of the population to achieve home ownership. However, monthly fees for exterior maintenance, management, and other common services often increase monthly costs, negating some of the savings derived from the relatively lower selling price of certain condominiums.

According to the Department of Finance, there were a total of 109 single family attached units, which include halfplex, townhome, and condominium units, in Lakeport in 2019.

MOBILE HOMES

Mobile homes are a relatively inexpensive housing alternative. Since mobile homes are prefabricated, they require less on-site labor than construction of a conventional house. Buyers of mobile homes include not only the elderly, but also working families and individuals who choose this alternative over traditional single-family residences.

Department of Finance data from 2019 states that there are 423 mobile homes in the City, which is 17.3% of the total housing units in Lakeport. A search of realtor.com revealed that in February 2020, there were 31 mobile homes listed for sale in Lakeport. The listed prices range from \$30,000 to \$200,000. The median list price was \$79,900.

The HCD 6th Cycle Data Package and the most recent Census data do not provide updated information for mobile homes by year or decade built.

MANUFACTURED HOUSING

Manufactured and factory-built homes offer another option for inexpensive housing. All manufactured homes built since 1976 must conform to the National Manufactured Home Construction and Safety Standards, a national uniform building code commonly called the "HUD Code," and administered by the U.S. Department of Housing and Urban Development.

The HUD code regulates home design and construction, durability, fire resistance, energy efficiency, and the installation and performance of heating, plumbing, air conditioning, thermal and electrical systems.

Many manufactured homes are indistinguishable from their site-built counterparts in construction and appearance. In California, from 65 to 70% of new manufactured homes sold are sited on lots

in urban, suburban or rural neighborhoods. Facilitating this opportunity are state laws (Government Code Sections 65852.3 and 65852.4), which allow manufactured homes to be sited on any residential lot, providing the home meets local development standards.

Also, pursuant to California Civil Code Section 714.5, covenants, conditions and restrictions adopted on or after January 1, 1998 cannot forbid the siting of a manufactured home on a residential lot, as long as the home can meet the same architectural standards as site-built homes in the neighborhood.

The cost of the average new dual-section manufactured home sold in California during 2019 was \$110,400. During 2019, construction costs per square foot for a new manufactured home averaged \$45 nationwide compared to \$85.7 per square foot for a comparable site-built home (national average). In 2019, the average sales price of a new manufactured home sold in the U.S. was \$81,700, with a cost of \$45 per square foot.

Today's manufactured homes are growing in popularity with local governments for use in urban in-fill and redevelopment projects. Manufactured housing is attractive for this use because of its cost effectiveness and the ability to design a home compatible with the local neighborhood that will fit in any lot with relative ease.

SPECIAL HOUSING NEEDS OF OTHER GROUPS

ELDERLY

Various portions of the Housing Element describe characteristics of the elderly population, the extent of their needs for subsidized housing, complexes developed especially for that group, and City provisions to accommodate their need. The elderly population (persons 65 and older) in Lakeport is shown in Table 3-32. From 2010 to 2017, the senior population increased by 40% from 944 to 1,319 persons.

Table 3-32: Senior Population by Age

	2010		2017		Percent Change
	Number	Percent	Number	Percent	
65 to 74 years	536	56.8%	704	53.4%	31.3%
75 to 84 years	232	24.6%	440	33.4%	89.7%
85 years and over	176	18.6%	175	13.3%	-0.6%
TOTAL	944	100%	1,319	100%	39.7%

Source: 2010 U.S. Census; US Census, 2013-2017ACS

As shown in Table 3-33, the number of householders 65 years and over in Lakeport in 2017 was 847 (39.5%). In 2017, approximately 28.5% of senior households owned their home). Seniors often prefer affordable units in smaller single-story or accessible multi-story structures, close to health facilities, services, transportation, and entertainment. As shown in Table 3-34, the total number of householders 65 years and over increased by 36.4% to 847 households by 2017.

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Table 3-33: Householder 65 Years and Over (2017)

2010	Age 65+ Householders	Percent of All Householders	Owner Householders 65+		Renter Householders 65+	
			Number	% of Senior Householders	Number	% of Senior Householders
Lakeport	847	39.5%	611	72.1%	236	27.9%
Lake County	8,885	33.7%	7,308	82.2%	1,577	17.7%

Source: US Census, 2013-2017 ACS

Table 3-34: Senior Household Growth

	2010	2017
Number	621	847
Percent Change		36.4%
Annual Percent Change		5.2%

¹Households with one or more people 65 years and older

Source: US Census, 2010; US Census, 2013-2017 ACS

Based on HUD 2000 CHAS data (which has not been aggregated in recent years to identify income by age group), approximately half of senior households, 50%, are in the lower income groups (extremely low, very low and low) and 15% of senior households are in the extremely low income group. Table 3-35 summarizes senior households by income group. Both the projected growth levels of senior households and the lower income levels of senior households indicates that there will be a demand for 15 to 20 new senior housing units by 2019 and that a portion of the City's regional housing needs allocation should be developed for senior households. Anecdotally, the demand for senior housing is higher than 15 to 20 units. The developer of the affordable Bella Vista Apartments (2014) indicated that they have a waiting list and there is demand for another affordable senior complex in Lakeport. Resources available for persons with developmental disabilities are discussed in Chapter 5.

Table 3-35: Senior* Households by Income and Tenure

Income Level	Owner		Renter		TOTAL
	Number	Percent	Number	Percent	
Extremely Low	75	11%	28	4%	15%
Very Low	60	9%	52	7%	16%
Low	125	18%	14	2%	20%
Moderate and Above Moderate	315	45%	32	5%	50%
Total	575	83%	126	18%	100%

Source: HUD, 2000 (special aggregation of 2000 Census data) – an updated aggregation of 2010 data is not available

*For this special data aggregation, senior households are considered those aged 62 and over

LARGE FAMILIES

Large families are defined as those families containing five or more persons. Income is a major factor that constrains the ability of families to obtain adequate housing. Larger units are more expensive and most of the units with more than three bedrooms are single-family homes, instead of multi-family rental units, and not usually abundantly available. Resources available for large families are discussed in Chapter 5.

Table 3-36 provides 2016 comparative information on the number and percentage of large families within Lakeport and Lake County. Approximately 5.8% of families in Lakeport are considered large families.

Table 3-36: Large Families, 2016

	Number of Large Families	Percent of Total Families
Lakeport	112	5.8%
Lake County	1,902	7.6%

Source: HCD, 6th Cycle Data Package

Only 8 percent of housing units in Lakeport have four or more bedrooms.

Of the large households identified in Table 3-36, 91 own their homes and 21 rent based on the 2018 HCD 6th Cycle Data Package. However, it is likely that there are a few large family renter households in the City. Large households that rent or own have a relatively even rate of housing problems; “any housing problem” includes overcrowding, units lacking complete kitchen facilities, and units lacking complete plumbing facilities.

Based on the US Census 2013-2017 ACS data, the supply of owner and rental units with 3 and more bedrooms greatly exceeds the number of larger households (see Table 3-37). While it does not appear that additional housing units are needed to accommodate large families, it is recommended that affordable housing developments for families continue to be encouraged to provide a portion of the units as three or four bedroom units.

Table 3-37: Household Size versus Bedroom Size (2017)

Tenure	5 Person Households			6 Person and Larger Households		
	3 BR Units	Households	Excess	4+ BR Units	Households	Excess
Owner	614	106	720	163	17	146
Renter	87	57	30	42	13	29

Source: HCD, 6th Cycle Data Package; US Census, 2013-2017 ACS

SINGLE PARENT HOUSEHOLDS

Female-Headed Households. Table 3-38 identifies total households in Lakeport and Lake County, female-headed households with no husband present, and female-headed households with own children under 18, no husband present (2013-2017 ACS data). Of the 1,190 households in Lakeport, 305 (25.6%) are female-headed with no husband present and 230 (19.3%) are female-headed with own children and no husband present. Lake County’s percentage of female-headed single parent households in 2017 was lower than Lakeport’s at 22.0%.

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Table 3-38: Female Headed Households (2017)

	Total Householders	Female Headed Households No Husband Present	Percent of all Households	Female Headed Households With Own Children Under 18, No Husband Present	Percent of all Households
Lakeport	1,190	305	25.6%	230	19.3%
Lake County	15,952	3,509	22.0%	2,014	12.6%

Source: 2013-2017 ACS

Male-Headed Households. Table 3-39 indicates male-headed households with and without children within Lakeport and Lake County in 2017. Male-headed households in Lakeport with no wife present totaled 54 (4.5%), and male-headed households with their own children and no wife present totaled 54 (4.5%). Lake County's percentage of male-headed households with or without children was more than the City's. Although the housing needs of female-headed households are usually greater than those of male-headed households, it is important to recognize the housing needs of both groups because male-headed households also have only one income. A larger percentage of female-headed households have children and females typically have lower incomes than males.

Table 3-39: Male Headed Households (2017)

	Total Households	Male Headed Households No Wife Present	Percent of all Households	Male Headed Households With Own Children Under 18, No Wife Present	Percent of all Households
Lakeport	1,190	54	4.5%	54	4.5%
Lake County	15,952	1,590	10.0%	915	5.7%

Source: 2013-2017 ACS

With a total of 284 single parent households in Lakeport, housing that is proximate to schools and daycare facilities may assist in addressing some needs specific to this population. Resources available for households with children, including single-parent households, are discussed in Chapter 5.

FARM WORKERS

There is no specific Census data available for the job category of "Farm Worker." The Census groups "Agriculture, Forestry, Fishing and Hunting, and Mining" in a single category; and there is no method for separating individual classifications from the grouping.

The HCD 6th Cycle Data Package identified that there are 2,762 workers and 301 farms County-wide, based on the 2012 USDA Census of Agriculture. The 2017 USDA Census of Agriculture identified 636 farms County-wide, of which 174 hired one or more workers. The 2017 USDA data identified 1,543 hired agricultural workers; of these workers, 508 worked 150 or more days per year and 1,035 workers worked less than 150 days per year.

There are 123 workers reported in Lakeport's "Agriculture, Forestry, Fishing and Hunting, and Mining" industry group, according to the 2013-2017 ACS. This represents 6.2% of the City's overall civilian labor force of 1,971. The number of persons employed in agricultural, fishing, hunting, and mining industries has decreased over the last two decades. In 2010, this group represented 1.7% (34) of the City's overall labor force, which was a decline from 2.3% (44) in 2000.

Aytch Plaza, which is located in Kelseyville, provides affordable housing and farmworker housing. Aytch Plaza includes two, three, and four-bedroom houses. Five of the houses are available to any low-income family, and six are reserved for low-income farmworker families. Oak Hill, a 40-unit farmworker apartment complex is located in Kelseyville. The 2012 Lake County Housing Element identified that the Oak Hill complex has on-going vacancies and has a difficult time filling its units due to the requirement to document legal status. Farm worker housing located near services is a critical need of farm workers and their families. In the unincorporated portion of Lake County, Middletown, Kelseyville, and some of the communities around Clear Lake have available services. Although some growers provide units for farm workers on their farms and ranches, there is more demand than supply. Despite the passage of a County zoning ordinance to facilitate the development of farm worker housing on farmlands, Farm Bureau members report that the County process continues to be cumbersome and fraught with delays and red tape.

Lakeport is anticipated to continue to urbanize in the future and additional farming operations are not projected within City limits. The majority of farmworkers in Lake County are employed in the unincorporated area and their needs will be addressed in the Lake County Housing Element. It is therefore anticipated that the need for farmworker housing in Lakeport will not increase in the coming years. Resources available for farm workers are discussed in Chapter 5.

DISABLED POPULATION

A "disability" includes, but is not limited to, any physical or mental disability as defined in California Government Code Section 12926. A "mental disability" involves having any mental or psychological disorder or condition, such as mental retardation, organic brain syndrome, emotional or mental illness, or specific learning disabilities that limits a major life activity. A "physical disability" involves having any physiological disease, disorder, condition, cosmetic disfigurement, or anatomical loss that affects body systems including neurological, immunological, musculoskeletal, special sense organs, respiratory, speech organs, cardiovascular, reproductive, digestive, genitourinary, hemic and lymphatic, skin, and endocrine. In addition, a mental or physical disability limits a major life activity by making the achievement of major life activities difficult including physical, mental, and social activities and working.

Physical, mental, and/or developmental disabilities could prevent a person from working, restrict a person's mobility, or make caring for oneself difficult. Therefore, disabled persons often require special housing needs related to potential limited earning capacity, the lack of accessible and affordable housing, and higher health costs associated with disabilities. Additionally, people with disabilities require a wide range of different housing, depending on the type and severity of their disability. Housing needs can range from institutional care facilities to facilities that support partial or full independence (i.e., group care homes). Supportive services such as daily living skills and employment assistance need to be integrated in the housing situation. The disabled person with a mobility limitation requires housing that is physically accessible. Examples of accessibility in housing include widened doorways and hallways, ramps, bathroom modifications (i.e., lowered

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countertops, grab bars, adjustable shower heads, etc.) and special sensory devices including smoke alarms and flashing lights.

The 2016 ACS data provided in HCD’s 6th Cycle Data Package indicated that for individuals over the age of 5, approximately 29% of the population of Lakeport had some form or type of disability that may impede their ability to earn an adequate income or find suitable housing accommodations to meet their special needs. Therefore, based on the 2016 HCD 6th Cycle Data Package, many in this group may be in need of housing assistance. Of persons 16 to 64, 96 (25.5%) are employed with a disability and 281 (74.5%) are unemployed with a disability. Of persons 65 or more, 370 have a disability. Table 3-40 identifies disabled persons by age and employment status.

Table 3-40: Disabled Persons by Age and Employment Status - 2016

	Ages 16 to 64		Ages 65 Plus		Total	
	Number	Percent	Number	Percent	Number	Percent of Disabled Persons
Employed with Disability	96	12.3%	N/A	N/A	96	12.9%
Unemployed with Disability	281	35.9%	N/A	N/A	281	37.8%
Total	377	100% (52.7% of population age 16-64)	370	100% (47.3% of population age 65+)	744	100% (15.5% of total population over age 5)

Source: HCD 6th Cycle Data Package, 2016
N/A = Not Applicable

The ACS Census defined six types of disabilities including hearing, vision, cognitive, ambulatory, self-care and independent living difficulty. A disability is defined as a mental, physical, or health condition that lasts over six months and persons may have more than one disability. According to the 2016 HCD 6th Cycle Data Package, there were 1,589 disabilities in Lakeport (see Table 3-41). However, this is not to say that there were 1,589 disabled persons in the city, as persons may have more than one disability. Table 3-41 identifies disabilities by type of disability. The most predominant disabilities are ambulatory difficulties, representing 32.5% of disabilities, and self-care difficulties, representing 19.6% of disabilities.

Those categorized as disabled due to mental disorder of some nature do not necessarily require physical improvements to housing. Social Services organizations offer assistance with medical attention and counseling for those in need of these types of services. Resources available for persons with developmental disabilities are discussed in Chapter 5.

Table 3-41: Disabilities by Disability Type

	Persons Ages 5-64		Persons Ages 65 +		Total	
	Number	Percent	Number	Percent	Number	Percent
Hearing Difficulty	128	31.1%	69	18.6%	197	12.4%
Vision Difficulty	30	7.3%	34	9.2%	64	4.0%

Cognitive Difficulty	121	29.4%	106	28.6%	227	14.3%
Ambulatory Difficulty	247	60.0%	269	72.7%	516	32.5%
Self-Care Difficulty	157	38.1%	155	41.9%	312	19.6%
Independent Living Difficulty	176	42.7%	97	26.2%	273	17.2%
Total Disabilities	412	100%	370	100%	1,589	100%

Source: HCD 6th Cycle Data package

PERSONS WITH A DEVELOPMENTAL DISABILITY

The persons with a disability category includes persons with developmental disabilities. "Developmental disability" means a disability that originates before an individual attains age 18 years, continues, or can be expected to continue, indefinitely, and constitutes a substantial disability for that individual." This term includes mental retardation, cerebral palsy, epilepsy, autism, and disabling conditions found to be closely related to mental retardation or to require treatment similar to that required for individuals with mental retardation, but does not include other handicapping conditions that are solely physical in nature.

While the US Census reports on mental disabilities, which include developmental disabilities, the Census does not identify the subpopulation that has a developmental disability. The California Department of Developmental Services (DDS) maintains data regarding people with developmental disabilities, defined as those with severe, life-long disabilities attributable to mental and/or physical impairments. The DDS data is reported by zip code, so the data reflects a larger area than the City of Lakeport, however the majority of the population within the zip code resides in Lakeport. The DDS data indicates that approximately 152 developmentally disabled persons reside in zip code 95453 (Table 3-43). Of these persons, 56 have special housing needs (independent living or care facilities) as shown in Table 3-44 and 87 live at home with a parent or guardian. Resources available for persons with developmental disabilities are discussed in Chapter 5.

Table 3-43: Persons with a Developmental Disability by Age

Zip Code	0-17	18+	Total
95453*	53	99	152

Source: HCD 6th Cycle Data Package

*Data for the zip code also includes unincorporated areas adjacent the City

Table 3-44: Persons with a Developmental Disability by Residence Type

Zip Code	Community Care Facility	Home of Parent/Guardian	Independent Living	Intermediate Care or Skilled Nursing Facility	Other	TOTAL
95453*	<11	87	56	0	<11	>143

Source: HCD 6th Cycle Data Package

*Data for the zip code also includes unincorporated areas adjacent the City

SUMMARY OF THE HOUSING NEEDS OF THE DISABLED

Approximately 52.7% of the City's population aged 16-64 has a disability and approximately 47.3% of the City's population aged 65 and older has a disability. While HUD CHAS data has not been provided in recent years, historically disabled renter households reported a higher incidence of housing problems, such as overcrowding, overpayment, or lacking full kitchen or plumbing facilities than disabled owner households. 31% of disabled households were in the extremely low or very low income brackets, 21% in the low income bracket, and 48% in the moderate or above moderate income brackets. There is limited housing available specifically for disabled persons in Lakeport; there are no apartment complexes, group homes, or care facilities that specifically serve the disabled or developmentally disabled populations. In-home services for eligible disabled persons are available to Lakeport residents, as described in Chapter 5. While most developmentally disabled persons either live at home or in an independent living environment (see Table 3-44), there is a need for care facilities to accommodate persons with disabilities, including developmental disabilities, who need more assistance than is provided either in a home or independent living environment. As described in Chapter 5, concurrent with the adoption of this Housing Element, the City is amending the Zoning Ordinance to permit small group homes by right in all residential zoning districts and to permit large group homes by right in the R-3 zoning district.

Approximately 26% of households in Lakeport have a disabled member. Applying this figure to the RHNA, approximately 39 new households will have one or more disabled members during the 2014-2019 planning period and approximately four of these new households may have a developmentally disabled member. Households with disabled members may overlap with other special housing needs groups, such as the elderly and large families. Housing units appropriate to accommodate physical, sensory, and/or developmental disabilities may be needed for up to approximately 16 of the new disabled households projected during the planning period.

HOMELESS

The federal definition of a homeless person per the McKinney Act, P.L. 100-77, Sec. 193(2), 101 Stat. 485 (1987) is cited as:

“ a person is considered homeless when the person or family lacks a fixed regular night-time residence, or has a primary night-time residence that is a supervised publicly-operated shelter designated for providing temporary living accommodations or is residing in a public or private place not designated for, or ordinarily used as, a regular sleeping accommodation for human beings.”

The Continuum of Care homeless data, a regional or local planning body consisting of service providers, lead agencies and individuals that work together to assist adults, youth and families experiencing homelessness and to provide the services needed to help such individuals move into transitional and permanent housing, with the goal of long-term stability, provided in the HCD 6th Cycle Data Package identifies that there are 401 homeless persons in the five-county Continuum of Care area, which includes Lake County. The data based on the 2017 Continuum of Care indicates a slight increase from the 2015 estimate of 315 homeless persons. Of the total homeless persons in the Continuum of Care area, 96% were unsheltered and 45% are chronically homeless. Of the 401 homeless persons, 71% are individuals and 27% are in families. Based on Lakeport's pro-rated share (2.5%) of the total population of the five-county area, approximately 10 of these

homeless persons were likely to have been located in Lakeport. However, in 2020, the Continuum of Care homeless data identified that there are 98 homeless persons in the City of Lakeport. While this represents a disproportionate amount of homeless in the City of Lakeport compared to the pro-rated share of total population of the five-county area, 39% percent of the homeless person were identified as first-time homeless and 25% identified as being displaced by the recent wildfires in California. The City has identified the C-3 zoning district to accommodate emergency shelters; there are at least 5 vacant and underutilized C-3 parcels in the City, which have a total capacity for approximately 110 beds. There are three parcels along Bevins Court and Bevins Street, close to multifamily housing and public services provided in the area; infrastructure and utilities are available in adjacent rights-of-way. Two parcels are located in the Parallel Drive area, with infrastructure and utilities available in adjacent rights-of-way, and are proximately to public services. The City also has had an approved 24-bed warming center that has operated during the winter months for the past two years; during the COVID-19 pandemic, this warming center has expanded to a full service shelter hosting up to 40 individuals.

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CHAPTER FOUR – INVENTORY OF RESIDENTIAL SITES

Government Code Section 65583 requires local governmental agencies to undertake a comprehensive review of their land base in order to inventory vacant sites, and to assess service and infrastructure capacities. This chapter provides an inventory of all vacant housing sites and housing opportunities for all income levels in the City of Lakeport in accordance with the Government Code.

The ability to provide suitable housing that meets the needs of residents from all income levels is largely dependent on opportunities within the community. These opportunities are determined primarily by the availability of vacant sites that can accommodate a range of housing unit types. Housing opportunities are also affected by infrastructure availability and capacity. Lastly, land use controls, environmental constraints, and market conditions, which are addressed in Chapter Five, also affect housing opportunities.

Land Availability

In 2018, the Lake County/City Area Planning Council developed the Lake County Regional Housing Needs Plan in order to identify the housing needs for each jurisdiction in Lake County. The study showed that the projected new construction housing need for the City of Lakeport from 2018 to 2027 is 132 units (see Table 1-1). The City has permitted 1 market rate single family home anticipated to be affordable to above moderate income households and 48 multifamily units (Martin Street Apartments II, which will provide 5 extremely low, 29 very low, 13 low, and 1 moderate (manager) units, and are currently under construction.

The amount of land available for new housing development is the crucial first step in determining whether an agency can accommodate their housing needs. There must be sufficient vacant parcels within the City limits or areas to be annexed that are already zoned for residential uses. The City's GIS database and County assessor data were reviewed in order to identify vacant parcels designated for residential development, as well as sites that have the potential for redevelopment. These parcels are illustrated in Figure 4-1 and summarized in Table 4-1. Appendix A includes an inventory of the individual parcels that identifies the assessor's parcel number, zoning designation, General Plan designation, acreage, maximum unit yield, and realistic unit yield for each parcel. Appendix A also identifies underdeveloped parcels.

Lakeport has adequate sites for residential development to accommodate the RHNA as shown in Table 4-1. The City has already made significant progress toward the very low and low income RHNA, with the majority of units to meet the lower income need either constructed or under construction. In addition, the City has 327.8 acres of vacant and underutilized sites with residential and high density residential land use designations and R-1, R-2, R-3, and R-5 zoning; these sites can accommodate approximately 2,273 units. As shown in Table 4-1, the City has adequate sites to accommodate 80 very low, 81 low, 390 moderate, and 1,722 above moderate income units.

4. INVENTORY OF RESIDENTIAL SITES

Table 4-1: Comparison of RHNA to Residential Capacity

Category	Acres	Max. Units/Acre	Very Low	Low	Moderate	Above Moderate	TOTAL
RHNA - 6th Cycle	-	-	31	21	21	59	132
Units Under Construction (2020) ¹	-	-	34	13	1	1	49
Remaining RHNA	-	-	-	8	20	56	105
Residential Sites							
R-1 Sites (Appendix A)	296.4	7.3	0	0	0	1,627	1,627
R-2 Sites (Appendix A)	2.4	19.3	0	0	30	0	30
R-3 Sites (Table 4-3, Appendix A)	13.5	29.0	80	81	275	0	436
R-5 Sites (Appendix A)	15.5	19.4	0	0	85	95	180
Total Sites	327.8	-	80	81	390	1,722	2,273
Excess Capacity			80	73	370	1,666	2,168

Source: City of Lakeport, 2014, 2020; De Novo Planning Group, 2020

¹1255 Martin Street Apartments Phase II (5 extremely low, 29 very low, 13 low, and 1 moderate (manager) units) and 1 market-rate single family home

Historically, smaller projects that are between 20 and 100 units are more desirable in smaller cities such as Lakeport. It is noted that the majority of Lakeport's residential subdivisions have been developed at a very slow pace and build out over two or more decades. As shown in Figure 4-1, many of the R-1 vacant parcels are contiguous and either are part of a larger single family project or could be assembled into a single family subdivision. Multifamily parcels designated R-2 and R-3 are available in a range of sizes that can accommodate small duplex, triplex, and fourplex projects as well as larger-scale multifamily projects. The typical size of a multifamily project in the City is in the 30-unit range, with recent affordable multifamily projects ranging from 24 unit to 48 units; the City can accommodate these project sizes with the parcels in the 1-5 acre range shown in Table 4-2. Demand for the development within a larger project would occur over an extended period of time due to growth projections so it would be necessary to break the project up into four or five phases. Table 4-2 presents the number of parcels within various size classes.

Table 4-2: Vacant Parcels by Size

General Plan Designation and Zoning Designation	<0.25 Acre	0.26-1 Acre	1-5 Acres	>5 Acres	Total Parcels
Residential (R) (R-1 Low Density Residential)	90	39	38	15	182
Residential (R) (R-2 Medium Density Residential)	9	2	0	0	111
High Density Residential (HDR) (R-3 High Density Residential)	2	3	8	0	13
Resort Residential (RR) (R-5 Resort Residential)	10	1	2	1	14

Source: City of Lakeport, 2014, 2020; Lake County Assessor's Data, 2020; De Novo Planning Group, 2020

Summary of Sites to Accommodate the RHNA

LOWER INCOME HOUSING

Affordable housing for extremely low, very low, and low income groups and the special needs groups (low-income, disabled, elderly, etc.) is anticipated to be accommodated primarily by multifamily development in the R-3 zone. The R-3 zone allows densities from 19.3 to 29.0 units/acre, which exceeds the minimum density of 15 units/acre assumed to accommodate lower income units pursuant to Government Code Section 65583.2(c)(3)(B)(i). R-2 and R-5 sites also have adequate densities to accommodate the lower income groups; however, the majority of lower income units are anticipated to be accommodated in the R-3 zone on Sites 1, 2, and 3 during this Housing Element cycle. This is consistent with recent affordable development projects in the City which have ranged from 24 to 48 units in size and have been built, or are being built, on R-3 sites.

As shown in Table 4-3, sites 1 through 3 are designated High Density Residential by the General Plan and are zoned R-3. These parcels range from 1.6 to 3.1 acres in size and are not located in the 100-year floodplain, very high fire hazard severity zone, or in an area with any known significant constraints to develop. These parcels are served by public water and sewer, with existing lines for connection located in Martin Street and Bevins Street. Anticipating that 20 percent of each parcel may be needed for roadways, infrastructure/utilities, setbacks, and other requirements, these parcels have a realistic yield of approximately 161 units and provide more than enough capacity to accommodate the City's remaining low income housing allocation. The 80 percent assumption is conservative, as the City's development standards allow for development at the maximum densities. It is noted that Site 3 is partially developed with Bella Vista Apartments; 2.2 acres of the 5.5-acre site remains undeveloped and is anticipated to accommodate a second phase of the senior housing development.

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Table 4-3: Lower Income Sites by Size, Realistic Yield, and Unit Capacity

Site #	APN/Address	General Plan/ Zoning	Site Size (Acres)	Max Unit Capacity	Realistic Capacity (80% of Max)	Comments
1	025-431-37 975 Bevins Street	HDR/ R-3	3.1	90	72 (36 very low, 36 low income)	Vacant. The parcel is not in a flood zone, very high fire hazard severity zone, and does not have any known environmental constraints. This site was included in the previous two Housing Element cycles and is subject to streamlining in accordance with Government Code Section 65583.2(c) as provided in Housing Plan Program 2-1.
2	025-451-01 400 Bevins Street	HDR/ R-3	1.6	47	38 (19 very low, 19 low income)	Vacant. The parcel is not in a flood zone, very high fire hazard severity zone, and does not have any known environmental constraints. This site was included in the previous two Housing Element cycles and is subject to streamlining in accordance with Government Code Section 65583.2(c) as provided in Housing Plan Program 2-1.
3	025-431-35 1075 Martin Street	HDR/ R-3	2.2	63	51 (25 very low, 26 low)	Partially developed with affordable senior project (Bella Vista Apartments). The lower portion of the parcel (2.2 acres) is vacant was planned to provide capacity for a second phase. The parcel is not in a flood zone, very high fire hazard severity zone, and does not have any known environmental constraints. This site was included in the previous cycle and is subject to streamlining in accordance with Government Code Section 65583.2(c) as provided in Housing Plan Program 2-1.
<i>Subtotal Vacant Sites</i>			<i>4.7</i>	<i>137</i>	<i>110</i>	
<i>Subtotal Underutilized Sites</i>			<i>2.2</i>	<i>63</i>	<i>51</i>	
TOTAL			6.9	200	161	

Source: City of Lakeport GIS, 2014; Lake County Assessor/DataQuick, 2014; De Novo Planning Group, 2014

MODERATE INCOME HOUSING

The City's moderate income housing needs can be accommodated by attached single family residential development, smaller multifamily developments (duplex, triplex, and fourplex), through mobile or manufactured homes built on lower cost single family housing sites, and through market-rate multifamily development. Attached single family, smaller multifamily, and market rate multifamily developments can be accommodated on R-2 and R-5 sites, as well as the R-3 sites not identified for potential multifamily development.

The City has 2.35 acres of vacant or underutilized land zoned R-2, 13.53 acres zoned R-3, and 15.51 acres zoned R-5. As shown in Tables 4-1 and 4-3, the City has realistic capacity, assuming sites are developed at approximately 80% of maximum densities, for 30 moderate income units in the R-2 zone, 275 moderate income units in the R-3 zone, and 85 moderate income units in the R-5 zone. In total, there is capacity for approximately 390 moderate income units, which exceeds the City's moderate income housing need of 19 units, as shown in Table 4-1. Individual sites in these zones are identified in Appendix A.

The City's moderate income need may also be accommodated through the development of smaller single family units and manufactured or mobile homes. Single family homes at the 2013 median sales price are also affordable to moderate income households. New manufactured homes on a single family lot are also affordable to moderate income households. While residential sites zoned R-1 are identified for above moderate income housing in Table 4-1 and Appendix A, there is adequate capacity in the R-1 parcels to accommodate both the City's moderate and above moderate income housing needs.

ABOVE MODERATE INCOME HOUSING

The City's above moderate income housing needs are anticipated to be accommodated primarily by parcels designated R-1 (Low Density Residential) as well as in resort developments along the lakeshore that can be accommodated by the R-5 zone. As shown in Table 4-1, the City has approximately 296.12 acres of R-1 sites that will realistically accommodate approximately 1,631 units, which is more than adequate to meet the City's above moderate income housing need of 64 units.

Utilities and Services

The ability to provide adequate infrastructure and services (roads, water, sewer, drainage, etc.) for new housing developments is an essential element in meeting future housing needs. The cost of providing significant infrastructure, when weighed with other development costs such as property, construction, and carry costs, can prohibit the ability of a developer to achieve a profitable return on investment in today's market climate. Infrastructure development is obtained in two ways: 1) through direct installation by a developer; or 2) through impact fee payments by the developer to fund installation by the City or a developer at a later date.

An assessment of the utility infrastructure and the public services available to operate and maintain the infrastructure is provided below. The assessment discusses infrastructure/service limitations for current and future development as well as infrastructure fees. This discussion is based on information that was obtained from the Lakeport General Plan, the Lakeport Master Sewer Plan (Pace, 2008), the Lakeport Master Water Plan (Pace, 2008), the City of Lakeport Municipal

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Service Review (Lake Local Area Formation Commission, 2012), the City's Sewer System Management Plan (Revision 1, March 2018), and through information from City staff.

The Master Water Plan, Master Sewer Plan, and storm water management plans have not been updated since 2008. Due to the low rate of development since 2008, the information in the infrastructure master plans continues to be relevant and applicable. The Municipal Services Review conducted in 2012 reviewed the adequacy of the City's municipal services to accommodate planned growth. The Sewer System Management Plan, revised in 2018, and USDA Water and Sewer Projects Scope were reviewed as part of this Housing Element update and are consistent with the below analysis of water and sewer availability. The City has received USDA grant and loan funds for water and sewer projects (USDA Water/Sewer Projects) to secure its water supply, ensure water quality, and to provide adequate wastewater treatment facilities.

WATER

The City of Lakeport obtains its water from two sources: groundwater and surface water. The groundwater system consists of wells, while the surface water consists of water from Clear Lake that is treated at the City's water treatment plant and the County's North Lakeport water treatment plant. The information in this section was derived primarily from the City of Lakeport 2008 Master Water Plan (Pace, 2008).

Water Supply: Lakeport's water supply is derived primarily from four groundwater wells (two Scotts Creek wells and two Green Ranch wells) and the surface water treatment plant, which treats water drawn from Clear Lake. The four City wells pump their water from the Scotts Valley Aquifer and have a combined maximum pumping capacity of roughly 2.8 million gallons per day (MGD). The two wells in Scotts Creek are the primary sources of supply during the months of May through October, while the wells at Green Ranch are the primary sources of supply during the winter months. In 2014, the City purchased the property where the Green Ranch wells are located in order to permanently secure this water supply.

The surface water treatment plant has a maximum capacity of 1.7 MGD and is used year round to supplement the City's well supply with treated surface water from Clear Lake. The water treatment facility includes pH control, pre-ozonation, coagulation, upflow clarification, multimedia filtration, post-ozonation, activated carbon, and chlorine disinfection. The water treatment plant is considered to be an advanced treatment process because it needs to treat Clear Lake water that is laden with algae.

In September 1995, the City of Lakeport entered into an agreement with the Yolo County Flood Control and the Water Conservation District which grants the City rights to 750 acre-feet per year of water extracted from the wells that draw water from the Scotts Valley Aquifer. The agreement also allows the City to purchase 2,000 acre-feet per year of water from either Clear Lake or the Scotts Valley Aquifer. The agreement is valid until January 1, 2030, with an automatic 10-year extension, unless either party elects to terminate the agreement. The agreement states that "in the event that there is a shortage of water available from Clear Lake, municipal water use around Clear Lake shall have priority over other uses." (Pace, 2008).

In March 1991, the City entered into a two-year agreement to purchase water from Lake County to meet a California Department of Public Health Compliance order that they increase their available water supplies. A combination pressure reducing/pressure sustaining valve was installed

on Lakeshore Boulevard to allow for the transfer of water from Lake County Service Area No. 21. The maximum flow through the valve is 85 to 95 GPM (Pace, 2008).

From 1992 to 1998, the County intertie provided a significant source of water to the City; however, since the treatment plant was upgraded, the City has ceased to draw significant volumes of water through the intertie. The County intertie is still connected and can supply water in case of emergency water shortages or to provide additional fire flow to the localized north Lakeport area. Over the past three years, the intertie has been opened on several occasions for the City to supply water to the County when there have been issues at the County water treatment plant.

Water Storage: The City currently has two welded steel storage reservoirs with a combined volume of 2.5 million gallons (MG). Both reservoirs are in relatively good condition. The City currently chlorinates their well water at the storage system with a gaseous chlorine system. Although this system is effective in adding the required chlorine to the water system, the Lake County Environmental Health Department, under the guidance of the California Accidental Release Prevention Program, has requested that the City of Lakeport evaluate its chlorine handling processes and consider replacing the chlorine gas disinfection process in the future with a safer method of disinfection (i.e. sodium hypochlorite).

Water Distribution System: Review of the water distribution suggests that there is a significant amount of unlined cast iron and galvanized steel pipe in the distribution system, some of which may be over 100 years old, and much of this old pipe is undersized (i.e., less than 4-inches). Although City staff has noted several water main repairs within the City's distribution system, the staff report that most of the systems mains are in generally good condition. Through the USDA Water/Sewer Projects, the City has replaced the water infrastructure control system and water metering devices in order to address health and safety needs. In 2019, the City's system served 2,260 connections.

Water Demands: Currently, the City's average daily demand is roughly 1.9 MGD and the analysis indicates that the City's current water supply system can meet this demand. To determine required future improvements, it was necessary to project how much and where future growth would occur. The 2008 Water Master Plan assumes that the City will grow 1.1 percent annually, with an estimated increase of 640 residential unit equivalents by 2028.. Given this growth rate, it was estimated that the City will require a MDD water supply of roughly 2.3 MGD by 2028. In 2019, the City's water treatment plant and water system provided approximately 1.92 MGD.

Summary: The City of Lakeport 2008 Master Water Plan includes several recommended improvements to the City's wells, treatment facility and distribution system. The City is actively pursuing the implementation of the recommended improvements, which will result in an adequate water supply to meet growth projections through 2028. Given that growth in the City has occurred at rates less than those used for the 2008 Water Master Plan, it is anticipated that the planned 2.3 MGD water supply will accommodate growth beyond 2028. The City has adequate supply and distribution capacity to meet the demand for potable water that would be generated by development consistent with the City's housing needs, including the 2018-2027 RHNA.

STORM DRAINAGE

There is a long history of flooding in the Lakeport area. Those portions of the city adjacent Clear Lake and the areas adjoining the principal water tributaries to the lake have experienced frequent inundation. Precipitation in the Lakeport area averages 28 inches per year with 40 percent occurring between December and January and 95 percent between October and April.

Topography within Lakeport is relatively gentle, with slopes ranging from 0.5 to more than 15 percent. The watershed beyond the city limits becomes more rugged. Soils in the area consist of loams and clays and generally have low permeability. The hazard of erosion is moderate. Two groundwater basins are adjacent to Lakeport; Scotts Valley to the west and Big Valley to the south. High groundwater levels normally range from 5 to 40 feet below the surface. There are seven defined drainage areas which affect Lakeport. They are Hartley, Rumsey Bay, Tenth Street, Forbes Creek, Sixth and Third Streets, Pier 1900, and Todd Road. All storm drainage from Lakeport presently discharges to Clear Lake. A large portion of the watersheds are outside the city limits, with 68 percent of the land area presently under County jurisdiction. Due to the large portion of the watershed area under County jurisdiction, City-County cooperation is essential for the success of a flood control program in Lakeport.

Drainage Facilities. Existing drainage facilities vary in size from 15-inch corrugated metal pipe culverts to a 13-foot by 7-foot box culvert on Forbes Creek. Much of the drainage is still carried in natural stream beds and open channels. Portions of the existing drainage system are in good condition and incorporation of these facilities into the long range master plan can reduce the cost of new facilities required. In some cases where the existing system cannot be incorporated, it may be used to collect and convey local runoff to the new facilities. Roadway culvert crossings are generally inadequate and will require replacement as the area continues to develop.

Lakeport is traversed by several streams and drainage areas which flow into Clear Lake. The development that has occurred during the past ten years has accentuated existing drainage problems and has increased the potential for flooding. New development must mitigate any net increase in stormwater runoff through providing on-site drainage retention/detention features, such as drainage swales, ponds, etc.

Flood Zone. There are 347 acres of land within the City limits that lie within a 100-year flood zone. This land is primarily located along the shores of Clear Lake and the streams that flow into the lake. There is no land within the City limits designated within the 500-year flood zone. See Figure 4-1.

Storm Water Management Plan. In 2003, the City of Lakeport, in conjunction with the County of Lake and the City of Clearlake, adopted the Lake County Storm Water Management Plan (SWMP). Required by the Federal Clean Water Act, under the National Pollution Discharge Elimination System (NPDES Permit Program), the County's three jurisdictions are required to maintain, implement, and enforce an effective SWMP. The SWMP is designed to reduce the discharge of pollutants into Clear Lake and to enhance the water quality.

As a part of this process, in 2006, the City Council adopted a new SWMP ordinance that will, among other things, prohibit non-storm water discharge into the City's storm drainage system. In addition, as part of its public education program, the City has stenciled storm drain inlets with the

message “No Dumping. Flows to Clear Lake” and has also installed visible “buttons” to replace worn stenciling.

Planned improvements. The City continues to make improvements to increase the capacity of existing drainage facilities to relieve flooding within presently developed areas. These improvements include efforts to mitigate conditions which result from 100-year storm events. Planned improvements include: 1) replacement and/or upsizing of existing roadway culvert crossings that are currently inadequate; 2) installation of larger culverts, new culverts, channels, and inlets to mitigate flash flooding that occurs adjacent to drainage courses; and 3) installation of frontage improvements such as curbs.

SEWER

The City of Lakeport Municipal Sewer District (CLMSD) owns and operates the City of Lakeport wastewater treatment plant (WWTP), which consists of a headworks facility with bar screens, two aerated treatment ponds, a chlorination facility, and an effluent storage reservoir. Effluent is disinfected and then discharged to the reservoir, and then is land applied to approximately 340 acres southwest of the existing city limits. The plant’s Average Dry Weather Flow (ADWF) design capacity is 0.51 million gallons per day (mgd), and its peak wet weather design flow (PWWF) is 3.0 mgd (Pace, 2008). Current ADWF have averaged 0.38 mgd in recent years and PWWF have averaged 2.8 MGD (Sewer System Master Plan, 2018).

The CLMSD serves land within the City limits, within two county assessment districts, an area south of the City, and an area north of the City. The District’s sewage collection system runs generally along the eastern edge of the City near Clear Lake. The City is currently served by two wastewater treatment plants.

The CLMSD was created primarily to facilitate funding of infrastructure and services. Budgeting for the District is conducted concurrently with the City’s budget process by city staff.

Wastewater Collection System: The existing Lakeport wastewater collection system consists of about 135,400 feet of collector sewer mains and 13,500 feet of interceptor sewers. Based on current estimated peak wet weather conditions, it appears that the majority of the existing collection system has, in general, adequate capacity. Since adoption of the 5th Cycle Housing Element, the City has replaced over 1,900 feet of aged sewer mains (Clear Lake Avenue, North Main Street, and First Street) and has addressed inflow and infiltration issues in several locations to ensure the system operates adequately.

Sewer Lift Stations: There are presently nine public operated sewage lift stations in the City: Martin Street, Clearlake Avenue (replaced in 2016), Lakeshore Boulevard, Rose Street, C Street, Lakeport Boulevard, Lake County Lift Station No. 12, Lerrecou Lane, and Linda Lane Lift Stations. The Lake County Lift Station No. 12 is operated by the Lake County Sanitary District, but it discharges into the Lakeport collection system. The Lakeshore Boulevard Lift Station is the City’s newest lift station and it discharges sewage into the Lake County Sanitary District collection system for treatment at the county treatment facilities.

Wastewater Treatment Plant: Based on the treatment plant water balance that was calculated for the 2008 Master Sewer Plan, it appears that the current Lakeport Wastewater Treatment Plant has an existing ADWF capacity of approximately 0.51 MGD. The design PWWF capacity of the plant

4. INVENTORY OF RESIDENTIAL SITES

is estimated at 3.0 MGD. The ADWF capacity is based on the treatment plant's ability to store and dispose of the annual effluent volume generated by Lakeport. Over the past 4 to 5 years, the summer ADWF has been estimated to be about 0.38 MGD. This is estimated to be about 75 percent of the current 100-year annual capacity of the effluent irrigation and storage facilities at the plant. Based on recent historical plant flows and the City's ongoing inflow and infiltration (I&I) reduction program, the estimated peak flow at the plant is roughly 2.8 MGD. Through the USDA Water/Sewer Projects, the City will repair and improve treatment ponds to address health and safety issues and to ensure adequate storage and treatment capacity.

Future Sewage Flows: The number of residential unit equivalents (RUEs) within the Master Plan study area is projected to be approximately 2,600. Based on the City's General Plan and proposed developments submitted to the City's planning department, the 2008 Master Plan estimated that growth would occur at a 1.1 percent annual growth rate equating to approximately 630 RUEs added to the City's wastewater collection system from 2008 through 2028. Of these future RUEs, about 520 RUEs would be added to the City's main sewer area that is currently being served by the Lakeport treatment plant. This would result in an ADWF at the treatment plant of roughly 0.48 MGD at year 2028 (Pace, 2008; Sewer System Management Plan, 2018).

Summary: The analysis in the Sewer System Management Plan (City of Lakeport, 2018) and the Master Sewer Plan (Pace, 2008) indicates that there is adequate sewer capacity to meet existing and projected growth within the City of Lakeport. Given that growth in the City has occurred at rates less than those used for the Master Sewer Plan, it is anticipated that the sewer capacity will accommodate growth beyond 2028. The Master Plan and Sewer System Management Plan, updated in 2018, identify various improvements to the sewer collection and treatment system that should be implemented over the next 20 years to ensure that adequate capacity continues to be available to the City. The City has been diligent in implementing improvements and seeking funding, such as the USDA Water and Sewer loan funds, to ensure that the sewer system is maintained and operated to serve existing and anticipated development. The City has adequate treatment and conveyance capacity to meet the demand for sewer treatment that would be generated by development consistent with the City's housing needs, including the 2018-2027 RHNA.

ROADS

Existing Network and Flow. The City of Lakeport's existing roadway network is defined and constrained by two barriers: Clear Lake on the east and State Highway 29 on the west. The majority of the city is laid out in a rectangular grid pattern which is interrupted by hilly terrain. In these hilly areas the street system becomes discontinuous and through traffic is difficult.

Many of the City's streets are narrow, not improved to current standards, and will require upgrading. In addition, further development of the street system between Lakeport Blvd. and Martin Street is hindered by large areas devoted to public facilities such as the City corporation yard and the Lake County Fairgrounds.

Although construction of the State Route 29 has reduced congestion downtown, it is now a barrier inhibiting east-west circulation through the Planning Area. Access across State Route 29 is only available at Eleventh Street, Lakeport Boulevard, Martin Street, and the South Main Street intersection with Highway 29. Additional capacity on existing roads will be required to

accommodate increased traffic crossing the freeway as the areas to the west of State Route 29 develop.

State Route 29 permits vehicles to bypass the downtown district and carries the largest amount of traffic through Lakeport. When the State Route 29 bypass was constructed in 1970, it carried between 2,000 and 4,000 vehicles per day, significantly reducing the amount of through traffic on Main Street and other city streets. Lakeport has grown considerably resulting in an increase in traffic volumes on Main Street. Traffic volumes will continue to increase commensurate with population growth in Lakeport and the County.

Traffic volumes continue to increase on principal arterials and many collectors, particularly in the downtown district. The central core, bounded by First, Third, Forbes and Park Streets, generates more vehicular traffic than anywhere else in Lakeport. The majority of north-south through traffic is carried on State Route 29 and on the Main Street, High Street, Lakeshore Boulevard corridor. East/west traffic volumes are highest on Lakeport Boulevard and Eleventh Street.

Roadway Improvements. Congestion on the City's arterial and collector street systems, including the downtown district will become a problem. Actions are needed to improve existing traffic flow and mitigate the impacts of existing and future land development. Major improvements to the existing system are necessary, including road widening, additional crossings over/under the freeway, new roads, additional traffic controls, including signalization of intersections, and perhaps one-way couplet systems.

Funds will not be available to build all the roadway improvements required to offset or significantly improve future traffic congestion in Lakeport and its Sphere of Influence. The roadway improvements listed in the General Plan, however, represent the most important and cost effective improvements. These recommended improvements constitute the City's Long Range Roadway Improvement Program.

Lakeport has several characteristics which increase the difficulty of improving the roadway system such as: hilly terrain; a relatively large amount of undeveloped land located within City limits; and many substandard roads. The City, however, has developed a systematic approach to improving the City's roadway system. Additional capacity is needed to carry the increased amount of projected traffic. The recommended improvements to the roadway system are organized under policies and implementation programs for System-wide Improvements, Route Completion, and Road Maintenance and Improvement. Current and planned projects in the Capital Improvements Program to address roadway system needs include First Street paving, road striping, Second Street sidewalk reconstruction, Hartley Street Safe Routes to School improvements, South Main Street rehabilitation program, and various road reconstructions and surface treatments.

Incomplete Streets and Utilities

There are several areas of Lakeport with incomplete street systems. Developing residential lots within these areas calls for the developer to construct right-of-way improvements, including half-street paving, curbs, gutters and sidewalks. Several of these lots also have topographic concerns, making the development process even more costly. The lack of sewer, water, and storm drainage utilities acts as an additional constraint to the development of housing. Areas with these constraints are primarily single family residential areas along the City's western boundary and do not include the City's R-2 and R-3 sites which are generally located adjacent to existing streets.

ENVIRONMENTAL CONSTRAINTS

Biological Resources

The City of Lakeport is located within the ecoregion known as the Northern California Interior Coast Ranges. Northern California Interior Coast Ranges vegetation is predominately characterized by the Blue Oak series, Chamise series, Purple needle grass series, and Foothill pine series (General Plan EIR, 2008). The vegetation within these plant communities vary greatly and are generally influenced by several ecological factors, including the amount of water available, soil depth and chemistry, slope and aspect (angle of the terrain with regard to direct sunlight), and climate.

The following habitat types are found within the City of Lakeport: shoreline, riparian, oak woodlands, chaparral, agricultural lands, and urban areas. There are several special-status plant and animal species know to occur in the vicinity of the City, however, the City is not located within an identified migratory corridor.

There are numerous policies and measures included in the 2008 Lakeport General Plan Draft EIR, which were incorporated into the City's 2009 General Plan update, that serve to protect and preserve important natural and biological resources (Conservation Element Policies C 1.1 through C 1.3 and related programs). The above referenced policies include requirements such as clustering residential development at higher densities to protect areas of open space, requiring setbacks from the Clear Lake shoreline and other surface water resources, and limiting the amount of ground disturbance during construction activities. As stated previously in this section, the City of Lakeport has adequate amounts of vacant and/or underutilized residential lands to meet their projected housing needs through 2019, without changing the land use designation on any City parcels. The General Plan EIR included an analysis that assumed full buildout of parcels within the City limits, and concluded that impacts to biological resources would not be significant after appropriate mitigation was applied. The natural and biological resources present in Lakeport would not pose an impediment to the development of new housing units to meet the City's RHNA.

Soils

The City of Lakeport lies on a shelf forming the western shore of Clear Lake. The surrounding area is mountainous, with valleys running southeast to northwest. Slopes range from 0.5 percent near the lake to 100 percent in the upper Forbes Creek watershed, but few areas have slopes over 40 percent, and most slopes are less than 15 percent. Elevation ranges from 1,326 feet above sea level at the lake to about 1,450 feet along Highway 29; peaks to the west of the City rise to over 1,900 feet.

Lakeport's bedrock consists of the marine Franciscan complex, typical of the Coast Range, overlaid with alluvium, lake and terrace deposits typical of the Clear Lake basin. The Franciscan complex dates roughly from the late Jurassic period, over 135 million years ago, while the alluvium, lake and terrace deposits are much younger, dating probably from the late Quaternary period, within the last million years. The Franciscan rock is fairly hard and stable, while that of the other deposits is softer and poorly consolidated. The geologic structure of the area is more complex than this simple, generalized "layer-cake" description would suggest; geologic activity, such as erosion, uplifting and faulting, has not only created the layers but altered their form and relative positions. Consequently, the deposits vary in depth, thickness, and position from spot to

spot. For instance, in many steeper parts of Lakeport the Franciscan formation protrudes through overlying layers.

Manzanita and Wappo loams are the predominant soil types in the Lakeport area; other soils, such as Cole Variant clay, and Bressa-Millsholm loams, are also present. Although these soils have no significant limitations, they do in general have low permeability, moderate susceptibility to erosion and high shrink-swell potential. In addition to naturally occurring soils, there are areas of downtown Lakeport where imported materials have been used as fill, particularly in lakefront areas. These materials tend to be poorly consolidated and subject to subsidence.

Asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. Asbestos is commonly found in ultramafic rock, including serpentine, and near fault zones. The amount of asbestos that is typically present in these rocks range from less than 1% up to about 25%, and sometimes more. Asbestos is released from ultramafic and serpentine rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways which are surfaced with these rocks, when land is graded for building purposes, or at quarrying operations. It is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time. All types of asbestos are hazardous and may cause lung disease and cancer. Health risks to people are dependent upon their exposure to asbestos. The longer a person is exposed to asbestos and the greater the intensity of the exposure, the greater the chances for a health problem. Asbestos-related disease, such as lung cancer, may not occur for decades after breathing asbestos fibers.

According to the Lake County Air Quality Management District, there are areas within the City of Lakeport where serpentine soils, which contain naturally occurring asbestos, are present. These areas are generally located in the southern portion of the City, east of State Route 29 and south of Martin Street (LCAQMD). The City's General Plan includes policies and measures that would reduce the risk of exposure to naturally occurring asbestos. Policy C 3.3 states that "The City shall protect public health from naturally occurring asbestos by requiring mitigation measures to control dust and emissions during construction, grading, quarrying or surface mining operations. Program C 3.3-a states that, "The City should adopt an ordinance that regulates construction activities in areas that may contain serpentine soils." These General Plan measures would ensure that risks associated with asbestos found naturally in serpentine soils in areas of the City would be mitigated to less than significant levels.

Future development within the city will be guided by the policies contained in the updated General Plan and other local regulations. The City's Erosion Control Ordinance requires developers to manage soil erosion on project sites using various standard measures. Policy S 1.3 of the General Plan Update minimizes risks from slope instability by requiring developers to implement measures that protect slopes, by designating properties with severe sliding and soils conditions for low intensity uses, and by evaluating slopes over 20 percent and/or unstable land for safety hazards. Additionally, General Plan Policy C 8.3 further reduces soil erosion potential by requiring grading permits for all new construction, where applicable.

The type and condition of soils in the City do not pose a significant impediment to the development of housing in the City.

4. INVENTORY OF RESIDENTIAL SITES

Geologic Hazards

As is true in many areas of California, Lakeport is located in a highly active earthquake area and the potential exists for a significant seismic event in the future. Immediately east of the city, between the city and Clear Lake, there is a potentially active rupture zone. Potentially active rupture zones are faults which have been active in the past 2,000 years. Little is known about the shoreline fault rupture zone; however, it represents a potential significant hazard and must be taken into consideration when development occurs in the vicinity.

To the west of the city lie the San Andreas Fault and the Healdsburg Fault, 30 and 15 miles away, respectively. Both of these faults have been responsible for moderate to major seismic events in the past. The maximum earthquake magnitudes observed to date are 8.5 for the San Andreas Fault and 6.75 (Richter Scale) for the Healdsburg fault.

Within the past 200 years, no major damaging earthquakes have occurred along faults in Lake County; however, numerous minor faults exist within the County, designated potentially active, which could cause ground rupture, failure and shaking. Precise locations of these faults are not well established. But from information available, it appears that the greatest number of faults occur in the southwestern portion of the county near Mt. Konocti. The southeastern portion of the county also appears to have considerable faults, particularly from Grizzly Peak eastward and running from Knoxville to the southern county line.

All new construction in Lakeport is required to comply with the most current version of the California Building Standards Code, including the California Building Code, which include requirements for construction that reduce the risk of catastrophic building failure during a seismic event.

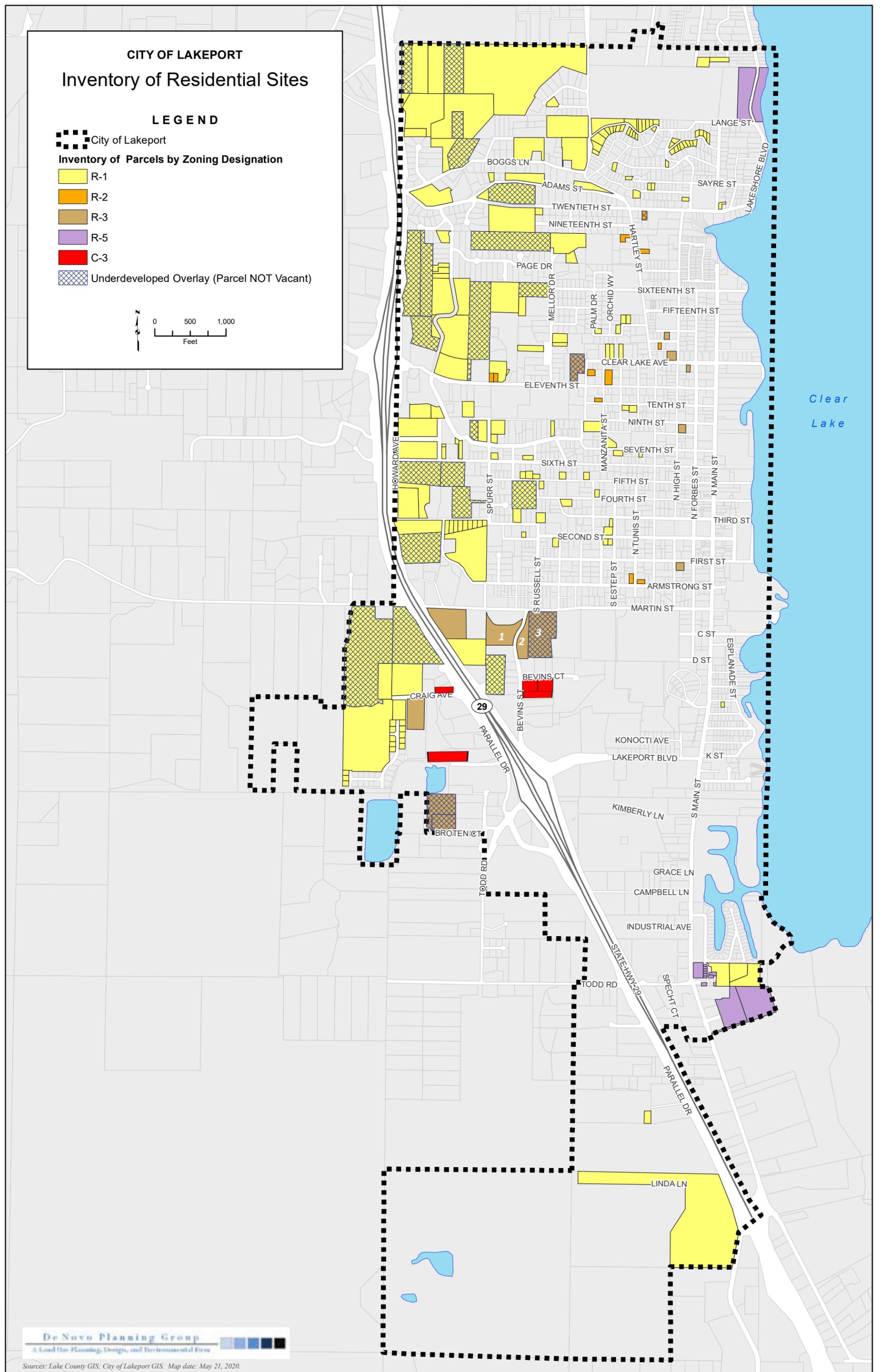
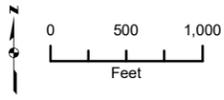
Fire Hazards

The south and southwest areas of Lakeport have lands rated high and very high fire hazard severity zones. To the west, a significant amount of lands beyond the City is rated in the very high fire hazard severity zone. While none of the sites included in the very low and low residential inventory (Sites 1, 2, and 3) are rated as high or very high fire hazard areas, the proximity of all lands within the City to areas that have high and very high fire hazard potential requires the City to ensure that lands are developed consistent with State and local requirements to address fire hazards, including providing an appropriate wildland/urban interface through ensuring that lands are maintained to reduce fire fuel sources and that building materials meet the requirements of the California Building Standards Code. All new construction in Lakeport is required to comply with the California Building Code, part of the California Building Standards Code, which establishes requirements for ignition-resistant construction for roofing, walls, decks, windows and other building elements for homes in the wildland-urban interface based upon a site's fire hazard severity zone classification.

CITY OF LAKEPORT Inventory of Residential Sites

LEGEND

-  City of Lakeport
- Inventory of Parcels by Zoning Designation**
-  R-1
-  R-2
-  R-3
-  R-5
-  C-3
-  Underdeveloped Overlay (Parcel NOT Vacant)



CHAPTER FIVE – CONSTRAINTS TO HOUSING AND HOUSING RESOURCES

Development projects face a variety of constraints that can be classified as governmental and non-governmental, although there is a strong interrelationship between these factors. Development constraints, by their definition, act to limit the number of units that are built. Governmental constraints can include land use and zoning controls, building codes, fees, permit processes, and political forces. Non-governmental constraints can include land cost and availability, financing costs and availability, construction costs, environmental constraints and social forces/consumer demands.

Chapter 4 presented a discussion about infrastructure availability, capital improvement needs, and potential environmental constraints related to natural and biological resources, soils, and geologic hazards. It was clearly stated in that discussion that the existing and planned infrastructure and environmental constraints would not be a significant constraint to meeting the City's growth projections. Therefore, infrastructure and environmental constraints are not discussed in the context of Chapter 5 Constraints to Housing. Specific governmental and non-governmental constraints are discussed in more detail in the following paragraphs.

Governmental Constraints

Governmental constraints are potential and actual policies, standards, requirements, fees, or actions imposed by the various levels of government on development. These governmental constraints are intended to ensure public safety and welfare with respect to housing construction and land use issues.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) was developed to protect the quality of the environment and the health and safety of persons from environmental effects. Discretionary projects are required to be reviewed consistent with the requirements of CEQA to determine if there is potential for the project to cause a significant adverse effect on the environment. Depending on the type of project and its potential effects, technical traffic, noise, air quality, biological resources, and geotechnical reports may be needed. If potential adverse effects can be mitigated, a mitigated negative declaration is required. If potentially adverse effects cannot be mitigated, an environmental impact report is required. These documents have mandated content requirements and public review times. Preparation of CEQA documents can be costly and, despite maximum time limits set forth in the Public Resources Code, can extend the processing time of a project by a year or longer.

Projects that are a permitted use or identified by State law as only being subject to by-right or ministerial requirements are not subject to the CEQA process. In addition, in certain cases, particularly for affordable housing, residential infill, and agricultural housing projects consistent with the General Plan and zoning that meet specific criteria, the CEQA review process can be significantly reduced. The CEQA Guidelines provide for exemptions for eligible agricultural housing, affordable housing, and residential infill projects through CEQA Guidelines Sections 15192 through 15195, streamlined review for infill projects through CEQA Guidelines 15183.3, and focused environmental review for projects consistent with the General Plan and zoning through CEQA Guidelines Section 15183.

PREVAILING WAGE LAWS

Public works projects and affordable housing financed through the use of public funds are required to pay prevailing wages, which create a significant cost impact on the construction or rehabilitation of affordable housing units for low or moderate-income persons and the infrastructure to support such housing. Prevailing wages are typically higher than market wages and increases the cost of providing housing. The rehabilitation of certain qualifying affordable housing units for low or moderate-income persons is exempted from this requirement. In 2002, SB 972 provided for exemptions from prevailing wage requirements for the construction or rehabilitation of privately-owned residential projects. In 2017, SB 35 provided for streamlining of housing approvals for eligible multifamily projects but limited streamlining provisions to projects that pay prevailing wages regardless of whether the project was a public work (which is typically the threshold for applying prevailing wage requirements).

LAND USE CONTROLS

Land use controls are minimum standards included within the General Plan, and implemented through the City Zoning and Subdivision Ordinances. General Plan land use designations are a means of ensuring that the land uses in the community are properly situated in relation to one another and providing adequate space for each type of development. Zoning regulations are designed to implement the intentions of the General Plan land use designations. They also control such features as height and bulk of buildings, lot area, yard setbacks, population density, the building use, etc. If zoning standards are significantly more rigid than private sector design standards and do not allow sufficient land use flexibility, then development costs could increase and housing production may decrease.

General Plan

Land Use Element. The Lakeport General Plan Land Use Element provides a range of residential building types and densities in various areas of Lakeport. Densities range from 7.3 units per acre in the Residential use to 29 units per acre in High Density Residential use. Below is a brief description of each general plan residential land use district.

Residential (R). Designates areas suitable for single family dwellings up to 7.3 units per acre and multifamily developments comprising up to four units within a single structure at a maximum density of 19.3 dwelling units per acre. Consistent zoning districts include, but are not limited to, R-1 and R-2.

High Density Residential (HDR). Designates areas suitable for multifamily residential development at a density of 19.4 to 29.0 dwelling units per acre. Senior multifamily uses are permitted at a density not exceeding 45 dwelling units per acre. The high density residential designation allows convalescent and other hospital uses. Limited office uses would be permitted with a Conditional Use Permit pursuant to criteria contained in the Zoning Ordinance. Consistent zoning districts include, but are not limited to, R-3 and R-5.

Resort Residential (RR). Designates areas suitable for a mixture of resort uses, primarily along the shores of Clear Lake at a density of up to 87 units per acre for hotels, motels, and resorts and 43.5 units per acre for campground or overnight recreational vehicle uses, recreational vehicle, or tent equivalent to 1 unit. Residential uses are permitted at the High Density Residential density of 19.4 to 29 units per acre. Limited retail uses consistent and compatible with lakefront recreational uses

are permitted in this designation. Commercial uses related to the lake-oriented, recreational characteristics of this designation are permitted at a maximum FAR of 0.35. Consistent zoning districts include, but are not limited to, R-5.

Building Intensity. The maximum building intensity and population density [for residential districts] that would be permitted by each Land Use Designation are summarized in Table 5-1. It should be emphasized that these figures provide the maximum potential building and population that could occur without taking into account the constraints imposed by the natural environment, vehicular access, the provision of necessary services, and the standards contained in the Community Design Element. The City may restrict the maximum density figures indicated below to take into account these factors.

Table 5-1: Building Intensity and Population Density by Land Use Designation

Land Use Designation	Approximate Population Density	Building Intensity
Residential	17 to 45 persons per acre	7.3 (R-1) to 19.3 (R-2) units/acre
High Density Residential	67 persons per acre	29 units/acre (R-3)
Resort Residential	46 to 67 persons per acre	19.4 (R-5) to 29 units/acre

Policy Constraints. In accordance with the Government Code and various environmental laws, the General Plan sets forth policies related to Conservation, Open Space, Parks, and Recreation, and Safety. An overview of these policies is provided below. These policies seek to protect and preserve important values of the community, but tend to conflict with the ability to develop certain land for housing. Such conflicts can be considered a constraint. Some of the General Plan policies that could serve as a constraint to housing development are presented below.

Conservation Element. Policy C 1.1 and C 1.2 aim to preserve biological resources such as plant and animal species, special habitat areas, heritage trees, and soil disturbance. Policy C 3.1 and C 3.2 require the City to maintain high air quality standards and to ensure that sensitive receptors are protected from impacts. Policy C 7.1 discourages the annexation of productive prime agricultural lands for urban uses. Policy C 8.1 requires the preservation of streams and creeks in their natural state to the maximum extent feasible.

Open Spaces, Parks, and Recreation Element. Policy OS 2.1 seeks to preserve and restore open space areas to their natural state wherever possible and limit uses to those with a minimal environmental impact. Policy OS 2.2 is designed to ensure that adequate open space is provided to permit effective wildlife corridors for animal movement. Policy OS 2.3 protects open space in a manner that ensures protection of sensitive habitat areas. Policy OS 2.10 aims to protect and preserve valuable scenic view sheds and view corridors. Policy OS 2.11 preserves and expands links between open spaces and creek corridors.

Safety Element. Policy S 1.8 seeks to minimize the risk of personal injury and property damage due to flooding by preventing any development within the 100-year flood plain.

Zoning Ordinance

The Zoning Ordinance (amendments through 2019) contains five residential zoning designations that serve to implement the general plan land use designations. These include the R-1 Low Density Residential District, R-2 Medium Density Residential District, R-3 High Density Residential District, R-5 Resort/Residential, and UR Urban Reserve.

Low Density Residential R-1 District. The permitted uses in this district include: one single-family dwelling or modular home, residential accessory buildings, small family non-residential day care licensed for eight or fewer persons, duplexes, and one secondary unit. A use permit is required for: bed and breakfast inns, rooming and boarding houses, short-term rental of a residence to transient guests, large family non-residential day care centers, and community care facilities. Community care facilities include small and large group homes.

Medium Density Residential R-2 District. The permitted uses in this district include: one single-family dwelling or manufactured home, two single-family dwellings subject to General Plan density standards, one secondary unit, duplexes, triplexes, fourplexes, and condominiums in accordance with the development standards, residential accessory buildings, and small family non-residential day care licensed for eight or fewer persons. A use permit is required for: nursing and convalescent homes, mobile homes parks, building heights in excess of 35 feet, and those uses permitted in the R-1 District subject to a use permit.

High Density Residential R-3 District. The permitted uses in this district include: duplexes, triplexes, fourplexes, apartment buildings, multi-family dwelling groups, and condominiums, residential accessory uses and accessory structures, and small family non-residential day care licensed for eight or fewer persons. A use permit is required for: mobile home parks, small-scale offices serving the multi-family residential complex, one- single-family dwelling or manufactured home if it is to replace a previously existing dwelling, those uses permitted in the R-2 District subject to a use permit, bed and breakfast inns with food service and catering, and community care facilities. The Zoning Ordinance was amended in 2014 to allow multi-family development to include an on-site office for the management of the complex without a use permit in order to accommodate apartments with on-site management.

Resort/Residential R-5 District. The permitted uses in this district include: Duplexes, triplexes, fourplexes, apartments, and condominiums, resorts, hotels, and motels. A use permit is required for: restaurants, food and beverage sales, retail sales of lake-oriented and recreational merchandise, rental of lake-oriented recreational equipment, mobile home park, RV park, and campground, marinas, boat storage facility and repair activity, and those uses permitted in the R-2 and R-3 zones with a use permit, bed and breakfast inns with food service and catering, and community care facilities.

Urban Reserve (UR) District. The purpose of this district is to provide for large lot residential development in areas where urban infrastructure such as public water, sewer, and City-maintained roads are not yet available but will ultimately be provided. The UR designates areas outside of the City limits and within the SOI. The permitted uses in this district include: One single-family dwelling, Agricultural and residential accessory uses and accessory structures including barns and private stables, and small family day care homes licensed for eight or fewer persons.

Light Retail (C-1) District. The purpose of this district is to establish areas for small neighborhood-oriented retail establishments on individual sites or small neighborhood shopping centers. Residential uses are allowed in conjunction with certain primary uses and large residential care homes are allowed with a use permit.

Service Commercial (C-3) District. The purpose of this district is to provide areas suitable for heavy commercial, light manufacturing, and fabrication uses which do not specialize in pedestrian traffic. Emergency shelters are permitted in this district.

Professional Office (PO) District. The purpose of this district is to establish areas for professional office uses. The PO district also provides for multifamily and large residential care homes subject to the issuance of a use permit.

Planned Development. The Zoning Ordinance also has a Planned Development Combining District (PD) overlay zone that allows greater design flexibility and planning when compared to the more strict application of conventional single-family land use and development criteria. Permitted uses in the PD district include all uses that are permitted in the base residential zone district, and they must conform to the area, height, density, lot width and yard regulations required by the underlying Zoning District.

The PD zone enables clustering of units (i.e. developing less land while allowing the same number of housing units that would be permitted under conventional subdivision ordinances), mixing of uses and building types (i.e. multiple housing mixed with commercial and professional uses for example), as well as establishment of special development standards and criteria, which respond to the particular features of a site. This flexibility allows for more efficient infrastructure cost per unit for development projects. It is estimated that the cost savings can be as high as 25 percent per unit when the PD zone is applied to certain parcels. The clustering approach, coupled with density bonuses, enhances Lakeport's role as an affordable housing resource, and is beneficial in meeting the housing needs of special groups (seniors, disabled, etc.).

Permitted Uses and Residential Development Standards. Table 5-2 summarizes the permitted residential uses within each residential district, as well as the C-1, C-3, and PO districts. Community care facilities are also permitted with a use permit in the Light Retail (C-1), Major Retail (C-2), and Service Commercial (C-3) Districts. Medium density (subject to R-3 standards) and mixed-use developments are allowed in the Central Business (CB) District with a use permit. Table 5-3 summarizes the development standards applicable to each residential district and select non-residential districts.

Table 5-2: Residential Permitted Uses

Zone	Single Family Unit	Duplex	Tri & Four-Plex/Condos	Multifamily Apts/Condos	Mobile Home Parks	Residential Care Home (Small)	Residential Care Home (Large)	Rooming and Boarding Houses	Emergency Housing or Shelter	Accessory Dwelling Unit
R-1	X	X ¹				X ²	UP	UP	UP	X ³
R-2	X ⁴	X	X		UP	X ²	UP	UP	UP	X ³
R-3	R	X	X	X	UP	R ²	ZP	UP	UP	

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Zone	Single Family Unit	Duplex	Tri & Four-Plex/Condos	Multi-family Apts/Condos	Mobile Home Parks	Residential Care Home (Small)	Residential Care Home (Large)	Rooming and Boarding Houses	Emergency Housing or Shelter	Accessory Dwelling Unit
R-5	R	X	X	X	UP	R ²	UP	UP	UP	
UR	X					X ²				X ³
C-1	X ⁶			X ⁶ /UP		X ²	UP			
C-3									X ⁵	
PO	R			UP			UP			

X = Permitted by Right, ZP = Permitted with a Zoning Permit; UP = Permitted with Use Permit; R = Permitted as Replacement Dwelling subject to Use Permit

¹Minimum lot size of 12,000 square feet

²Small residential care homes are subject to the same permitting requirements and standards as a residential unit of the same type. A single family residential care home is permitted in the same manner as a single family residence.

³Permitted on 7,500 sf parcel subject to standards in Chapter 17.28

⁴Two single family units permitted per lot

⁵Emergency shelters that do not meet the location and performance standards established at Section 17.28.010(EE) are subject to a Use Permit

⁶Mixed-use residential permitted in conjunction with a commercial and/or office use Section 17.09.030.H,I, 17.08.050.I.

Table 5-3: Development Standards by Residential Zoning District

Zoning District	Allowed Density (du/ac)	Min. Lot Size (sf)	Min. Site Width (ft)	Front Setback (ft)	Side Setback (ft)	Rear Setback (ft)	Max. Height (ft)	Max. lot Coverage (%)
R-1	7.3	6,000	60	15	5	10	35	40% ³
R-2	19.3	6,000	60	15	5/10 ²	10/15 ²	35	40%
R-3	29.0 ¹	6,000	60	15	5/10 ²	10/15 ²	35	1-story: 60% 2-story: 55% 3-story: 50%
R-5	19.4	6,000	60	15	10	15	25	1-story: 60% 2-story: 55% 3-story: 50%
UR	0.2	5 acres	150	20	5	20	35	Not specified
C-1	None	6,000	60: interior 65: corner	10	10	0/10 ⁴	35	1 story: 60% 2 story: 50% Floor Area Ratio: 0.35
C-3	NA	12,000	100	15	10	0/10 ⁴	35	Floor Area Ratio: 0.45
PO	29.0	6,000	80	15	10	5/10 ⁵	35 ⁶	

¹Senior housing is allowed at densities up to 45 du/ac

²The lower end of the setback range applies to single family and duplex uses; the upper range applies to triplex, fourplex, and condominium uses

³Lot coverage up to 60% is allowed on substandard lots

⁴10 feet adjacent to residential lot

⁵10 for two stories, additional stories may require increased setback

⁶Additional height subject to use permit

Source: City of Lakeport Zoning Ordinance, 2019

Subdivision Ordinance

The Subdivision Ordinance governs the process of converting raw land into building sites. It allows the City to control the internal design of each new subdivision so that its pattern of streets, lots, public utilities, etc. will be safe, pleasant and economical to maintain. Overly restrictive standards will result in greater land development costs and/or lack of development interest.

The Subdivision Ordinance requires on- and off-site improvements that are similar to the requirements of other communities in Lake County and does not create any undue obstacles or constraints in the provision of any housing type. Rather, the required improvements ensure the provision of adequate utilities, efficient access for public safety services, and the ability to maintain quality, livable neighborhoods and communities.

Approximately 346 acres of land in the City of Lakeport is located within Special Flood Hazard Area “A” according to the City of Lakeport’s Geographic Information System. Most of this land is on the eastern side of town adjacent to Clear Lake. Property located in Flood Zone “A” is subject to a one percent or greater chance of flooding (100-year flood) in any given year. Construction occurring within flood zones must be done in accordance with Chapter 15.16 of the Municipal Code which states that no structure shall be constructed, located, extended, converted, or altered without full compliance with the Floodplain Management regulations.

Site Improvements

Site improvements are regulated by the Subdivision and Zoning Ordinances through conditions and standards imposed within the City’s Site Plan Review process. Site improvements include such things as required off-street parking, landscaping, walls, storm drainage, sewer and water systems, etc. The frontage of each lot must be improved to provide street (if not served by a standard street), curb, gutter, and sidewalk. Local streets require 40 to 50 feet of right-of-way, including 30-34 feet of improved street, 4 feet of sidewalk (both sides), and 4 feet of planting strips (both sides). Arterial streets require 60 to 66 feet of right-of-way, including 30-34 feet of improved street, 4 feet of sidewalk (both sides), and 4 feet of planting strips (both sides). To reduce housing costs, the City attempts to require only those improvements that are deemed necessary to maintain public health, safety, and welfare. Right-of-way street improvements and other required improvements may be deferred for subdivisions of four or less parcels.

Parking

Parking requirements are identified in Table 5-4. The Zoning Ordinance provides for flexibility in parking requirements, including reductions in parking requirements and joint-use of parking facilities. Section 17.23.030 allows parking to be reduced by the Planning Commission, City Council, or other review authority when the following findings are made:

1. The characteristics of a particular use do not necessitate the number of parking spaces, parking lot design, or improvements required by this section; and

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2. The reduced parking standards will be adequate to accommodate all parking needs generated by the use and will not be a detriment to the public health, safety, and welfare.

Section 17.23.060(D) allows off-site and joint use parking under certain conditions. Off-site parking may be provided within a 300 foot radius of the project after approval by the Planning Commission or City Council. If said parking is located on land not owned by the project developer, a cross access agreement or other contractual arrangement must be provided. Said parking must be available without charge. Joint use of parking facilities may be allowed by the appropriate review authority when there is no conflict of use and when there is sufficient parking for all uses. Joint use of parking facilities will only be considered upon the submittal of a cross access easement or other agreement allowing said parking.

Affordable housing projects may use the parking ratios established by Government Code Section 65915 (State Density Bonus law), which provide a reduction compared to the City’s parking ratios, except that the City’s parking requirements for a two- or three-bedroom single family unit are the same as those provided under GC Section 65915.

Table 5-4: Parking Standards – Residential Uses

Residential Use	Parking Requirement
Single-family dwelling or duplex on individual lots	1 covered and 1 covered or uncovered space per dwelling unit.
Triplex, fourplex, or multifamily dwelling	1 covered and 0.5 covered or uncovered space per dwelling unit. 0.5 additional uncovered space for each unit with three or more bedrooms; and, or multifamily dwellings, 1 recreational vehicle parking space per 10 dwelling units.
Mobilehome in a mobilehome park	1 covered space per dwelling unit; 1 recreational vehicle parking space per five dwelling units; and one visitor parking space for each two dwelling units.
Emergency shelters in the C-3 service commercial district	1 space for every 6 adult beds or 0.5 space per bedroom designated for family units with children. 1 space shall be provided for each manager/staff member. Bike rack parking required.
Accessory dwelling unit	1 covered off-street parking space.
Rooming or boarding house; dormitory	1 parking space for every rentable bedroom in addition to the parking required for the residence; for dormitories, 100 square feet of floor area shall be considered a bedroom.

Source: City of Lakeport Zoning Ordinance, 2019

Analysis of Land Use and Development Standards related to Residential Development and Affordable Housing:

Lakeport’s residential development standards have not constrained housing development in the City nor are they an obstacle to the development of affordable units. The densities generally match the General Plan land use categories. The setback and height requirements relate well to the

densities permitted. Lot size requirements also are reasonable. Development of substandard lots is permitted by Section 17.28.010 V. of the Code.

As described in Chapter 4, the City has adequate sites to accommodate its housing needs, including more than adequate capacity to accommodate the City's very low and low income housing allocation with R-3 multi-family sites. Multi-family housing projects are permitted by right in the R-2, R-3, and R-5 districts. The General Plan requires development in the High Density Residential designation to have a minimum of 19.4 du/ac. This provision effectively prohibits the development of vacant multi-family sites with low density single family detached homes, resulting in the preservation of these sites for high density housing.

Lot coverage requirements apply in all residential zoning districts and increase relative to the allowed density in each district. These requirements allow 50 to 60 percent lot coverage for multi-family development, as shown in Table 5-3. Heights up to 35 feet, which accommodate three stories, are allowed in the R-2 and R-3 zoning districts. Multi-family front setbacks of 15 feet are the same as allowed for single family development, while side and rear setbacks only increase by five feet compared to single family development. The allowed setbacks, along with lot coverage allowances and maximum allowed heights, provide a developable envelope that will accommodate development at maximum allowed densities.

The City's multifamily parking requirements are less than or comparable to those of other local agencies, including Lake County (multifamily parking requirement of 2 spaces/du or 1 space per bedroom, 0.5 guest spaces/du, and one recreational vehicle space per five dwelling units) and Clearlake (parking requirement of 2 spaces/du plus 0.5 guest spaced/du, except one bedroom units which require 1.5 spaces/du plus 0.5 guest spaces/du). Lakeport's parking requirements are not considered a constraint to the development of housing nor are they considered a constraint to developing affordable housing.

While revisions to the City's zoning or development standards are needed to accommodate development of affordable housing and a variety of housing types, specific housing types do need to be addressed in the Zoning Ordinance (see discussion below).

ZONING FOR A VARIETY OF HOUSING TYPES

The Lakeport Zoning Ordinance provides opportunities for a variety of housing types. The Zoning Ordinance does not discriminate against special needs persons and does not discriminate based on household/family type. The Zoning Ordinance defines "family" as one or more persons occupying a premise and living as a single housekeeping unit as distinguished from a group occupying a hotel, club, fraternity, or sorority house. The family shall be deemed to include necessary servants.

Housing Accessibility for the Disabled

The Lanterman Act sets out the rights and responsibilities of persons with developmental disabilities. The Lanterman Act impacts local zoning ordinances by requiring the use of property for the care of six or fewer disabled persons to be classified as a residential use under zoning. More specifically, a State-authorized, certified or licensed family care home, foster home, or a group home serving six or fewer disabled persons or dependent and neglected children on a 24-hour-a-day basis is considered a residential use that is to be permitted in all residential zones. No local agency can impose stricter zoning or building and safety standards on these homes.

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An analysis of constraints on persons with disabilities was conducted for this Housing Element update.

Community Care Facilities. A Community Care Facility is a facility, place, or building which is maintained and operated to provide non-medical residential care, emergency shelters, adult day care, or home finding agency services for children, adults, or children and adults, including, but not limited to, the physically handicapped, mentally impaired, or incompetent persons. “Community care facility” shall include residential facility, residential care facility for the elderly, adult day care facility, home finding agency, and social rehabilitation facility, as defined in Section 1502 of the Health and Safety Code.

State law requires the consideration of small residential care facilities as residential uses that must only be subject to the same restrictions that apply to family dwellings. The Lakeport Zoning Ordinance allows residential care facilities serving six or fewer persons subject to the same requirements as a single family home. Large residential care homes serving 7 to 14 persons will be allowed as a permitted use in the R-3 zone and with a conditional use permit in the R-1, R-2, C-1, and C-2 zones. Community care facilities serving 15 or more persons will continue to be allowed with a conditional use permit in the R-1, R-2, R-3, C-1, C-2, and C-3 zones.

While Health and Safety Code 1267.9 provides for the prevention of overconcentration of certain community care facility/group home uses, State law does not provide for spacing requirements for all group home and community care facility uses. The Lakeport Zoning Ordinance was revised in 2014 to remove use permit and spacing requirements for residential care facilities that were inconsistent with State law. does not allow more than one community care facility permitted within a 300’ radius of another community care facility or day care center, unless approved by the Planning Commission.

The City provides for small residential care facilities consistent with State law and also provides for large residential care facilities and community care facilities in order to accommodate and encourage a variety of housing types and facilities to serve persons in need of care.

Accessibility. The City has adopted the California Building Standards Code. Chapter 11A sets forth housing accessibility requirements and will ensure that all or a portion of new developments are accessible to disabled persons. The accessibility requirements apply to apartments with three or more units, condominiums with four or more units, dwellings with three or more efficiency units (group homes), congregate residences, homeless shelters (if not already subject to access provisions of the State Architect), and publicly funded housing.

Improvements to ensure long-term accessibility to housing for the disabled are not specifically addressed in the Municipal Code. The City does not impose special permit procedures or requirements that could impede the retrofitting of homes for accessibility. The City’s requirements for building permits and inspections are the same as for other residential projects and are straightforward and not burdensome. The City’s currently expedites processing of requests that are necessary for reasonable accommodation and does not have any burdensome requirements. The Zoning Ordinance was amended in 2014 to establish a reasonable accommodation permit process for persons with a disability, including identification of approval procedures for accessibility improvements, such as the installation of ramps, walkways, grab bars, raised counters, and lighting, and identification of improvements that are exempt from building permit requirements.

Housing Rehabilitation. Retrofitting of units for accessibility is subject to the City's building permit requirements. The City's Housing Rehabilitation Program can be used to provide accessibility improvements for lower income households.

Nondiscrimination. The City requires nondiscrimination clauses where it enters into agreements to assist in the development of housing.

Secondary Units

Secondary accessory residential units, or accessory dwelling units (ADUs), can provide housing family members, students, the elderly, in-home health care providers, the disabled, and others, at below market prices within existing neighborhoods, increase the rental housing stock, and provide homeowners with added income. The Zoning Ordinance includes provisions for the development of ADUs, allowing ADUs as a permitted use within R-1 and R-2 districts and allowing two or more residential units per lot in the R-3 and R-5 districts. Chapter 17.28.010.CC establishes performance standards for ADUs, including the following requirements:

- Only one ADU shall be permitted on any one parcel.
- The total floor area shall not be less than 300 s.f. and shall not exceed 60% of the square footage of the existing single family house.
- The unit shall not be constructed unless there is an existing single-family dwelling on the site.
- The unit shall be provided with one covered parking space, in addition to the covered parking required for the existing single-family dwelling unit.
- The minimum lot size shall be 7,500 s.f., except if a unit meets specified criteria including an agreement that the unit be affordable to low, very low, or extremely low income tenants for a minimum of five years.
- Sewer expansion fees shall be collected and water expansion fees shall be collected if a new water meter is installed or upsized.

Since adoption of the 2014 Housing Element, a series of bills have been passed that require ADUs to be permitted if specific standards are met. Government Code Section 65852.2 provides for ADUs to be created in all zones that allow single-family or multifamily residential uses and allowed on lots with an existing or proposed dwelling, without a limitation that the dwelling be a single family unit. Government Code Section 65852.2 also establishes requirements for local standards for ADUs including ensuring that minimum size standards do not prohibit an efficiency unit and that the maximum square footage is at least 850 s.f. or 1,000 s.f. for an ADU with more than one bedroom, ensuring that standards permit at least an 800 s.f. accessory dwelling unit at least 16 feet in height, removing parking standards for certain ADUs, providing specific allowances for ADUs within multifamily units and on lots with multifamily units, and limiting fees that may be collected. Program 2-4 in the Housing Plan requires the City's secondary dwelling requirements to be updated to accommodate ADUs consistent with the requirements of State law.

Manufactured Housing

The City of Lakeport allows the installation of manufactured housing, mobile homes, and factory built housing provided the housing unit meets the state-allowed architectural standards. This provision is set forth in Chapter 17.29 of the City of Lakeport Zoning Ordinance. Allowing manufactured housing provides an affordable option for new residential development.

Housing for the Homeless

Emergency Shelters. Every locality must identify a zone or zones where emergency shelters are allowed as a permitted use without a conditional use or other discretionary permit. The identified zone or zones must include sufficient capacity to accommodate the need for emergency shelter as identified in the housing element, except that all local governments must identify a zone or zones to accommodate at least one year-round shelter. Adequate sites/zones can include existing facilities that can be converted to accommodate the need for emergency shelters.

State law requires the consideration of emergency shelters within residential districts that must only be subject to the same restrictions that apply to similar housing types in the same zone. The Lakeport Zoning Ordinance was updated to allow emergency shelters in the C-3 district, which was identified as appropriate for emergency shelter uses, due to the proximity to services and compatibility of uses allowed in the district. There are approximately eight acres of undeveloped C-3 land located on six sites throughout the City.

The Zoning Ordinance allows emergency shelters as a permitted use in the C-3 zone subject to the following standards:

- A maximum of twenty-four beds;
- Conformance to the development standards of the C-3 district;
- Management;
- Length of stay not to exceed 120 days in a 365-day period;
- Hours of operation, with clients admitted between 6 pm and 8 am during Pacific Daylight time and 5 pm and 8 am during Pacific Standard Time;
- Parking requirement of one space for every six adult beds, one-half space per bedroom designated for family units with children, one space for each staff member, and bike rack parking;
- Adequate exterior lighting for security purposes;
- Size and location of client intake and waiting area, including visual screening and rain/wind screening for exterior waiting areas;
- Security requirements, including secure areas for clients' personal property;
- Health and safety requirements addressing laundry facilities, toilets, and showers (which apply to all residential uses in the C-3 zone);

- Interior and/or exterior common space for clients to congregate shall be provided on the property at a ratio of not less than fifteen square feet per client, with a minimum overall area of one hundred square feet; and
- On-site management/shelter provider requirements, including submittal of an operational plan to ensure effective management.

Shelters may provide one or more of the following types of common facilities for the exclusive use of residents: central cooking and dining room(s) subject to compliance with county health department requirements, recreation room, counseling center, child-care facilities, and other support services intended to benefit homeless clients. Emergency shelters that are not consistent with the location, development, number of beds, and/or operational standards may be allowed with a use permit.

The City's emergency shelter provisions were adopted with the intent to comply with State housing law. The majority of the City's provisions are consistent with State law which allows a local government to apply written, objective standards addressing the maximum number of beds served nightly, off-street parking, size and location of waiting and client intake areas, on-site management, proximity to other shelters, length of stay, lighting, and security. The City updated the emergency shelter provisions in 2014 to remove certain standards that exceeded State law and the current provisions are consistent with the requirements of State law.

Low Barrier Navigation Centers. Low barrier navigation centers are a housing first, low barrier, temporary, service-enriched shelter that are identified and defined by State law. AB 2162 requires jurisdictions to further streamline approval of eligible low barrier navigation center applications in areas zoned for mixed use and multifamily uses, including nonresidential zones subject to specific criteria. The City's Zoning Ordinance does not address these recent requirements. Program 3-7 in the Housing Plan requires the Zoning Ordinance to be updated to address this requirement.

Supportive Housing. Supportive housing is permanent rental housing linked to a range of support services designed to enable residents to maintain stable housing and lead fuller lives. This housing benefits both households that are transitioning from homelessness and extremely low income households that are at-risk of homelessness. Typically, a portion of the housing is targeted to people who have risk factors such as homelessness, or health challenges such as mental illness or substance addiction. The types of support services that can be provided include medical and mental health care, vocational and employment services, substance abuse treatment, childcare, and independent living skills training.

State law requires the consideration of supportive housing as residential uses that must only be subject to the same restrictions that apply to similar housing types in the same zone. The Lakeport Zoning Ordinance was updated to define supportive housing consistent with the requirements of State law. AB 101 requires jurisdictions to further streamline approval of eligible supportive housing applications, including allowing supportive housing by right in all zones that allow residential and mixed use. Supportive housing within the City's Zoning Ordinance is allowed in all zones that allow residential uses and is subject to the same standards as residential units of the same type, meaning that a single family supportive housing unit is treated as a single family home

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and a multi-unit supportive housing facility is treated as a multi-family development. Program 3-7 in the Housing Plan requires the Zoning Ordinance to be updated to address this requirement.

Transitional Housing. Transitional housing is a type of supportive housing used to facilitate the movement of homeless individuals and families to permanent housing. Every locality must identify zones that will allow the development of transitional housing. Appropriate sites for transitional housing have the following characteristics:

- **Zoning:** Transitional housing should be subject to the same permitting processes as other housing in the zone without undue special regulatory requirements.
- **Location:** The zoning should include sites located within the boundaries of the jurisdiction and close to public services and facilities, including transportation.
- **Development Standards:** Parking requirements, fire regulations, and design standards should not impede the efficient use of the site as transitional housing.

State law requires the consideration of transitional housing as residential uses that must only be subject to the same restrictions that apply to similar housing types in the same zone. The Lakeport Zoning Ordinance was updated to define and accommodate transitional housing consistent with the requirements of State law, including the definition of transitional housing provided at Government Code Section 65582. Transitional housing is allowed in all zones that allow residential uses and is subject to the same standards as residential units of the same type, meaning that a single family transitional housing unit is treated as a single family home and a multi-unit transitional housing facility is treated as a multi-family development.

Housing Opportunities for Extremely Low Income Households

Extremely low income households can be housed in affordable housing developments with deep subsidies, such as Section 8 or Section 232. Other housing opportunities for extremely low income households include housing with shared facilities, such as living or dining areas, with private sleeping areas and are often referred to as single room occupancies (SROs), ADUs, and Section 8/Housing Choice Vouchers. SRO and secondary unit types of development allow rents to be much lower than those associated with typical apartment complexes. The City's apartment use allows for single rooms (self-contained dwelling units) to be provided within a building. While these units must provide cooking facilities, there is no minimum standard for cooking/kitchen facilities. The City also allows boarding houses, which are defined as a dwelling that serves three or more persons. Both the multifamily use and the boarding house use can accommodate efficiency units and developments such as SROs and is permitted in the R-3 and R-5 zones. As discussed in Chapter 4, there are vacant sites with these land use designations that will accommodate apartments with deep subsidies and SROs.

Employee Housing

Health and Safety Code Section 17021.5 requires employee housing for six or few employees to be permitted in the same manner as a single family residence and Section 17021.6 requires employee housing consisting of no more than 36 beds in a group quarters, 12 units or spaces designed for use by a single family or household, or eligible projects under Section 17021.8, to be deemed an agricultural use of land and limited to the same permit and zoning requirements of any other agricultural activity in the same zone. The Zoning Ordinance defines employee housing providing accommodation for six or fewer employees as a single family use subject only to those restrictions

that apply to other residential dwellings of the same type in the same zone and is consistent with State law. The Zoning Ordinance does not address employee housing as defined and accommodated under Health and Safety Code Sections 17021.6 and 17021.8. Program 3-7 would update the Zoning Ordinance to accommodate eligible employee housing consistent with Health and Safety Code Sections 17021.6 and 17021.8.

PERMIT APPROVAL PROCESS

The governmental review process adds time to the development process, which causes a direct financial effect on development. The longer it takes for a development proposal to be approved, the higher the development costs become.

State law provides basic time requirements to try to minimize costly delays, while providing adequate time for the local government to properly evaluate a development proposal. The time requirements are embodied in the Subdivision Map Act, California Environmental Quality Act, and General Plan and Zoning law (Government Code).

Processing times for development review vary, based on the size of the project and the extent of environmental review required. The review period can range from 30 review days for a minor project and up to six months for a major project. The review time does not include the time necessary for planners, engineers, and architects to prepare the development proposal and environmental studies, which can add significant additional time to the process.

Table 5-5 summarizes typical timelines for development permits in the City, following a determination that the application is deemed complete. Certain review and approval procedures run concurrently. For example, a ministerial review for a single family home would be processed concurrently with the design review. Site plan review is part of the design review process and not conducted separately. The CEQA document for a subdivision tract map would be processed concurrently with the site plan, subdivision map, and any requested variances or exceptions. Such procedures save time, money, and effort for both the public and private sector and decrease processing time and expense for the developer.

Table 5-5: Permit Types – Processing Time and Approval Authority

Permit	Processing Time	Approval Authority
Single Family Unit – Building permit	20 – 30 days	Community Development Director
Design Review – Duplexes, and Renovations	30 days	Community Development Director
Design Review – Multi-family	60 days	Planning Commission
Use Permits	30 – 45 days	Planning Commission
Minor Exceptions	30 days	Community Development Director
Variances	30 to 45 days	Planning Commission
Parcel Map (Tentative)	60 to 120 days	Planning Commission and City Council

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Permit	Processing Time	Approval Authority
Parcel Map (Final)	30 days	City Council/City Engineer
Subdivision Tract Map (Tentative)	45 to 60 days	Planning Commission and City Council
Subdivision Tract Map (Final)	30 days	City Council/City Engineer
Negative Declaration/Mitigated Negative Declaration	60 to 120 days	Same as primary permit requested
Environmental Impact Report	6 – 8 months	Same as primary permit requested

Source: City of Lakeport, 2020

The City works closely with developers to expedite approval procedures so as not to put any unnecessary timing constraints on development. For a typical project, an initial pre-consultation meeting with the community development department, public works, and the fire district is arranged to discuss the development proposal. Then a tentative parcel map application for a single family subdivision or design review application (site plan, elevations, and landscaping plan) for a multi-family project is filed. The application is first reviewed by the planning department and other departments, such as public works, for consistency with City ordinances and General Plan guidelines. The applicant is then approved by the appropriate approval authority.

Depending on the complexity of the project, a single-family project or multi-family development is typically approved in eight weeks from date of plan submission; if no variances, exceptions, zone changes, or parcel/subdivision maps or CEQA initial study are needed. Depending on the complexity of the request, a variance or zone change request would add two to four weeks to the processing time. After the project is approved, the building department performs plan checks and issues building permits. Throughout construction, the building department will perform building checks to monitor the progress of the project. This process does not seem to put an undue time constraint on most developments because of the close working relationship between City staff, developers, and the decision-making body. Table 5-6 outlines typical approval requirements for a single-family infill project, a 50-unit subdivision, and a 50-unit multifamily project.

Table 5-6: Typical Processing Procedures by Project Type

Project Type	Single Family Unit	Single Family Subdivision	Multifamily Development
<i>Processing Requirements</i>	Building Permit	Initial Study/Negative Declaration	Design Review
		Tentative Map	Initial Study/Negative Declaration or CEQA Exemption (if eligible)
		Final Map	
<i>Estimated Processing Time</i>	20 - 30 days	10 to 16 weeks	8 weeks; 10 – 16 weeks if an Initial Study is required

Source: City of Lakeport, 2020

Use Permit. A Use Permit is not required for single family or multi-family development, but is required for group homes, emergency shelters, and other uses as shown in Table 5-1. A Use Permit requires Planning Commission review. In order for a project to receive a use permit, the Planning Commission must make findings that:

- The proposed location and use is consistent with the objectives of the Zoning Ordinance and purposes of the district in which the site is located;
- The proposed location of the use and conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the health, safety, or welfare of persons residing or working in or adjacent to the neighborhood of such use; and will not be detrimental to properties or improvements in the vicinity or to the general welfare of the City; and
- The proposed use will comply with the provisions of this ordinance.

As described above, the conditions for a use permit require consistency with the Zoning Ordinance and General Plan, as well as findings that the use will not be detrimental to health, safety welfare, properties, or improvements.

Design Review. Concurrent with the project approval process, a developer must have their site plans reviewed prior to the issuance of a building permit. Architectural and Design Review is required for all new proposed commercial, industrial, multi-family residential, institutional, or similar buildings for the proposed exterior remodel of buildings that result in altered appearances, additions, extensions, or enlargements, and for all proposed residential to office/commercial conversion projects.

Administrative review and a decision on Design Review applications by the Community Development Director is completed for duplex and minor commercial projects without a requirement for a public hearing within 60 days of the application being deemed complete.

A decision on Design Review applications for multi-family projects, single family subdivisions, and other development projects by the Planning Commission is completed with a noticed public hearing within 60 days of the application being deemed complete.

The City's architectural and design review requirements are intended to facilitate high-quality development and are not onerous. The requirements include:

Building Design: Where large structures are proposed, massing should be broken up through setbacks and other design techniques. Buildings with excessive blank walls are discouraged; variation in color, trim, and building materials is encouraged in these situations. Roofs should be less visually dominant than walls.

Building Details: Mechanical equipment and other hardware should be screened from public view or located to not be visible from public view. Building components, windows, doors, eaves, and parapets, should be in proportion to one another. Buildings should have the same materials, or those that are architecturally harmonious, used for all building walls and other exterior building components wholly or partly visible from public ways. Materials should be of durable quality.

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Building Color: In general, no more than three colors should be used on a building - the base color, the major trim, and the minor trim. The base color should be the natural color of the masonry or a primary paint color. The base color should relate harmoniously with the base colors on contiguous or close by buildings. When the base color of the building is a natural brick, the major trim color should be related to the brick color.

Lighting: Exterior lighting, when used, can enhance the building design and the adjoining landscaping. Lighting standards and building fixtures should be of a design and size compatible with the historic character of the area, building, and adjacent areas. Lighting shall be restrained in design and excessive brightness avoided. Lighting must not create glare or shine into street right-of-way.

Design review applications are reviewed for consistency with the City's design review criteria and the following findings must be made for approval of a design review application:

- The proposed project is consistent with the purposes of the Lakeport Zoning Ordinance,
- The project is in substantial compliance with the design criteria, and
- The project is consistent with the Lakeport General Plan.

The design review process does not regulate any specific uses, but requires all uses to comply with specific design standards. The design review process is similar to the site plan review process conducted by most jurisdictions. The City's design review requirements are objective (e.g., no more than three colors should be used on a building, blank walls should be broken up by variation in color and trim) and are clearly established in the Zoning Ordinance. The City's design review requirements are written to include many "shoulds" rather than "shalls" in order to allow applicants flexibility in achieving substantial compliance. As part of an effort to streamline permit processing, the City provides a design review handout that identifies the submittal requirements for a design review application and a description of design review criteria. In order to expedite processing, the Zoning Ordinance requires all design reviews to be considered within 60 days of the application being deemed complete. The design review process does not present a constraint to the development of market-rate or affordable housing, but simply ensures orderly and safe development in the City. The City has approved multiple affordable housing projects and the design review process has not resulted in multiple rounds of review, delays, or other constraints. However, the design review process does include subjective language that does not meet the requirements of Government Code Section 65913.4, which requires that any zoning, subdivision, and design criteria applied to eligible multifamily projects be objective standards that involve no personal or subjective judgment by a public official and are uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant or proponent and the public official before submittal.

Minor Exceptions. The Community Development Director may grant a minor exception up to a maximum of ten percent of distance between structures; lot dimensions; on-site parking, loading, and landscaping; and setbacks. Minor exceptions are approved at the administrative level and require notice to the contiguous property owners. Minor exceptions are approved with the following findings:

- A. That there are special circumstances applicable to the property, including its size, shape, topography, location, or surroundings which create an unusual situation in terms of the ability to comply with Code requirements.
- B. That granting the minor exception is necessary for the preservation and enjoyment of a substantial property right possessed by other properties in the same vicinity and land use district and is restrictive to the property for which the minor exception is sought.
- C. That granting the minor exception will not be detrimental to the public health, safety, or welfare or injurious to the property or improvements in such vicinity and land use district in which such property is located.
- D. That granting the minor exception does not constitute a special privilege inconsistent with the limitation upon other properties in the vicinity and land use district in which such property is located.
- E. That granting the minor exception does not exceed ten percent of the standard(s) being modified, or allow a use or activity which is not otherwise authorized by the regulations governing the subject parcel.
- F. That granting the minor exception will not be inconsistent with the General Plan.

Variiances. The Planning Commission may grant a variance from the requirements of this Code governing the modification of the dimensional standards involving the distance between structures, lot area, lot coverage, lot dimensions, setbacks, and the number and dimensions of parking area or loading space requirements. Variances to use standards or General Plan densities are prohibited by the California Government Code. Variances require a publicly noticed hearing and are granted only if the following findings are made:

- A. The strict application of the Zoning Ordinance deprives the property of privileges enjoyed by other properties in the vicinity, and under identical land use district classification, due to special circumstances applicable to the property including size, shape, topography, location, or surroundings;
- B. That granting the variance is necessary for the preservation and enjoyment of a substantial property right possessed by other properties in the same vicinity and land use district and denied to the property for which the variance is sought;
- C. That granting the variance will not be materially detrimental to the public health, safety, or welfare, or injurious to the property or improvements in such vicinity and land use district in which the property is located;
- D. That granting the variance does not constitute a special privilege inconsistent with the limitations upon other properties in the vicinity and land use district in which such property is located;
- E. That granting the variance does not allow a use or activity which is not otherwise expressly authorized by the regulations governing the subject parcel; and

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F. That granting the variance will not be inconsistent with the Lakeport General Plan.

Permit Processing Conclusions: The typical land use entitlement processing time in Lakeport for a multi-family development is approximately 8 weeks and a single-family development, such as a subdivision, is 10 to 16 weeks, following the determination of a complete application. This approval process includes the submittal of an application and payment of fees, which is then reviewed for completeness by the Community Development Department. This review and approval process is very efficient and predictable when compared to many other California communities, and provides a developer with the ability to predict and control development costs. This efficient process is in part attributable to the relatively low volume of permit applications and is further aided by the City's conscientious effort to avoid unnecessary delays in processing applications. The City's permit processing and approval processes do not put an undue constraint on the timely review and approval of development applications and do not constrain the development of housing.

It is noted that single family projects frequently may file a final map or the first phase of their final map and request building permits within 6 weeks to 1 year of approval, but it also is not uncommon for a project applicant to finalize their subdivision or parcel map and then sell off the parcels to an investor or developer that may wait even longer to request building permits. However, subdivisions in Lakeport have been very slow to develop and it is typical for a developer to take 10 or more years to request a building permit on a single family lot after the final map creating the single family lots has been filed. Multifamily projects develop more quickly. Typically, building permits are requested within one year of design review approval. The City's most recent multifamily projects have been affordable housing projects and the time between the City's approval of the project and the building permit application was used to secure and finalize project funding as most funding sources (HOME, CDBG, Low Income Housing Tax Credits) require a project to demonstrate readiness (site review approval, completion of the environmental review process, etc.) before the project is eligible for funding.

LOCALLY ADOPTED ORDINANCES AND REGULATIONS

Apart from the land use controls discussed throughout this section, the City does not have any moratoriums on development, growth control restrictions, inclusionary housing requirements, short-term rental ordinances, or other ordinances or regulations that impede the development of housing.

APPROVED AND BUILT DENSITIES

While the City's regulations identify maximum densities that may be developed in the City, individual developers may opt to build at the lower, mid-range, or higher end of allowed densities. Recent projects in Lakeport that are built or are under construction are consistent with the densities anticipated by the City's General Plan, Specific Plans, and Zoning Code, with the exception of the two affordable housing projects.

The Martin Street Apartments (24 units on 2.5 acres) and Martin Street Apartments II (48 units on 4.2 acres), which are both affordable to lower income households, have ranged from 9.6 to 11.4 units per acre, which is less than the maximum allowed density of 29 units per acre in the R-3 district.

While no subdivisions have been approved recently, a review of the most recent approved (Lakewood Knoll – approved, expired map) and built subdivisions (Schellinger Homes – partially built) for projects with low density residential designations and zoning indicates projects zoned R-1, which allows up to 7.3 units per acre, are proposing and constructing housing from approximately 4 to 5 units per acre consistent with the allowed density range. The units in the Victorian Village subdivision, which was partially completed, were approved and built at approximately 12 units per acre, which is less than the maximum of 19.4 units per acre allowed in the R-5 district.

BUILDING CODES

Building Codes, however, regulate the physical construction of dwellings and include plumbing, electrical and mechanical improvements. The City enforces the 2019 California Building Code and related codes, the California Building Standards Code (CBSC). The CBSC, as published by the California Building Standards Commission, is applied statewide. The City has adopted the CBSC without amendment. The CBSC is developed by the State Housing Law Program administered by the Department of Housing and Community Development (HCD) and is the statewide standard for residential, commercial, and other new development. The building standards are published in the California Code of Regulations, Title 24, known as the California Building Standards Code. These codes are considered to be the minimum necessary to protect the public health, safety and welfare. Because the City uses the state’s standards for its building code without any amendments or additional requirements, there is no associated constraint to the development of housing.

The Community Development Department is responsible for administering ordinances and other regulations pertaining to land and building development within the City limits. The Department provides plan-checks and inspections. Building Code enforcement is conducted first through the plan-check process for new construction, remodeling, and rehabilitation projects. The plan check process ensures that the plan and specifications are designed according to code. The second step is scheduled inspections during construction to ensure that the structure is built to the plan specifications.

Inspections are also conducted in response to public complaints or an inspector’s observation that construction is occurring without proper permits. Local enforcement of these codes does not add significantly to the cost of housing in Lakeport and maintains an acceptable standard of health and safety for all inhabitants.

FEES

Although development fees do contribute to the total cost of housing development, the extent to which these costs are passed on to the consumer depends on price sensitivity of each housing type and the ability of housing developers to absorb such cost increases and still maintain acceptable profit margins. Where increased costs cannot be absorbed by the consumer or developer, housing production will decline. In “price sensitive” markets, such as that for affordable housing, when increased costs cannot be absorbed by the developer, or products modified to compensate the developer, affordable housing is not built.

Various fees and assessments are charged by the City and other agencies to cover the costs of processing permits and providing services and facilities, such as utilities, schools, and

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infrastructure that are associated with building housing. Almost all of these fees are assessed through a pro rata share system, based on the magnitude of the project's impact or on the extent of the benefit which will be derived.

Table 5-7 summarizes the City's development application and processing fees and building and development impact fees collected by the City and outside agencies.

Table 5-7: 2019 Development and Building Fees

Fee Description	Fee
Application Review and Processing Fees	
Architectural and Design Review	\$2,809.72
Architectural and Design Review – Minor	\$711.80
Certificate of Compliance	\$266.97
Lot Divisions (Parcel Map, Subdivision)	
- Minor (4 or less lots)	\$1,356.52
- Major (5 or more lots)	\$2,045.96
Use Permit	\$652.29
Minor Use Permit	\$172.02
Variance	\$682.11
Zone Change	\$1,038.06
Zoning Permit	\$177.09
CEQA: Categorical Exemption	\$133.48
CEQA: Environmental Impact Report	Direct cost (outside consultant and City staff)
CEQA: Initial Study/Mitigated Negative Declaration	\$844.94
Building and Development Impact Fees	
Sewer Expansion Fee (CLMSD South)*	\$14,409 per unit
Sewer Expansion Fee (CLMSD North)*	\$12,053 per single family dwelling
Water Expansion Fee	\$7,845 for a standard ¾” meter \$31,369 for a 1 ½” meter
Storm Drainage Fee	(\$.10/sf of impervious surface)
State Fee for Green Building Standards	\$1 per \$25,000
School Fees	\$2.97/square foot
Fire Fee	\$1.00/square foot

Sewer Lateral	Time & Material
Water Lateral	Time & Material
Building Permit Fee	Determined based on value

Source: City of Lakeport Land and Building Development Information : Fees and Expenses, 2019

*Fee requirements payment of either City of Lakeport Municipal Service District (CLMSD) South or North fee, but not both.

**Additional fees and charges are required for planning applications and possibly for the mitigation of development impacts as determined on a case-by-case basis.

As shown in Table 5-8 shows the planning, building and development fees for a 1,500 s.f. single family home, a 50-unit single family subdivision, and a 50-unit multifamily apartment project. A 1,500 square-foot single-family residence would have fees totaling approximately \$29,729 to \$32,085. A 50-unit single family subdivision with an average unit size of 1,850 s.f. would have total fees of approximately \$31,257 to \$33,613 per unit. There are economies of scale with developing multifamily projects, which have smaller unit sizes and efficiencies associated with common water and sewer infrastructure. The fees for a 900 square foot multifamily unit (average size in a 50-unit project) would be approximately \$13,710 to \$14,889, which is significantly less than the average fee for a stand-alone single family home or a unit in a single family subdivision. Similarly, the fees for a stand-alone 1,500 square foot single family home are slightly less than an 1,850 square foot home that is built as part of a larger subdivision.

Table 5-8: Processing and Impact Fees – Residential Development

Fee Description	Single Family Unit 1,500 square ft. ¹	50-unit Single Family Subdivision (1,850 s.f. average unit size)	50-unit Multifamily Project (900 s.f. average unit)
Planning and Building Fees			
Architectural and Design Review – includes Planning and Engineering Fees	N/A	\$2,809	\$2,809
CEQA – Initial Study/Negative Declaration	N/A	\$844.94	\$844.94
Development Agreement	N/A	\$1,245	--
Building Permit Fee	\$3,370	\$168,500	\$43,238
Lot Division	N/A	\$2,045	N/A
Development Fees			
Sewer Expansion Fee (CLMSD South) ²	\$14,409	\$602,650 or	\$301,300 or
Sewer Expansion Fee (CLMSD North) ²	\$12,053	\$720,450	\$360,225
Water Expansion Fee	\$7,845	\$392,250	\$156,941 ³
Storm Drainage Fee (\$.10/sf of impervious surface)	\$500	\$25,000	\$7,310 ⁺
State Fee for Green Building Standards**	\$6	\$300	\$200
School Fees (\$2.97/sf)	\$4,455	\$274,725	\$129,344

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Fee Description	Single Family Unit 1,500 square ft. ¹	50-unit Single Family Subdivision (1,850 s.f. average unit size)	50-unit Multifamily Project (900 s.f. average unit)
Fire Fee (\$1.00/sf)**	\$1,500	\$92,500	\$43,550
Total Fees****	\$29,7296 / \$32,085	\$1,562,869 to \$1,680,669	\$685,537 to \$744,462
Fee per Unit	\$29,729 / \$32,085	\$31,257 / \$33,613	\$13,710 to \$14,889

Source: City of Lakeport Land and Building Development Information: Fees and Expenses, 2019. Fees are subject to change.

¹Assumes a 1,500 sf home on a 10,000 sf lot

²Payment of either CLMSD South or North fee is required, but not both.

³Assumes a 48 unit complex with a 4" meter. Fee is determined based on meter size.

⁴Additional fees and charges are required for sewer laterals, water meters, water laterals, right of ways improvements, planning applications, and any site-specific mitigation determined on a case-by-case basis.

Lakeport's fee structure does not appear to pose an undue constraint on the production of housing, based on development trends. The City's fees remain comparable to those of other jurisdictions in the region and the City does not collect traffic, parks and open space, governmental facilities, and similar impact fees commonly collected by jurisdictions throughout the State that can increase the cost of development.

It is noted that State law limits fees associated with ADUs, particularly those associated with water, sewer, and impact fees as identified by Government Code Section 65852.2(f). Chapter 17.28 of the Zoning Ordinance requires collection of sewer expansion fees and, if a new meter is installed or upsized, water expansion fees, which exceeds the fee limitations of State law. Program 2-4 will update the City's fee schedule to ensure that fees collected for ADUs are consistent with the requirements of State law and will significantly reduce potential water and sewer fees collected for an ADU.

ANNEXATIONS

The Lake County Local Agency Formation Commission (LAFCo) regulates, through approval or denial, the boundary changes proposed by public agencies or individuals. LAFCo does not have the power to initiate boundary changes on its own, except for proposals involving the dissolution or consolidation of special districts and the merging of subsidiary districts. Their authority includes both Sphere of Influence (SOI) amendments and annexations.

LAFCo's efforts are directed toward seeing that services are provided efficiently and economically while ensuring that agricultural and open-space lands are protected. LAFCo's policies related to the expansion of a City's urban boundaries are guided by the Cortese-Knox-Hertzberg Act, which requires the City to prezone territory to be annexed, and prohibits subsequent changes to the general plan and or pre-zoning designations for a period of two years after completion of the annexation, unless the city council makes a finding at a public hearing consistent with the provisions of GC 56375 (e). The City's pre-zoning must take into account the likely intended development of the specific property. In instances where LAFCo amends a proposal to include additional territory, the Commission's approval of the annexation will be conditional upon completion of pre-zoning of the new territory.

According to the Lake LAFCo Policies, Standards and Procedures (amended November, 2007), LAFCo will normally adjust annexation boundaries to include adjacent urbanized areas in order to maximize the amount of developed urban land inside the city, and to minimize piece-meal annexation. As used herein, “urbanized areas” are areas that are developed for industrial, commercial or residential use with a density of at least one residential unit per 1.5 acres and which receive either public water or sewer service.

While LAFCo serves an important role in local land use planning and the provision of services, SOI and annexation approvals are considered a governmental constraint to housing development because of the lengthy time period and the service review requirements.

Non-Governmental Constraints

Non-governmental constraints are those which are generated by the economic and social environment which are beyond the control of local governments. Some of the impacts of non-governmental constraints can be offset to a minimal extent by local governmental actions, but usually the effects are localized and have little influence on the housing need within the jurisdiction or market area. Non-governmental constraints to affordable housing in Lakeport consist of three major factors: price of land, availability of financing, and cost of construction.

Regional demand has a direct impact on the cost of land. The local government can either limit or provide an adequate supply of entitled land for development in order to meet the regional demand. The availability of financing is affected by factors that the local government cannot control, including capital levels of banks and investors, credit worthiness of borrowers, and the willingness of investors to supply capital for real estate. Construction costs are affected by a variety of factors, including the national demand for materials and commodities, and the supply of local construction labor.

FINANCING COSTS AND AVAILABILITY

One of the most significant factors related to the provision of adequate housing for all segments of the population is the availability of financing. The average annual mortgage interest rates for the years 2000 through 2019 can be found in Table 5-9. In 2000, interest rates for a 30-year fixed rate mortgage were just over 8 percent. The rates fell by over a percent in 2001 and by another half a percent in 2002. In 2003 rates declined to 5.83 percent and held under six percent for the following two years. In 2006 as home prices peaked interest rates climbed by a half a percent to 6.41 percent and held over 6 percent for the next two years. Since 2008, interest rates have already dropped significantly to an average of 3.94 percent in 2019.

Table 5-9: Average Annual Mortgage Interest Rates 2000-2019

Year	Annual Average	Year	Annual Average
2000	8.05	2010	4.69
2001	6.97	2011	4.45
2002	6.54	2012	3.66
2003	5.83	2013	3.98
2004	5.84	2014	4.17

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2005	5.87	2015	3.85
2006	6.41	2016	3.65
2007	6.34	2017	3.99
2008	6.03	2018	4.54
2009	5.04	2019	3.94

Source: Freddie Mac, Monthly Average Commitment Rate and Points on 30-Year Fixed-Rate Mortgages

Generally speaking, households can afford to spend 30 percent of their monthly income on housing. This figure assumes that the household does not have an already high debt to income ratio, or other high monthly expenses. A household that makes the median annual income of approximately \$40,446 in Lake County (2013-2017 ACS Survey) could theoretically afford a monthly housing payment of \$950. With a \$20,000 down payment a median income household could purchase a home valued at approximately \$144,135 at a 4.75 percent interest rate. As interest rates increase, the affordability is significantly eroded. For example, if interest rates climbed back to 8 percent as they were throughout the 90s and in 2000, the buying power of the same median income household would shrink \$36,080 to \$108,055. Table 5-10 presents an Affordability—Interest Rate Sensitivity Index.

It is noted that the median income reported by the 2013-2017 ACS Survey is much less than the 2019 median income of \$64,800 used to determine eligibility for federal and state housing assistance programs. Table 5-10 demonstrates the effect of the interest rate on amount of a mortgage a household is able to afford.

Table 5-10: Affordability—Interest Rate Sensitivity Index

Home Price	\$100,000	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Down (10%)	\$10,000	\$15,000	\$20,000	\$25,000	\$30,000	\$35,000	\$40,000
Loan Amount	\$90,000	\$135,000	\$180,000	\$225,000	\$270,000	\$315,000	\$360,000
Typical Loan Terms: 30 yrs, 5% interest							
Monthly Housing Payment (w/tax/ins.)	\$585	\$880	\$1,170	\$1,465	\$1,760	\$2,050	\$2,345
Required Annual Household Income	\$23,400	\$35,200	\$46,800	\$58,600	\$70,400	\$82,000	\$93,800
Typical Loan Terms: 30 yrs, 6% interest							
Monthly Housing Payment (w/tax/ins.)	\$640	\$965	\$1,285	\$1,605	\$1,930	\$2,250	\$2,570
Required Annual Household Income	\$25,600	\$38,600	\$51,400	\$64,200	\$77,200	\$90,000	\$102,800
Typical Loan Terms: 30 yrs, 7% interest							
Monthly Housing Payment (w/tax/ins.)	\$700	\$1,055	\$1,405	\$1,755	\$2,105	\$2,455	\$2,805

Required Annual Household Income	\$28,000	\$42,200	\$56,200	\$70,200	\$84,200	\$98,200	\$112,200
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Source: De Novo Planning Group, 2020

TYPICAL LOAN – MEDIAN INCOME HOUSEHOLD (LAKE COUNTY)

- Median Income \$64,800 (median income used to determine eligibility for various housing assistance programs)
- *Home Value:* \$222,900
- *Down Payment:* \$22,000 (10 percent)
- *Loan Value:* \$200,610 (90 percent)
- *Interest Rate:* 4.75 percent
- *Monthly Payment:* \$1,381/month (including principal, interest, taxes, insurance)
- *Average Loan Fees and closing costs:* 3.5 percent total, includes 1.5 percent loan-related costs plus one point (Loan fees and points are typically paid by the buyer)

Assistance is available through the City’s First Time Homebuyers program, based on the availability of funds, to eligible and qualified lower income homebuyers.

PRICE OF LAND

According to the California Building Industry Association, the cost of land represents an ever-increasing proportion of the total housing development cost. Since the mid-1960’s, raw land has cost significantly more in California than in the rest of the United States. Land costs in Lakeport, however, are considered less than the majority of California.

Cost of land is influenced by the cost of the raw land, the cost of holding the land during the development process, and the cost of providing services to meet City standards for development. The cost of raw land is influenced by variables such as scarcity, location, availability of public utilities, zoning, general plan designation, and unique features like trees, water frontage, and adjoining uses.

According to recent online real estate listings, unimproved residential lots in the Lakeport area are priced around \$17,500 and \$40,284 per acre, on average. Unimproved residential lots range from approximately \$35,000 to \$70,000 per acre for a 0.2-acre to 4.0-acre lots. Improved (finished) single family residential lots sales prices ranged from \$9,000 to \$65,000, with a median price of \$38,625 for a ready-to-build single family lot. Measures to reduce land costs, which are traditionally available to local governments, include the use of Community Development Block Grant (CDBG) program income funds, CDBG and HOME grants, and the use of government-owned surplus lands for housing projects. These measures generally benefit the construction of assisted, low-income housing. The City of Lakeport utilizes CDBG and HOME funding; it does not own any surplus land suitable for residential development.

COST OF CONSTRUCTION

Construction costs include both hard costs, such as labor and materials, and soft costs, such as architectural and engineering services, development fees, and insurance. Rising costs of labor and materials have contributed to non-governmental constraints on housing development and improvements. These costs were a substantial part of the increased housing costs during the 1990s

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through 2005. Builders passed those increases along to the homebuyer or renter. As the value of homes turned downward with the recession, construction costs also decreased.

The cost of residential construction varies significantly project to project. On average, construction costs in Lakeport run approximately \$150 to \$200 per square foot. Additional costs, which average from \$50 to \$75 per square foot of residential construction, account for site improvements. The source of these figures was an estimate by the California Contractors State License Board.

Current construction cost estimates for multifamily homes in Lake County, show that hard costs still account for approximately 70 percent of the building cost and soft costs average around 25 percent (the remaining 5 percent is land costs). For single family homes, hard costs currently account for roughly 50 percent of the building cost, soft costs are 30 percent and land is the remainder.

Construction cost increases, like land cost increases, affect the ability of consumers to pay for housing. Construction cost increases occur due to the cost of materials, labor, and higher government imposed standards (e.g., energy conservation requirements). In the past five years, the development community produced market rate for-sale housing in Lakeport that is affordable to above moderate income households.

Since the passage of Proposition 13, local governments have faced the increasingly difficult task of trying to finance the cost of infrastructure. Infrastructure costs can no longer practically be passed on to the taxpayer through property tax backed general or special obligation bonds by the local jurisdiction. The incremental cost of these facilities has been partially financed through impact fees; however, typically these costs are passed along by increasing the cost of housing and rents.

Other methods that can be used by jurisdictions to promote the construction of affordable housing include allowing smaller lots, reducing processing fees, and reducing processing time. Lot size and improvement concessions need to consider possible site-specific characteristics such as soil quality and drainage capacity before they are granted. Reducing fees can have a significant effect on housing costs in jurisdictions where the fees represent a large percentage of the overall cost. Additionally, providing federal and state grant funds remain available; such funds may be used by the City to reduce off-site costs in support of affordable housing development. These options might be considered for developers who would assure that housing developed with such concessions would be kept affordable to lower income households for long periods of time.

CONSUMER PREFERENCE

The increase in housing costs during the 1990s and first half of the 2000s was partially due to consumer preference and lifestyle expectations. The size of the typical single-family house increased and the amenities included in the housing package changed, as well as the number of bedrooms and size of living areas. All of these lifestyle choices have costs associated with them.

The general trend in consumer preference in California from 2000 through 2005 was toward larger homes, smaller lots, and more attached home products. As the real estate market began its downturn in 2006 through 2009 the general trend in consumer preference in California has shifted back to smaller homes, larger lots, and more detached home products. In recent years, development

of new housing has been extremely limited. In upcoming years, the consumer preference trend in Lakeport has maintained its trend toward larger single family detached homes on large lots.

At Risk Housing Units

The Housing Element Law requires that there be an analysis of existing or potential “at-risk” assisted housing developments, which are eligible to convert to market-rate housing over the next ten (10) years. The conversion may be due to the termination of a subsidy contract, mortgage prepayment, or expiration of use restrictions. “Assisted housing developments” are multi-family rental housing projects that receive or have received government assistance under federal programs listed in the Housing Element Law, state and local multi-family revenue bond programs, local redevelopment programs, the federal Community Development Block Grant Program, or local in-lieu fees.

Database for At Risk Units. The California Housing Partnership Corporation (CHPC) maintains a database of federally subsidized multifamily housing in the state of California. The database contains information on more than 150,000 federally subsidized apartments that are at-risk of conversion to market rate.

At Risk Assessment. Each property in the database is assigned a level of risk of conversion. There are three levels of risk: At-Risk, Lower Risk and Low Risk. At Risk properties are At-Risk when they are within five years of the end date of the most valuable subsidy or rent restriction. Lower Risk properties are at Lower Risk of conversion when their most valuable subsidy or rent restriction is scheduled to terminate within six to ten years of the current date. Low Risk properties are Low Risk when their subsidies and/or rent restrictions will expire more than 10 years in the future. If a property is owned by a nonprofit organization, the database assumes that the risk of conversion to market is one level lower than it otherwise would be. While this is not always accurate, on average the risk of conversion is lower when a property is owned by a nonprofit whose mission is typically to maintain the affordability of apartments for lower income households.

Lost to Conversion: This category includes all federally subsidized apartments that have opted out of their Section 8 contracts or lost their Section 521 Rental Assistance. In the case of properties that never had a rent subsidy, those that have prepaid their subsidized mortgages are considered Lost to Conversion. The database does not count as lost those properties that have refinanced their subsidized mortgages but continued their Section 8 or Section 521 Rental Assistance contract.

Preserved: This category includes those properties that have been acquired by owners with a new regulatory agreement with a government entity that commits them to keeping the apartments affordable to the same income group for at least another 30 years. In the case of properties with project-based rental subsidies, there must be an extension of the rent subsidy contract, typically for 20 years for Section 8 properties, and five years for Section 521 properties.

At Risk Units in Lakeport. The CHPC and the owner or operator of each affordable project was contacted in order to identify at-risk units. In the City of Lakeport there are 55 "at-risk" assisted housing units, which include 25 in Lakeport Village and 30 in Sunshine Manor, which are eligible to convert to market-rate housing over the next ten years. Those housing developments are presented in Table 5-11 below.

5. CONSTRAINTS TO HOUSING AND HOUSING RESOURCES

Table 5-11: Federally Assisted Multifamily Housing

Name/Address/ Phone	Program	Units	Affordability Exp. Date	Risk Assessment
Lakeport Village 901 S. Forbes St. (707) 263-5231	USDA Rural Development (Section 515); HCD Rental Construction Housing Program	32 (25 w/ subsidy) 14 – USDA	25 units: annual contract	At Risk: High
Lakeview Apartments 525 Bevins St. (707) 263-7021	US HUD (Section 202/8) Senior Housing	36	Expiration Date: 2/28/2034	Low risk, Nonprofit
Sunshine Manor 2031 Giselman St. (707) 263-3761	US HUD (Section 202/8) Senior Housing	30	Expiration Date: 10/31/25	At Risk: Moderate, Nonprofit
Bevins Court 958 Bevins St (707) 263-3524	US HUD (Section 202/8) Senior Housing	10	Expiration Date: 12/2043	Low, Nonprofit
Bella Vista 1075 Martin Street (707) 263-3327	LIHTC USDA Rural Development Section 515	48 (47 affordable)	Expiration Date: 2067	Low
Martin Street Apartments 1255 Martin St. (707) 263-3003	LIHTC	24 (23 assisted)	Expiration Date: 12071	Low
Total			171 subsidized units/ 55 at-risk	

Source: HCD 6th Cycle Data Package, 2018

None: No expiration date

Low: Section 8 Contract Expiring or Mortgage maturing in more than 10

Moderate: Section 8 Contract Expiring or Mortgage maturing in 5-10 years

High: Section 8 Contract Expiring or Mortgage maturing in 1-5 years

Very High: Section 8 Contract Expiring or Mortgage maturing in next year

Lakeport's affordable units are under the following federal programs:

Project-Based Section 8: Section 8 is a rent subsidy program in which tenants pay no more than 30% of their income for rent with HUD paying the difference up to the contract rent amount. Project-based Section 8 contracts have terms of up to 20 years, except for those financed by the California Housing Finance Agency, which have terms of 30 years.

Section 515: USDA Rural Development (RD) administered direct mortgage program provides loans for rental housing in rural communities. Loans have terms of up to 50 years with an interest rate of 1%.

Section 202 Supportive Housing for the Elderly. The Section 202 program helps expand the supply of affordable housing with supportive services for the elderly. It provides very low-income elderly

with options that allow them to live independently but in an environment that provides support activities such as cleaning, cooking, transportation, etc. The program is similar to Supportive Housing for Persons with Disabilities (Section 811).

Section 811 Supportive Housing for Persons with Disabilities. Section 811 is a program that allows persons with disabilities to live as independently as possible in the community by increasing the supply of rental housing with the availability of supportive services. The program also provides project rental assistance, which covers the difference between the HUD-approved operating costs of the project and the tenants' contribution toward rent. The program is similar to Supportive Housing for the Elderly (Section 202).

Low Income Housing Tax Credits. The Low Income Housing Tax Credit (LIHTC) program was created by Congress in 1986 as Section 42 of the Federal Tax Reform Act. The LIHTC program encourages the construction and rehabilitation of low income rental residential development by providing a federal income tax credit as an incentive to investors. Investors receive tax credits for a specified number of years in return for investing equity capital. In California, the California Tax Credit Allocation Committee administers the LIHTC program and requires a 55-year affordability period.

The Sunshine Manor affordability period ends in 2025. While the project could convert to market rate, the project is owned by a non-profit with a public purpose to develop and own affordable housing. Sunshine Manor has little incentive to remove current rental restrictions by terminating their Section 8 contracts or prepaying their mortgages, although they are eligible to do so. Some non-profit owners may prepay their mortgages in order to bring new capital into their projects. They are, however, less likely to opt-out of their Section 8 contracts. The Lakeport Village complex has an “at risk” assessment because the owner is not a non-profit and the Section 8 contract renews annually. The owner has renewed the contract since 2006 and they have indicated that they intend to continue to renew in the future.

Cost Analysis. State Housing Element law requires that all Housing Elements include additional information regarding the conversion of existing, assisted housing developments to other non-low income uses (Statutes of 1989, Chapter 1452). This was the result of concern that many affordable housing developments would have affordability restrictions lifted when their government financing was soon to expire or could be pre-paid. Without the sanctions imposed due to financing restrictions, affordability of the units could no longer be assured.

In order to provide a cost analysis of preserving “at-risk” units, costs must be determined for rehabilitation, new construction or tenant-based rental assistance. The following costs anticipate rehabilitation, construction, or rental assistance of unit sizes comparable to those in the Sunshine Manor and Lakeport Village Apartments, which have primarily 1-bedroom units and some 2-bedroom units.

- 1) Rehabilitation – The primary factors used to analyze the cost of preserving low-income housing include: acquisition, rehabilitation and financing. Actual acquisition costs depend on several variables such as condition, size, location, existing financing and availability of financing (governmental and market). There are not currently any multifamily units that are listed for sale in Lakeport; therefore, the acquisition cost assumption is based on an average cost of a multifamily unit within the region. Table 5-12 presents the estimated per

5. CONSTRAINTS TO HOUSING AND HOUSING RESOURCES

unit preservation costs for the City of Lakeport. This option would result in a cost of \$7.47 million to preserve 55 replacement units for a 55-year or longer affordability term, depending on the financing program and specific affordability restrictions.

Table 5-12: Rehabilitation Costs

Fee/Cost Type	Cost per Unit
Acquisition	\$103,474 ¹
Rehabilitation	\$20,000
Financing/ Other (10% of costs)	\$12,347
TOTAL PER UNIT COST	\$135,821
TOTAL COST – 55 UNITS	\$7,47,0155

¹Based on median cost of multifamily projects with four or more units that have been sold in the last three years or are listed for sale

Source: De Novo Planning Group, 2020

- 2) **New Construction/Replacement** – New construction implies construction of a new property with the same number of units and similar amenities as the one removed from the affordable housing stock. Cost estimates were prepared by using regional information and data. The construction of new housing can vary greatly depending on factors such as location, density, unit sizes, construction materials and on-site and off-site improvements.

In general, costs for construction of single family detached units are around \$180 per square foot, while multifamily units are between \$200 and \$250 per square foot. Multifamily units have higher costs to build when compared to single family detached because of the building and fire code standards (i.e. fire sprinklers, etc.), which drive construction costs up. Additionally, multifamily units have higher liability costs. The following table describes new construction costs for a typical garden style apartment within the region. Table 5-13 presents the estimated per unit new construction/replacement costs estimated for development in the City. The cost to construct 55 replacement units would be approximately \$5,871,375 to \$6,250,000.

Table 5-13: New Construction/Replacement Costs

Cost/Fee Type	Housing Type	
	Multifamily ¹	Single Family ¹
Land Acquisition	\$5,286 ²	\$38,625 ³
Construction and Site Improvements	\$167,700	\$117,000
Planning, Building, Development, Fire, and School Fees	\$13,710	\$29,729
Financing/ Other	\$28,004	\$10,893
TOTAL PER UNIT COST	\$214,700⁴	\$228,747

TOTAL COST – 55 UNITS	\$11,808,500	\$12,581,085
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¹Assumes an average unit size of 650 s.f. (assuming a mix of one and two bedroom units) to replace the at-risk units

²Based on Martin Street Apartments II per acre land cost; assumes 20 units per acre

³Based on average costs for single family lots in the City

⁴Average cost for Martin Street Apartments II was \$313,860 per unit; complex has solely 3- and 4-bedroom units

Source: De Novo Planning Group, 2010

- 3) **Tenant-Based Rental Assistance** – This type of preservation largely depends on the income of the family, the shelter costs of the apartment and the number of years the assistance is provided. If the very low income family that requires rental assistance earns \$25,950 (50% of median income for a 2-person household), then that family could afford approximately \$648.75 per month for shelter costs. The difference between the \$648.75 and the median rent of \$922.50 (the average of the median rents for one and two bedroom units) would result in necessary monthly assistance of \$274 a month or \$3,288 per year. For comparison purposes, typical affordable housing developments carry an affordability term of at least 30 years, which would bring the total cost to \$98,640 per household per family. Tenant-based rental assistance for the 55 at-risk units would be approximately \$5,425,200 for a 30-year period and \$9,946,200 for a 55-year period.

Summary. Providing rental assistance for a 30-year period is the most cost-effective approach toward preserving at-risk units at a cost of \$5.4 million. However, for a longer term of affordability, it would be more cost-effective to acquire and rehabilitate units, which would cost approximately \$7.5 million. New construction of units is the most expensive approach, which would cost approximately \$11.8 million for a multifamily development with 30 one bedroom units and 25 two bedroom units and \$12.6 million for development of single family lots (either existing single family lots or subdividing several parcels throughout town) with one and two bedroom units. It is noted that these costs do not reflect potential costs savings associated with various federal and State housing grant and loan programs, discussed below under Resources.

Termination Notice Requirements. State law (§65863.10 of the Government Code) requires notice by owners who want to terminate their rental restrictions (Section 8 and federally assisted mortgages), whose restrictions expire (tax credit projects), or who want to sell an assisted property. The law applies to projects with low-income rental restrictions, including: 1) all types of project-based Section 8/Housing Choice Vouchers developments; 2) projects with mortgages financed through the Section 221 (d) (3) BMIR, Section 236, Section 202 programs or Section 515; and 3) projects that have received an allocation of tax credits under Section 42.

Two notices are required: one at twelve months prior to termination or expiration of the restrictions, and a second notice at six months. The purpose of these notices is to inform tenants, local governments, local housing authorities, and HCD of the owner’s intention to terminate restrictions.

California law also contains an “option to make an offer to purchase” (Section 65863.11 of the Government Code). The purpose of this provision is to provide buyers willing to preserve an assisted project with an opportunity to try to purchase the development from the seller. An owner who chooses to terminate rental restrictions or whose restrictions are expiring is required to provide a notice to potential qualified buyers. An owner with an assisted project also must provide notice if selling the project would result in discontinuance of the use restrictions.

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A notice must be sent to all qualified entities who register with HCD on their website or who contact the owner directly. This notice must be sent 12 months prior to sale or termination by registered or certified mail, as well as posted in the project.

Active Termination Notices. There are not currently any private owners of assisted multifamily rental housing units who are considering no longer providing rental restrictions and converting restricted units to market-rate units that have filed notice with the California Housing and Community Development.

Qualified Entities. Housing element law states that the analysis shall also identify public and private non-profit corporations known to the local government which have legal and managerial capacity, and interest in acquiring and managing assisted housing developments. Following is a representative list of those public and private sector organizations with a registered interest and documented managerial capacity with the HCD's First Right of Referral Program.

HCD maintains a list of Qualified Entities who are interested in purchasing government-subsidized multifamily housing projects. The list is updated periodically. The current list of Qualified Entities for Lake County includes Christian Church Homes of Northern California, Inc., Lake County Housing Services Department, Petaluma Ecumenical Properties Inc., and Rural Communities Housing Development Corp. The full list of Qualified Entities including contact information can be obtained from HCD at: <http://www.hcd.ca.gov/hpd/hrc/tech/presrv/>.

Resources

The following resources include both agencies and funding programs. The agencies listed provide housing-related services and services to special needs groups. The housing funding programs listed include federal and state programs that are available, mostly on a competitive basis, to the City and housing developers for the development, acquisition, and/or rehabilitation of housing. The housing funding programs also include local programs that are available to Lakeport residents and property owners.

Regional and Local Programs

City of Lakeport. The City of Lakeport operates multiple housing programs, including a housing rehabilitation program, first time homebuyer assistance program, and emergency housing assistance program. These programs are funded through a variety of sources, including competitively awarded grants, so the amount of funding available fluctuates in any given year. .

Housing Rehabilitation Program. Housing rehabilitation loans are issued by the City through grant funding and program income from federal CDBG and HOME funds, which are administered by the State Department of Housing and Community Development. Housing rehabilitation loans are available to eligible extremely low, very low, and low income households. The program can be used to fund health and safety repairs, including, but not limited to, roofing, flooring, plumbing, electrical, heating and cooling, water damage, mold, painting, handicap accessibility, windows, and weatherization. Seriously dilapidated homes and mobilehomes can be replaced.

Emergency Housing Assistance Fund. The City operates an emergency housing grant program for the purpose of providing grants to eligible extremely low, very low, and low income households to respond to emergency situations or hardship conditions. Emergency situations or hardship conditions include roof repair, window, siding, and door repair or replacement, heating and cooling system repair or

replacement, plumbing and electrical system repair or replacement, and other similar repair and replacement projects. The Emergency Housing Grant Program may provide assistance to qualified households who are in need of financial assistance to pay water, sewer, power, and propane utility bills which are past due and where services may be disconnected.

First Time Homebuyer Program. The City assists eligible first time homebuyers with home purchases through “gap” financing with CDBG and/or HOME funds. The first time homebuyer must receive the maximum loan that they are eligible for and the City provides a deferred, low interest loan for the difference between the homebuyer’s loan and the cost of the home.

Lake County Department of Social Services (LCDSS). The LCDSS Director is the Executive Director of the Lake County Housing Commission and administers housing programs as well as programs for special needs within the county. The LCDSS is mandated to provide care and assistance for local children and adults who are endangered by abuse, neglect or exploitation; administer County, State and Federal assistance programs; and provide services and support to enable families to become financially self-sufficient. These mandates are accomplished through partnerships with the community for integrated services and a work environment that supports exceptional performance through teamwork.

Section 8/Housing Choice Voucher Program. The Section 8/Housing Choice Voucher program is a rental assistance program for very low income households. LCDSS is responsible for administering the Lake County Section 8 Housing Choice Voucher Program funded by HUD. The Commission administers the Section 8/Housing Choice Voucher Program countywide. Voucher holders may choose anywhere within the County area to live and the number in use in Lakeport changes from time to time. Currently, 22 vouchers are in use in Lakeport. The voucher waiting list is currently full.

Family Self-Sufficiency Program. The Commission also administers the Family Self-Sufficiency (FSS) Program for up to 50 Section 8 households. There are currently 33 slots open in this program. FSS is a HUD program that encourages low-income families receiving Section 8 Housing assistance to obtain employment that will lead them to economic independence and self-sufficiency. All families or individuals receiving Section 8 Housing assistance are eligible to participate in the FSS Program.

In-Home Supportive Services. The In-Home Supportive Services (IHSS) program provides domestic and personal care services to low-income aged, blind, and disabled persons, including developmentally disabled persons, who, without these services, would be unable to remain in their homes and would require placement in costlier long-term institutional care. IHSS services can include assistance with meal preparation, laundry, shopping, transportation, bathing, dressing, and bowel and bladder care. In order to be eligible to receive IHSS services, applicants must be eligible for the Medi-Cal Program.

Area Agency on Aging. The Area Agency on Aging is a division of Lake County Department of Social Services. The Area Agency on Aging coordinates and/or implements a range of senior programs, including nutrition programs (Meals on Wheels), senior legal assistance, family caregiver support, adult day care, and health promotion and disease preventions.

5. CONSTRAINTS TO HOUSING AND HOUSING RESOURCES

CalFresh Program. The CalFresh (formerly Food Stamps) program is designed to help meet the nutritional needs of people with low incomes. CalFresh benefits are intended to purchase food items for the household and may not be used for items such as liquor, cigarettes, household supplies, or hot foods. CalFresh allotments are determined on a quarterly basis utilizing income information received from the family.

General Relief Program. The General Relief (GR) program is a county-funded general assistance program for indigent county residents, which offers repayable benefits. The GR Program provides necessary assistance to eligible persons who are without resources to meet their minimum basic needs for food, housing, utilities, clothing and medical care.

Lake County Behavioral and Mental Health Services. Behavioral Health provides integrated recovery-oriented mental health and alcohol and other drug services in clinic locations. Alcohol and drug abuse diversion and treatment services are available at the clinics and through contracts with local provider agencies. Services include individual and group counseling, trauma-informed treatment services for adults and youth, substance abuse prevention, and referrals to detoxification or residential treatment center.

Mental Health services are designed to provide strong community-based partnerships with individuals and families who are dealing with serious mental illness, including those who have co-occurring (mental health and substances abuse) disorders. Recovery-oriented services include assistance with establishing stable housing, access to physical health care, medications management, trauma-informed counseling and peer supports. Behavioral Health assists with management of mental health crises for all members of the community and provides for inpatient or temporary residential care as appropriate.

Lake County Continuum of Care (LakeCoC). The LakeCoC is a HUD-designated organization that promotes communitywide commitment to the goal of ending homelessness. LakeCoC provides funding for efforts by nonprofit providers and State and local governments to quickly rehouse homeless individuals and families, while minimizing the trauma and dislocation caused to homeless individuals, families, and communities by homelessness; promotes access to and effects utilization of mainstream programs by homeless individuals and families; and optimizes self-sufficiency among individuals and families experiencing homelessness.

California Human Development Farmworker Services. This program serves the lower income population, including farmworkers and their adult children, and has an office in Lakeport. The program provides paths and opportunities for education, training, criminal justice alternatives, housing, and other services, including English education, referrals to immigration and other services, green card renewal, citizenship class, emergency help, job search assistance and placement, adult work experience training, and on-the-job training.

Redwood Coast Regional Center. The Redwood Coast Regional Center provides services for developmentally disabled persons in Lake County through its office located in Lakeport. The RCRC provides information, referral, assessment and diagnosis services, early intervention and support, including home visits, health services, and medical services, individualized planning and service coordination, behavioral supports, employment and day services, health and medical services, family support services intended to assist an individual to remain cared for at home including respite care, nursing, and crisis intervention, residential care, including licensed

residential care and foster family homes, and transportation assistance. Services are provided to all eligible persons, following verification of eligibility and evaluation of need for services. To be eligible to receive services, a person must have a substantial disability that began before their 18th birthday and is expected to continue indefinitely.

Rural Communities Housing Development Corporation (RCHDC). The RCHDC mission is to develop affordable housing for low income and special needs individuals in Lake and Mendocino counties. RCHDC owns and operates two apartment complexes in Lakeport. The first complex is Sunshine Manor, which has 30 apartments and is located at 2031 Giselman Street. The second is Lakeview Apartments, which has 36 apartments and is located at 525 Bevins Street.

St. John's Episcopal Church Food Closet/Thrift Shop. St. John's Episcopal Church operates a food closet and thrift shop on Thursdays from 11 am to 3 pm for community members.

North Coast Energy Services, Inc. is a not-for-profit organization which provides energy conservation, consumer education & advocacy, home improvement, utility assistance, job training, and other services to people in need in Lake County.

Federal and State Funding Programs

Affordable Housing and Sustainable Communities Program (AHSC) funds land use, housing, transportation, and land preservation projects that support infill and compact development and reduce greenhouse gas (GHG) emissions. Funds are available in the form of loans and/or grants in two kinds of project areas: Transit Oriented Development (TOD) Project Areas and Integrated Connectivity (ICP) Project Areas. There is an annual competitive funding cycle.

California Housing Finance Agency (CalHFA) Multifamily Programs provide permanent financing for the acquisition, rehabilitation, and preservation or new construction of rental housing that includes affordable rents for Low and Moderate Income families and individuals. One of the programs is the Preservation Acquisition Finance Program that is designed to facilitate the acquisition of at-risk affordable housing developments and provide low-cost funding to preserve affordability.

CalHOME Program provides grants to local public agencies and non-profit developers to assist households in becoming homeowners. CalHome funds may be used for predevelopment, development, acquisition, and rehabilitation costs as well as downpayment assistance. While CalHOME funding has been limited to disaster assistance in recent years, this would be an appropriate program for the City to pursue to begin to develop a local portfolio of housing assistance programs and funds.

Community Development Block Grant (CDBG) program. The City of Lakeport is eligible to compete each year for federal CDBG funds through the State Small Cities and Counties program. These funds can be utilized for the replacement of substandard housing, rehabilitation of lower income owner-occupied and rental-occupied housing units, and other programs that assist households with incomes at or below 80 percent of median income. It can also be used to offset infrastructure costs in support of affordable housing development. The City is eligible to apply for up to \$500,000 annually on a competitive basis. In addition, the City receives CDBG Program Income through repayment of CDBG-funded loans. The current balance of the CDBG Program Income Fund is approximately \$19.

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Emergency Housing and Assistance Program (EHAP) provides funds to local government agencies and non-profit corporations for capital development activities and facility operation for emergency shelters, transitional housing and safe havens that provide shelter and supportive services for homeless individuals and families. No current funding is offered for this program.

Emergency Shelter Grant (ESG) Program provides emergency shelter and related services to the County's homeless populations. Eligible activities include: the rehabilitation and conversion of buildings for use as emergency shelters; the provision of essential services to the homeless; operating support for emergency shelters; and homeless prevention/rapid rehousing activities. ESG funds are administered by the LakeCoC for the entire County.

Golden State Acquisition Fund (GSAF) was seeded with \$23 million from the Department's Affordable Housing Innovation Fund. Combined with matching funds, GSAF makes up to five-year loans to developers for acquisition or preservation of affordable housing. Loans are a maximum of \$13,950,000. Funds are made available over the counter.

Low-Income Housing Tax Credits can be used to fund the hard and soft costs (excluding land costs) of the acquisition, rehabilitation or new construction of rental housing. Projects not receiving other federal subsidy receive a federal credit of 9 percent per year for 10 years and a state credit of 30 percent over 4 years (high cost areas and qualified census tracts get increased federal credits). Projects with a federal subsidy receive a 4 percent federal credit each year for 10 years and a 13 percent state credit over 4 years.

HOME Program. Federal HOME funds are also obtained through a competitive application process through HCD. Funds may be used for rehabilitation, acquisition and/or new construction of affordable housing. At least 90 percent of the households assisted must be at or below 60 percent of median income. HOME funds are available on an annual basis to the City during a competitive application process for up to \$800,000. The City does not currently have funds in the HOME Program Income Fund.

Housing for a Healthy California (HHC) provides funding on a competitive basis to deliver supportive housing opportunities to developers using the federal National Housing Trust Funds (NHTF) allocations for operating reserve grants and capital loans. The Department will also utilize from a portion of moneys collected in calendar year 2018 and deposited into the Building Homes and Jobs Trust Fund to provide funding through grants to counties for capital and operating assistance. Funds will be announced through a Notice of Funding Availability.

Infill Infrastructure Grant Program (IIG) funds infrastructure improvements to facilitate new housing development with an affordable component in residential or mixed use infill projects and infill areas. If an affordable or special needs housing developer is interested in developing in the City's core area, this program could be useful to fund infrastructure improvements.

Joe Serna Jr. Farmworker Housing Grant Program finances the new construction, rehabilitation and acquisition of owner- and renter-occupied housing units for agricultural workers, with a priority for lower income households. No current funding is offered for this program.

Local Early Action Planning (LEAP). This program assists cities and counties in planning for housing through providing over-the-counter, non-competitive planning grants.

Low-Income Housing Preservation and Residential Home Ownership Act (LIHPRHA). LIHPRHA requires that all eligible HUD Section 236 and Section 221(d) projects “at-risk” of conversion to market-rate rental housing through the mortgage prepayment option be subject to LIHPRHA Incentives. The incentives to owners include HUD subsidies which guarantee owners an eight percent annual return on equity. Owners must file a Plan of Action to obtain incentives or offer the project for sale to a) non-profit organizations, b) tenants, or c) public bodies for a 12 month period followed by an additional three-month sale to other purchasers. Only then are owners eligible to prepay the subsidized mortgages.

Mobilehome Park Rehabilitation and Resident Ownership Program (MPRROP) makes short- and long-term low interest rate loans for the preservation of affordable mobilehome parks for ownership or control by resident organizations, nonprofit housing sponsors, or local public agencies. MPRROP also makes long-term loans to individuals to ensure continued affordability. Funds are made available through a periodic, competitive process. MPRROP is currently accepting applications on an over-the-counter basis.

Multifamily Housing Program (MHP) is administered by HCD and is a competitively awarded deferred payment loan program. The MHP assists with the new construction, rehabilitation, and preservation of permanent and transitional rental housing for lower income households. MHP funds are only provided for post-construction permanent financing.

Predevelopment Loan Program (PDLP) makes short-term loans for activities and expenses necessary for the continued preservation, construction, rehabilitation or conversion of assisted housing primarily for low-income households. Availability of funding is announced through a periodic Notice of Funding Availability. Eligible applicants include local government agencies, non-profit corporations, cooperative housing corporations, and limited partnerships or limited liability companies where all the general partners are non-profit mutual or public benefit corporations.

Preservation Interim Repositioning Program (PIRP) is a short-term loan program designed to preserve housing at risk of conversion to market rates. Only non-profits, dedicated to the provision of affordable housing, may apply. Local matching funds, together with PIRP funds, may not exceed 20 percent of total costs. No current funding is offered for this program.

Project Based Housing Vouchers. This program is a component of the former Section 8 Housing Choice Voucher program funded through HUD. The program's objective is to induce property owners to make standard housing available to low-income families at rents within the program limits. In return, the Housing Commission or HUD enters into a contract with the owner that guarantees a certain level of rents.

Section 811/202 Program (Supportive Housing for Persons with Disabilities/Elderly). Non-profit and consumer cooperatives can receive no interest capital advances from HUD under the Section 202 program for the construction of Very-Low Income rental housing for seniors and persons with disabilities. These funds can be used in conjunction with Section 811, which can be used to develop group homes, independent living facilities and immediate care facilities. Eligible activities include acquisition, rehabilitation, new construction and rental assistance.

ENERGY CONSERVATION

Energy conservation improvements offer the most viable means of addressing high-energy costs. The objective of energy conservation efforts directed towards new development should be the maximum feasible use of passive or natural cooling and lighting. This might be achieved by encouraging the incorporation of solar access. Examples of passive cooling opportunities include the design of lots to allow the proper orientation of a structure to take advantage of prevailing breezes or available shade. Passive heating opportunities include the design of lots to allow structures to be aligned in an east-west direction for southern exposure.

RETROFIT

There are a number of methods available to improve conditions of existing structures and to decrease their energy demand, all of which fall under the general label of “retrofit.” Among the most common techniques for increasing building efficiency are: insulation of ceilings, heating-ventilating air conditioning ducts and hot water heaters; weather stripping and caulking; night setback thermostats; spark ignited pilot lights; low-flow shower heads; window treatment to provide shade; and furnace efficiency modifications. The City of Lakeport monitors such modifications on substantial rehabilitation projects pursuant to the California Building Standards Code.

Weatherization in existing dwellings can greatly cut down heating and cooling costs. Weatherization is generally done by performing or improving attic insulation, caulking, weather stripping and storm windows, furnace efficiency modifications, and certain mechanical measures to heating and cooling systems. The U.S. Department of Energy allocates money to states for disbursement to community-based organizations.

Other means of energy conservation in residential structures includes proper design and location of windows, window shades, orientation of the dwelling in relation to sun and wind direction, and roof overhang to let the winter sun in and block the summer sun out.

PG&E provides the Energy Upgrade California Program, which offers incentives to homeowners who complete comprehensive energy-saving home improvements on a single-family residence. PG&E’s Energy Savings Assistance Program is available to lower income households and provides energy-saving improvements at no charge to qualified households residing in a single family home, mobile, home, or apartment that is at least five years old.

North Coast Energy Services, Inc. provides a Weatherization Services program that provides energy efficiency-improving measures in a home, including ownership and rental units, to reduce energy costs.

The City encourages maintenance and rehabilitation of housing to maximize energy efficiency. The City’s housing rehabilitation program provides funding assistance for lower income households to rehabilitate their home and provide weatherization and energy retrofit improvements.

NEW DEVELOPMENT

The City encourages energy conservation in residential projects. New subdivision and parcel reviews are considered in terms of street layout and lot design. Residential structures must meet

the requirements of Title 24 (CalGreen) relating to energy conservation features of the California Building Standards Code.

The Bella Vista senior apartments, built in 2013, were designed to comply with the LEED Platinum certification. The Martin Street Apartments, built in 2019, and Martin Street Apartments II were also designed to achieve LEED certification. Green materials, finishes, and systems used in the project include Green Label Plus certified flooring, low VOC paint, EnergyStar rated appliances, low flow sinks, showerheads, and toilets, energy efficient windows, increased insulation, high indoor air quality, water efficient irrigation, and an on-site solar energy array.

City Energy Policies

The City's General Plan includes measures to reduce energy usage, through: 1) land use policies that encourage mixed uses, links between development and alternative transportation modes, 2) transportation policies that encourage increased use of alternative transportation modes and reductions in vehicle miles travelled, and 3) through Conservation Element policies for energy conservation and use of renewable resources.

The Land Use Element includes policies that encourage mixed uses to promote reduced traffic; encourage residential development to have a "neighborhood" orientation that provides linkages with services and pedestrian and bicycle modes of transportation.

The Transportation Element includes policies and programs to improve the City's bikeways system, provide improved pedestrian facilities, and encourage and facilitate increased public transit service.

The Conservation Element of the General Plan sets forth the City's approach to energy conservation and use of renewable resources. Policies and programs associated with Objective C5 will reduce demand for electricity and increase energy efficiency. Program C5.1-a calls for the integration of energy efficiency, conservation, and other green building requirements into the development review process. Program C5.1-b offers incentives, including permit streamlining, fee waivers, and density bonuses, to encourage energy efficiency and green building practices. Policies and programs associated with Objective C6 will increase renewable resource use. Program C6.2-a requires the protection of passive or active solar design elements and systems from wintertime shading by neighboring structures and trees.

Implementation of policies in the Land Use, Transportation, and Conservation Elements facilitate green building techniques and encourage a variety of land use and transportation mechanisms to reduce energy consumption and address climate change.

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CHAPTER SIX – GOALS, POLICIES, AND PROGRAMS

This section describes housing goals, policies, and programs for the City of Lakeport. A goal is defined as a general statement of the highest aspirations of the community. A policy is a course of action chosen from among many possible alternatives. It guides decision-making and provides a framework around which the housing programs operate. A program is a specific action, which implements the policy and moves the community toward the achievement of its goals. Programs are a part of the City’s five-year action plan and constitute the City’s local housing strategy.

State Housing Findings

The State identifies the following findings in Government Code Section 65580 related to Housing Elements:

- The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every Californian, including farmworkers, is a priority of the highest order.
- The early attainment of this goal requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.
- The provision of housing affordable to low- and moderate-income households requires the cooperation of all levels of government.
- Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.
- The Legislature recognizes that in carrying out this responsibility, each local government also has the responsibility to consider economic, environmental, and fiscal factors and community goals set forth in the general plan and to cooperate with other local governments and the state in addressing regional housing needs.
- Designating and maintaining a supply of land and adequate sites suitable, feasible, and available for the development of housing sufficient to meet the locality’s housing need for all income levels is essential to achieving the state’s housing goals and the purposes of this article.

Housing Element Goals, Policies, and Programs

The City of Lakeport Housing Element is consistent with, and addresses, the above-stated state goals. The goals of the City of Lakeport Housing Element serve at the local level to enhance and build upon State of California goals for providing safe, decent, and affordable housing available for all City residents.

The City’s housing goals, which are continued from the 2009 and 2014 element, are as appropriate today as when they were originally developed. These goals encompass new

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construction, conservation of existing stock, affordability, and provision of adequate housing for all persons.

Goal 1: Conserve and Improve Lakeport's Existing Neighborhoods and Housing Supply

Goal 2: Facilitate and Encourage Development of Housing to Meet the Regional Housing Needs Allocation

Goal 3: Expand Housing Opportunities for the Elderly, the Handicapped, Households with Very-Low to Moderate Incomes and For Persons with Special Housing Needs

Goal 4: Promote and Affirmatively Further Fair Housing Opportunities throughout the Community for All Persons Regardless of Race, Religion, Sex, Age, Marital or Familial Status, Ancestry, National Origin, Color, Disability, or Other Protected Characteristics.

Policies and programs from the 2014 Housing Element have been incorporated herein or updated, otherwise modified, or deleted as deemed appropriate.

GOAL 1 CONSERVE AND IMPROVE LAKEPORT'S EXISTING NEIGHBORHOODS AND HOUSING SUPPLY

Policy 1A The City shall encourage the maintenance and improvement of its residential areas. (Programs 1-1, 1-2, 1-3, and 1-5)

Policy 1B The City shall encourage the preservation of its affordable housing supply, including extremely low, very low, and low income units, through regulation of condominium and mobile home park conversions, proactive noticing of at-risk units, and seeking funding to retain and improve lower income units. (Programs 1-2 and 1-4; Municipal Code Chapter 15.20)

Policy 1C The City shall discourage conversion of housing to non-residential uses, unless there is a finding of clear public benefit and equivalent housing can be provided for those who would be displaced by the proposed conversion. (Programs 1-1)

Policy 1D The City shall require developers to provide relocation assistance to residents displaced from mobile home parks converted to other uses. (Municipal Code Chapter 15.20)

Program 1-1 Maintain Existing Residential Zoning

Retain existing residential zoning and discourage non-residential uses in these zones. Maintain zoning limitations on non-residential uses and home occupations in the residential zoning districts.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department, Planning Commission, and City Council.

Implementation Schedule: Ongoing.

Expected Results: Maintain allowed residential densities and uses.

Program 1-2 Housing Rehabilitation Program

Continue and expand the City’s Housing Rehabilitation Program, which provides assistance to extremely low, very low, and low income units, including lower income households with special needs, through the following activities:

- Re-establish a dedicated staff position to administer and implements the Housing Rehabilitation Program, as well as other housing programs as soon as additional funding is obtained to support this role.
- Submit applications, when warranted, to appropriate funding sources (CDBG, HOME, and other programs) to increase program funding. Use associated administration funds to maintain staff support and increase program support, if necessary.
- Community Development and Housing staff shall coordinate to identify areas of the City with a high incidence of homes with deferred maintenance and target these areas for code enforcement.
- Continue to make program pamphlets available at City Hall, the public library, other public facilities, and on the City’s website.
- Distribute program information in conjunction with continuing building code enforcement.

Funding Sources: HOME and CDBG funds

Responsible Departments/Agencies: Community Development Department, Housing staff

Implementation Schedule: Ongoing

Expected Results: Code enforcement activities – 15 units/year

Housing rehabilitation loans – 2 to 5 housing rehabilitation loans/year to extremely low, very low, and low income households based on funding availability

Program 1-3 Capital Improvement Program

Continue to identify priorities for capital improvements in the City’s older residential neighborhoods, including street maintenance, curbs, gutters, and sidewalks, storm drainage facilities, and street lighting. Where improvements are identified in lower income areas, seek state funding for the improvements. Update the City’s Capital Improvement Program (CIP) to include capital improvements that are identified as a high priority and to ensure that areas needing improvement are scheduled for funding at a specific time in the future.

Funding Sources: General Fund, HOME and CDBG funds

Responsible Departments/Agencies: Community Development Department, Public Works Department, Housing staff, City Council

Implementation Schedule: Review Capital Improvement Program annually to identify priorities. Seek funding for priority projects – 2015 through 2019

Expected Results: Three capital improvement projects in aging neighborhoods

Program 1-4 **Conversion of Affordable Units**

Conserve affordable units through the following activities:

- When an affordable housing development is at-risk of converting, assist the owners in identifying resources, including funding, for the continued provision of affordable units.
- Upon receipt of notice of a proposed conversion of assisted affordable housing, the City will contact qualified entities and encourage their involvement in the acquisition of the units.
- Tenant Education - The City will work with tenants of at-risk units and provide them with education regarding tenant rights and conversion procedures. The City will also provide tenants in at-risk projects information regarding Housing Choice Voucher/Section 8 rent subsidies through HUD (special vouchers for existing tenants in Section 8 projects), the Housing Authority, and other affordable housing opportunities in the City.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department, Housing staff, Planning Commission, City Council

Implementation Schedule: Ongoing implementation.

Expected Results: Preservation of 25 affordable units.

Program 1-5 **Energy Conservation Retrofit**

Encourage and assist in implementing energy conservation measures including, but not limited to, weatherization, siding, and dual pane windows in conjunction with housing rehabilitation programs. Coordinate with North Coast Energy Services to provide weatherization improvements, where applicable, and seek to identify additional partners and programs to provide weatherization and energy-efficient improvements to existing homes.

Funding Sources: HOME and CDBG funds

Responsible Departments/Agencies: Community Development Department, Housing staff

Implementation Schedule: Ongoing

Expected Results: 5 units/year, can be in conjunction with housing rehabilitation loans

GOAL 2 FACILITATE AND ENCOURAGE DEVELOPMENT OF HOUSING TO MEET THE REGIONAL HOUSING NEEDS ALLOCATIONS

Policy 2A The City shall encourage additional housing to meet the City's Regional Housing Need Allocations by maintaining an inventory of adequate sites to meet the City's housing needs, by actively encouraging and assisting the construction of multifamily housing, by promoting a range of housing types, and by encouraging utilization of density bonuses in support of affordable housing. (Program 2-1, 2-2, and 2-5)

Policy 2B The City shall pursue county, state and federal programs and funding sources that provide housing opportunities for extremely low, low, and moderate-income households. (Program 2-2)

- Policy 2C** The City shall facilitate the development of residential uses in existing and new commercial areas where the viability of the commercial activities would not be adversely affected. (Zoning Ordinance Chapters 17.10 and 17.12)
- Policy 2D** The City shall continue to facilitate the construction of second dwelling units and permit accessory residential units by right in the R-1 zoning district. (Zoning Ordinance Chapter 17.04)
- Policy 2E** The City shall provide a Housing Specialist staff position or a comparable position. (Program 1-2)
- Policy 2F** The City shall expedite processing of affordable housing projects. (Program 2-1, Zoning Ordinance Chapter 17.39)
- Policy 2G** Encourage developers of lower income and special needs housing to use available incentives, including the City’s density bonus ordinance. (Programs 2-2, 3-2, and 3-3, Zoning Ordinance Chapter 17.39)

Program 2-1 Streamline Housing Approvals

Update the Zoning Ordinance to:

1. Provide by-right approvals for residential development in which at least 20 percent of the units are affordable to lower income households in accordance with Government Code Section 65583.2(c) for Sites 1, 2, and 3 (see Chapter 4, Table 4-3).
2. Establish object zoning, development, and design standards for lower income housing developments to facilitate review of projects eligible for the streamlined, ministerial process provided by Government Code Section 65913.4.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department, Housing staff, Planning Commission, City Council

Implementation Schedule: Zoning Ordinance revisions completed by August 15, 2022

Expected Results: Development of two multifamily housing projects (including Martin Street Apartments II) with at least 8 extremely low, 32 very low, and 32 low income units.

Program 2-2 Affordable Housing Resources

Encourage the interest of development community, including Rural Communities Housing Development Corporation, in providing additional affordable housing and seek additional affordable housing resources through, for example, developer agreements, mortgage revenue bonds, tax credits, and the California Housing Rehabilitation Program. This program shall include the following actions:

- Regularly contacting housing stakeholders group, including affordable housing developers, to identify potential housing projects, including affordable new construction, special needs housing, and first time homebuyer assistance, and prioritize potential funding efforts.

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- Provide interested developers and other potential housing partners with information regarding affordable housing resources and incentives (include information from Programs 2-1 (once implemented) and 3-3 and Zoning Ordinance Chapter 17.39) and provide the brochure to applicants interested in affordable and/or multifamily housing, and
- Seek funding or support funding applications that would provide first-time homebuyer and downpayment assistance programs.
- Seek funding or support funding applications that would provide new affordable units, including extremely low income units.

Funding Sources: Federal and State funding sources; City General Fund;

Responsible Departments/Agencies: Housing staff, Planning Commission, City Council

Implementation Schedule: Annual outreach to housing stakeholders; loan/grant applications to support viable projects

Expected Results: Two applications for funding for affordable new housing construction projects; 24 new affordable units in addition to Martin Street Apartments II.

Program 2-3 **Energy Conservation**

Continue and expand the City’s encouragement of alternative design for energy conservation by regularly updating brochures and information regarding City policies and programs, particularly as they pertain to affordable housing. Policies C.5.1, C.5.2, C.6.1, and C.6.2 and associated programs in the Conservation Element provide direction and implementation measures for energy efficiency and conservation.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department

Implementation Schedule: Update of energy conservation and water conservation information (handouts and website links) when appropriate

Expected Results: Public information regarding energy conservation and water conservation programs and opportunities

Program 2-4 **Accessory Dwelling Units**

Update the Zoning Ordinance to revise the standards for secondary units to ensure that ADUs are allowed as a permitted use in all zoning districts that allow single family and multifamily uses and including standards addressing lot coverage restrictions, lot size restrictions, minimum and maximum size limitations, owner-occupancy requirements, and parking requirements, as provided in Government Code Section 65852.2 and addressing certain covenants, conditions, and restrictions that prohibit or unnecessarily restrict ADU consistent with the requirements of Civil Code Section 4751.

The City shall also update its development fees, including utility and impact fees, to be consistent with the requirements of Government Code Section 65852.2(f) which limits water and sewer fees that can be collected as well as other impact fees.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department

Implementation Schedule: Update within one year of Housing Element adoption

Expected Results: Permit 3 accessory dwelling units per year.

Program 2-5 Market Rate Housing

Continue to support market rate housing development, including individual single family lots, single family subdivisions, and townhomes and condominiums. Consider coordinating with the Chamber of Commerce and regional housing producers to attract single family home developers – this effort may include publishing a list of potential single family housing sites, including undeveloped finished single family lots and single family sites that can accommodate residential subdivisions.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department

Implementation Schedule: Ongoing

Expected Results: Permit 20 market rate units.

GOAL 3 EXPAND HOUSING OPPORTUNITIES FOR THE ELDERLY, THE HANDICAPPED, HOUSEHOLDS WITH VERY LOW TO MODERATE INCOMES, AND FOR PERSONS WITH SPECIAL HOUSING NEEDS

Policy 3A The City shall encourage and facilitate housing types and programs for senior citizens, the disabled, including developmentally disabled, large families, and other groups identified as having special housing needs. (Programs 3-1 through 3-9)

Policy 3B The City shall continue to encourage the development and expansion of housing opportunities for the elderly and disabled through techniques such as smaller unit sizes, reduced fees (water/sewer) for smaller units, parking reduction, common dining facilities, and fewer but adequate amenities. (Programs 3-3 and 3-4, Zoning Ordinance Chapter 17.39)

Policy 3C The City shall facilitate housing opportunities for the homeless and households at-risk of homelessness, including allowing emergency shelters in specified zone(s) and maintaining an inventory of adequate sites to accommodate homeless housing needs. (Program 3-7; Zoning Ordinance Section 17.28.010(EE) and Chapter 17.37)

Policy 3D The City shall work with private, county, and state agencies to provide emergency housing for the homeless. (Programs 3-2 and 3-8)

Policy 3E The City shall require developers using public or tax-exempt financing to include language in agreements with the City permitting persons and households eligible for HUD Housing Choice Voucher rental assistance or similar assistance to apply for below market rate units provided in the development.

Policy 3F The City shall continue to identify and provide incentives to encourage development of extremely low income, senior, disabled, large family, and other special needs housing types. (Program 3-3, Zoning Ordinance Chapter 17.39)

Program 3-1 Removal of Constraints to Housing for Special Needs Groups

Continue to assess and update the Zoning Ordinance, Municipal Code, and City procedures to remove constraints and address changes in state law, particularly regarding housing for special needs groups, including seniors, the disabled (consistent with requirements of SB 520), large families, farmworkers, and homeless.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department, Planning Commission, City Council

Implementation Schedule: Review codes and procedures bi-annually, appropriate amendments made within one year of completion of review

Expected Results: No quantified objective; removal of constraints to special needs housing

Program 3-2 Special Needs Housing Coordination

Continue to assist and coordinate with other agencies serving Lakeport to address special needs housing, including extremely low income, disabled, senior, farmworker, homeless, large families, single female heads of families, and households at-risk of homelessness, as needed and feasible. Provide a handout that identifies available housing programs for lower income households and special needs groups and make the handout available at City Hall, the library, and the City website.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department, Housing Staff, Planning Commission, City Council

Implementation Schedule: Ongoing

Expected Results: Continued availability of handout and information regarding special needs housing programs

Program 3-3 Incentives for Extremely Low Income, Senior, Disabled, Large Families, and Special Needs Housing

Continue to provide incentives for special needs housing and extremely low income housing, prioritizing development of extremely low income housing. Housing for extremely low income households, including Single Room Occupancy, shared housing, and housing with supportive services, will be incentivized through expedited development processing, density bonuses, and a reduction in development standards, such as lot coverage, parking, and/or setbacks (see Zoning Ordinance Chapter 17.39). Senior and disabled housing can be incentivized through flexible parking, setback, lot coverage and other standards, where found to be consistent with maintaining the character of the surrounding neighborhood. Large family housing (three or more bedrooms) can be incentivized through reduced setbacks or a density bonus for projects, particularly multifamily, with 20 percent or more large units.

Funding Sources: City General Fund

Responsible Departments/Agencies: Community Development Department, Housing staff, Planning Commission, City Council

Implementation Schedule: On-going

Expected Results: No quantified objective

Program 3-4 Seek Site and Funding for Affordable Housing

Identify at least one suitable site for an affordable housing project, considering sites that may be appropriate for affordable family housing, special needs housing, and/or senior housing funded by a HUD 202 or a similar program. Coordinate with developers to identify interest in developing an affordable housing project, with emphasis on housing that includes units to accommodate extremely low income and/or special needs households, and, if there is interest, facilitate obtaining funding and construction of the affordable housing.

Funding Sources: HOME, CDBG (same funding source as Program 2-2)

Responsible Departments/Agencies: Housing staff, Planning Commission, City Council

Implementation Schedule: Identify sites by December 2021; contact developers and seek funding in 2021 through 2027

Expected Results: No quantified objective

Program 3-5 Seek Available Funding

Seek and aggressively pursue available State and Federal assistance for City and non-profits (CDBG, HOME, etc.) to develop affordable housing for seniors, large-families, households with children, and others with specialized housing needs when there is a request from a developer for an affordable housing project appropriate for the City. If no new affordable housing construction projects are identified, the City will pursue funding for First Time Homebuyer, housing rehabilitation, and other programs that will provide housing assistance but may not result in the development of housing for special needs groups.

Funding Sources: General Fund

Responsible Departments/Agencies: Housing staff, Planning Commission, City Council

Implementation Schedule: Ongoing

Expected Results: Submit at least one application for year for affordable housing programs

Program 3-6 Farmworker Housing

Continue to monitor farmworker population increases within the City during elevated farming seasons. Through coordination with Lake Economic Development Commission and affordable housing developers, identify potential to assist with or support a local or regional farmworker housing development.

Funding Sources: General Fund

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Responsible Departments/Agencies: *Housing staff, Planning Commission, City Council*

Implementation Schedule: *Ongoing monitoring*

Expected Results: *No quantified objective*

Program 3-7 **Accommodate Special Needs Housing**

Revise the Zoning Ordinance to address the requirements of State law related to:

1. Low barrier navigation centers, including defining and streamlining approval of eligible low barrier navigation centers as a use by right in zones, including nonresidential zones, where multifamily and mixed uses are permitted consistent with the requirements of Government Code Sections 65660 through 65668;
2. Allowing eligible supportive housing as a use by right in zones, including nonresidential zones, where multifamily and mixed uses are permitted pursuant to Government Code Sections 65650 through 65656; and
3. Allowing eligible employee housing, including housing consisting of no more than 36 beds in a group quarters, 12 units or spaces designed for use by a single family or household or eligible projects under Section 17021.8, subject to the same requirements as an agricultural use in the same zone pursuant to Health and Safety Code Sections 17021.6

Funding Sources: *General Fund*

Responsible Departments/Agencies: *Community Development Department, Planning Commission, City Council*

Implementation Schedule: *Zoning Ordinance revisions concurrent with Housing Element adoption*

Expected Results: *Zoning Ordinance revisions*

Program 3-8 **Maintain Ongoing Estimates of the Demand for Emergency Housing**

Consult annually with local churches, North Coast Opportunities, other service providers and the County's Social Services Department to maintain ongoing estimates of the demand for emergency housing. Include findings in the annual report prepared under Program 4-2.

Funding Sources: *General Fund*

Responsible Departments/Agencies: *Housing staff*

Implementation Schedule: *annually*

Expected Results: *Findings included in annual report*

Program 3-9 **Reasonable Accommodation for Persons with Disabilities**

Continue to provide handouts to all interested parties and make information available on the City's website regarding accommodations in zoning, application of building codes, and permit processes for persons with disabilities, including describing that reasonable accommodation are permitted through a ministerial process, provided: 1) the requested accommodation would not impose an undue financial or

administrative burden on the City, and 2) the requested accommodation would not require a fundamental alteration in the nature of the City's land-use and zoning program.

Funding Sources: General Fund

Responsible Departments/Agencies: Community Development Department, Planning Commission, City Council

Implementation Schedule: Ongoing

Expected Results: Ongoing availability of handout and information available on the website

GOAL 4 PROMOTE AND AFFIRMATIVELY FURTHER FAIR HOUSING OPPORTUNITIES FOR ALL PERSONS REGARDLESS OF RACE, RELIGION, SEX, AGE, MARITAL OR FAMILIAL STATUS, ANCESTRY, NATIONAL ORIGIN, COLOR, DISABILITY, OR OTHER PROTECTED CHARACTERISTICS.

Policy 4A The City shall actively support fair housing opportunities for all persons regardless of race, religion, sex, age, marital or familial status, ancestry, national origin, color, disability, or other protected characteristics. (Program 4-1)

Policy 4B The City shall encourage and support public participation in the formulation and review of the City's housing and development policies. (Program 4-2)

Policy 4C The Planning Commission and City Council shall annually review progress in implementing the Housing Element including the progress in achieving its objectives and meeting its share of regional housing needs. (Program 4-2)

Program 4-1 Equal Housing Opportunity

Facilitate equal and fair housing opportunities by continuing to designate the Community Development Director as the City's Equal Opportunity Coordinator and by implementing actions to affirmatively further fair housing opportunities for all persons regardless of race, religion, sex, age, marital or familial status, ancestry, national origin, color, disability, or other protected characteristics. The City's Equal Opportunity Coordinator shall ensure fair housing services and opportunities are provided to residents and property owners through actions including:

- Coordinating with the Lake Economic Development Coordination and California Housing and Community Development Department (HCD) to ensure that public service announcements via different media (e.g., newspaper ads, public service announcements at local radio and television channels, the City's social media accounts) and presentations with different community groups are made at least two times per year.
- Providing a fair housing presentation to the City Council at least once per year.
- Facilitating public education and outreach by providing informational flyers on fair housing at the City's public counters, the library, and on the City's website.
- Distributing educational materials to property owners, apartment managers, and residents every two years.

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- Maintaining a log of complaints of discrimination, including referrals to the California Department of Fair Employment and Housing (DFEH) for investigation and resolution of complaints, and follow up to identify if resolution was obtained with the DFEH. If resolution was not obtained, follow up with HCD to ensure that affordable housing laws are actively enforced.
- Actively recruiting residents from neighborhoods of concentrated poverty to serve or participate on boards, committees, and other local government bodies.
- Providing education to the community on the importance of participating in the planning and decision-making process and completing Census questionnaires.
- Reviewing land use and planning proposals, including development proposals, general plan amendments, master planning efforts for parks, recreation, infrastructure, and other facilities and amenities, to ensure that the City is replacing segregated living patterns with integrated and balanced living patterns, where applicable and feasible, and working to transform racially and ethnically concentrated areas of poverty into areas of opportunity without displacement.

Funding Sources: General Fund, Housing Program Income

Responsible Departments/Agencies: Community Development Director

Implementation Schedule: Annual coordination with Lake EDC and HCD to provide information to the community twice per year, annual presentation to City Council, bi-annual distribution of information, and addressing complaints, actively recruiting residents, providing educational materials, and reviewing land use and planning proposals on an ongoing basis

Expected Results: Findings included in annual report

Program 4-2 Community Participation and Annual Reporting

Prepare an Annual Progress Report, using the HCD template, to the City Council and Planning Commission which describes 1) implementation of Housing Element programs to date, 2) the amount and type of housing activity as related to the Housing Element's goals, policies, and programs, and 3) an updated summary of the City's housing needs. Submit this report to the Department of Housing and Community Development within 30 days after review by the City Council.

As part of the annual report process, Housing Element updates, and other housing-related efforts, ensure that the community is notified of the effort being undertaken and is provided the opportunity to comment and participate.

Funding Sources: General Fund

Responsible Departments/Agencies: Community Development Director/Housing staff, City Council

Implementation Schedule: Report for prior year completed March/April of each year

Expected Results: Annual reports

Conclusion

The foregoing programs are considered appropriate and desirable to ensure that the community's housing needs through 2027, as identified in Chapters 1 through 5, are met in a timely and cost effective manner. The programs designate funding sources, the party(ies) responsible for implementation, and expected results, including quantified objectives where applicable. Table 6-1 shows an estimate of quantified objectives by income category for the number of units to be constructed, rehabilitated and conserved over the planning period. Table 6-2 identifies an estimate of quantified objectives for very low and low income units by program.

In implementing those objectives, the community will require funding from a variety of sources including, but not limited to, CDBG and HOME funds.

Table 6-1: Quantified Objectives: Construction, Rehabilitation, and Preservation by Income Level

Income Levels	Construction	Rehabilitation	Preservation
Extremely Low	8	5	55
Very Low	32	15	
Low	32	15	
Moderate	21	0	0
Above Moderate	20	0	0
Total ¹	113	35	55

Table 6-2: Quantified Objectives for Very Low and Low Income Units by Program

Program	Construction	Rehabilitation	Preservation
Program 1-3: Housing Rehabilitation Program	0	35	0
Program 1-5: Conversion of Affordable Units	0	0	55
Program 1-6: Energy Conservation Retrofit	0	25*	0
Programs 2-1: Streamline Housing Approvals, 2-2: Affordable Housing Resources, 3-2: Special Housing Needs Coordination, and 3-3: Incentives for Extremely Low, Senior, Disabled, Large Families and Special Needs Housing	72	0	0
Program 2-4: Accessory Dwelling Units	21	0	0
TOTAL	93	35	55

*May be combined with Program 1-3

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CHAPTER SEVEN – COMMUNITY PARTICIPATION

Community participation was solicited and encouraged throughout the Housing Element process. Community participation efforts are described below for the development of the Draft Housing Element and the adoption of the Final Housing Element.

Development of Draft Housing Element

The Housing Element Update process began in 2020, which included preparation of an initial public draft Housing Element Update and related public participation components as Phase 1 of the public outreach effort. This original public participation phase planned for several public and stakeholder workshops, with two workshops occurring during Housing Element preparation and two workshops occurring during the public review period. However, the novel coronavirus (also known as COVID-19) resulted in shelter-in-place and social distancing requirements that have precluded in-person workshops and resulted in the cancellation of the planned April 2020 and May 2020 workshops.

COVID-19 is an illness spread by person-to-person contact. The first case in California was documented on January 25, 2020. On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic. In March 2020, as COVID-19 cases in California and the United States increased, Governor Newsom issued a series of Executive Orders restricting activities and movement within the State in an effort to reduce the spread of COVID-19. On March 18, 2020, the Lake County Public Health Officer issued a shelter-in-place order, which replaced orders issued on March 16, 2020. On March 19, 2020, a statewide shelter-in-place order was issued requiring residents to stay at home, unless they need to leave their home to conduct essential activities, which including shopping for necessities and going outdoors for private recreation, conduct essential business, or operate critical infrastructure. An end date has not yet been given for when the stay home requirement will be lifted, but the State has identified six health and scientific indicators will be considered before modifying the State's order. On April 28, 2020, Governor Newsom identified four stages for how California will reopen schools, businesses, and public spaces. The State is currently moving toward Stage 2, working to make it consistently safe for essential workers, and considering allowing counties to re-open lower-risk businesses and public spaces with modifications to allow for distancing. In Stage 3, higher-risk businesses will be able to reopen, but with measures in place to ensure public safety. Stage 4 will be the end of the stay-at-home order. It is anticipated that public in-person workshops that comply with social distancing and health measures may occur during Stage 3, however, Governor Newsom has indicated Stage 3 is months away. It is anticipated that this 6th Cycle Housing Element will be completed prior to the end of the stay home requirements. COVID-19 has presented a challenge to the City's public participation program, which had planned for a series of in-person workshops and meetings, augmented by a survey.

In response to the cancellation of the initial public and stakeholder workshops due to the shelter-in-place restrictions, the City and consultant team revised the housing needs survey to be a more detailed survey available in both English and Spanish that could be conducted on-line, eliminating any person-to-person contact, as well as a separate on-line survey for housing stakeholders. This initial effort is summarized below under Initial Public Engagement and Participation. The results

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of these surveys, as well as outreach to various stakeholders, and research related to the City's housing needs informed the preparation of Chapters 2 through 6 of this Housing Element Update.

In addition to the public outreach workshop, key stakeholders, agencies, and organizations were contacted individually for input to ensure that the Housing Element accurately reflects a broad spectrum of the community and prioritizes needs appropriately.

INITIAL PUBLIC AND STAKEHOLDER INPUT:

The Housing Element Update process began in 2020, which included preparation of an initial public draft Housing Element Update and related public participation components as Phase 1 of the public outreach effort. This original public participation phase planned for two public and stakeholder workshops. However, COVID-19 resulted in shelter-in-place and social distancing requirements that precluded in-person workshops and resulted in the cancellation of the planned April 2020 workshops.

Housing Needs Survey

In order to obtain a range of community input that reflected the broad economic and demographic spectrums of the City in the absence of in-person workshops, City staff and the consultant team disseminated a detailed housing needs survey to individuals, community organizations, County departments, and public agencies to gain a deeper understanding of resident housing needs. The survey consisted of 18 questions designed to better understand the housing needs and priorities for Lakeport and was available in English and Spanish. The housing needs survey was advertised via a mailer as part of the April utility bill, the City website, the Police Department's facebook page, and Lake County Health and Human Service's housing page on their website. An introduction to the survey and links to the survey in English and Spanish were also emailed to approximately 40 stakeholders, including public agency representatives, real estate professionals, service providers, and housing developers. This group of stakeholders was asked to post the survey on their social media pages and to disseminate the survey among their clients and residents in order to increase opportunities for participation, particularly among the lower income and special needs populations that are served by multiple service providers that were contacted.

In total, 46 survey responses were received and the full survey results are provided in Appendix B. A second set of emails has been sent out to the stakeholders as well as follow-up posts on social media pages to remind people to participate; the invitations to take the survey have been posted to the City's website in April and May 2020. The following information summarizes survey results to date. It should be noted that any personal identification information has been omitted from the survey results in Appendix B.

The majority of respondents (52%) live and work in Lakeport, another 20% live in Lakeport and are retired or do not work, 17% live in Lakeport but work elsewhere, and 7% work in Lakeport and live elsewhere.

Approximately 67% of respondents have lived in Lakeport for more than 10 years while 21% have lived in the City for less than 5 years. The most common reasons residents gave for living in Lakeport included (respondents could choose multiple answers): proximity to job/work (41%), local recreational amenities and scenery (41%), proximity to family and/or friends (31%),

affordability (31%), and safety of neighborhood (26%). 55% of respondents own their home while 34% rent, 5% currently live with another household (neither own nor rent), and 5% indicated that they are homeless.

Respondents indicating that they wish to own a home in Lakeport but do not currently own one identified the following reasons (respondents could choose multiple answers) for not owning a home: cannot find a home within their target price range (67%), not having the financial resources for an adequate down payment (62%), not having the financial resources for the monthly mortgage payment (38%), and cannot find a home that suits their living needs (35%).

Homeowners identified a range of upgrades or expansions they have considered making to their home, with the most commonly identified desired upgrades including: solar (60%), roofing (55%), and painting (45%).

Regarding housing conditions, 26% of respondents indicated their home is in excellent condition, 19% indicated their home shows signs of minor deferred maintenance, 36% indicated that their home needs one or more modest rehabilitation improvements, and 17% indicated their home needs one or more major upgrades. The majority of respondents live in a single family home (62%) while 12% live in a multifamily unit or apartment, 9% live in a duplex or attached home (townhome), 10% live in a mobile home, and 4% live in a hotel.

Regarding the type of household, residents indicated the following: couple (no children) household (43%), couple with children under 18 (14%), single person household (19%), young adult living with parent or parents (4%), multi-generational household (including parents with adult children and single parents with children and other generations) (6%), and single person living with roommates (5%). Additionally, 17% live in a 1-person household, 45% in a 2-person household, 14% in a 3-person household, 12% in a 4-person household, 5% in a 5-person household, 5% live in a 6-person household, and 2% live in a 7-person household. Further, respondents ages range from 24-39 years (36%), 40-55 years (29%), 56-74 years (31%), and 75 years or older (5%).

39% of respondents indicated they are very satisfied with their current housing situation, while 24% indicated they are somewhat satisfied, 7% indicated they are somewhat dissatisfied, and 29% indicated they are dissatisfied.

When asked to rank the priority of various housing-related issues, the responses that were ranked as the highest priorities include the following, in order of importance:

- Provide code enforcement and programs to help maintain and uplift neighborhoods that have areas of blight, disrepair, or have suffered from the economy.
- Ensuring that landlords and developers follow fair housing practices when renting or selling homes.
- Ensure that the housing market in Lakeport provides a diverse range of housing types, including single-family homes, townhomes, apartments, and condominiums to meet the varied needs of local residents.
- Homebuyer assistance programs, such as a first-time homebuyer loan or grant program.

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- Encourage the rehabilitation of existing housing stock in older neighborhoods.
- Housing for seniors.
- Emergency housing assistance (assistance with utility bills and/or loan payment).
- Ensure that children who grow up in Lakeport can afford to live in Lakeport.
- Provide shelters and transitional housing for the homeless, along with services to help move people into permanent housing.
- Housing for large families, veterans, and/or persons with disabilities.
- Housing rehabilitation or repair loan program.
- Make it easier to build homes.

The majority of respondents (63%) felt that the different housing types in Lakeport currently meet their needs. The types of housing identified as being most needed in the City were identified as single family (detached) (53%), apartments (38%), duplex, triplex, and fourplex units (30%), condominiums or townhomes (28%), senior housing (28%), and housing for people with disabilities (20%).

When asked to share comments or concerns relevant to the Housing Element Update, responses included:

- Concerns about affordable housing. In order to afford housing even in Lakeport one has to live paycheck to paycheck. Also concerned about the process of making formal complaints about neighbors who continuously violate noise laws, etc.
- In the city of lakeport it's quite hard for going couples with no children or not considered at workers to find housing/buy a home. There is really close to 0 opportunities for them.
- We need affordable housing apartments that are ADA-complainant and affordable for those with incomes under 1,000 a month.
- There are not any high-quality apartment buildings in Lakeport. Also, many homes/areas of lakeport are more run down than I'd like. It was difficult to find a nice home in a nice area.
- Concern that the city makes sure to support local small business as well as property owners and renters. This year is going to be tough on everyone and making sure that people get help, remain employed, is instrumental in how the city navigates this difficult time.
- We need affordable housing, but we also need help finding ways to help low wage workers the opportunity to buy a home. We also need more support for people of color to have access to these programs.

The Housing Plan addresses the needs identified by the community. Overall, one of the primary concerns identified by the community was the need for single family homes and the associated difficulty households have affording a single family home or downpayment. The Housing Plan

(Chapter 6) includes Program 2-5 to support the production of market rate housing development, including single family homes, and Program 2-2 includes a component to encourage additional funding for first-time homebuyer and downpayment assistance programs. Respondents also identified the need to maintain neighborhoods and existing housing. The Housing Plan includes Program 1-3 to provide for ongoing capital improvements and maintenance to address the needs of the City's older neighborhoods, while Programs 1-2 and 1-5 address the need to assist homeowners and property owners with housing rehabilitation and weatherization improvements to maintain the housing stock. The need for affordable housing opportunities, including housing for large families, veterans, and persons with disabilities as well as the need for a variety of housing types was also identified. Programs 2-1 through 2-5 provide for a greater range of new housing opportunities in the City, while Programs 3-1 through 3-7 address housing needs for special needs groups. Program 4-1 furthers fair housing opportunities to ensure all persons, regardless of any protected characteristics, have access to housing.

Housing Stakeholders Survey

Housing stakeholders were also surveyed for the purpose of identifying any housing needs and constraints to obtaining housing related to the population or clientele of service providers, housing needs and constraints as observed by advocates and interested parties, and housing needs and constraints to building or providing housing as observed by members of the development community. The survey was sent to approximately 45 agencies, service providers, developers, real estate professionals, and other stakeholders listed in Appendix C. The survey was sent out on May 18, 2020 and a follow-up email was sent to stakeholders on June 3, 2020 inviting their review of the Draft 6th Cycle Housing Element.

The stakeholders survey provided extensive data, particularly related to issues and concerns associated with lower income and special needs populations in Shasta County and information regarding potential constraints to housing development. 9 survey responses were received. The results of the survey are summarized below.

The respondents work with a range of clients, including: seniors, disabled, developmentally disabled, large families, female-heads of households, farmworkers, persons in need of emergency shelter, and the homeless population. It should be noted that respondents may serve more than one community population.

Of the respondents, 10% develop housing and provide supportive services while 90% of respondents provide supportive services but do not develop housing. Survey respondents were asked to identify the primary housing types needed to serve the specific populations that their organizations services. When asked about housing needed based on the population they serve, respondents identified the following types of housing as the most needed for each specific population.

General population: Housing close to services, market rate housing, single family and multifamily housing affordable to extremely low, very low, and low income households, and housing with on-site childcare.

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Seniors/Elderly: Multifamily – senior market rate, multifamily – senior affordable extremely low, very low, and low income households, single family housing affordable extremely low, very low, and low income households.

Disabled persons: Housing with features for a disabled person, single family housing (both affordable and market rate), and multifamily housing affordable extremely low, very low, and low income households.

Developmentally disabled: Housing with features for a disabled person, housing close to services, both single family and multifamily housing affordable to extremely low through low income households, and emergency shelter.

Single female heads of household with children: Housing with childcare on-site, single family and multifamily market rate housing; single family housing affordable extremely low, very low, and low income households.

Farmworkers: Permanent farmworker housing and seasonal or temporary farmworker housing

Persons in need of Emergency Shelter: Emergency Shelter, market rate senior housing, and affordable multifamily housing.

When asked about housing services needed by population they serve, priority needs for specific populations included:

1. General population:
 - Assistance with finding affordable housing, renting or purchasing a home, occasional financial assistance, housing close to public transportation, and housing close to services and daycare
2. Seniors/elderly:
 - Assistance finding affordable housing, grants or loans to make a home accessible, assistance finding housing affordable to extremely low and low income households; financial assistance, assistance with addressing legal and fair housing issues
3. Disabled:
 - Grants or loans to make modifications to make a home accessible to a disabled resident, assistance finding housing affordable to extremely low and low income households, assistance with addressing legal and fair housing issues
4. Developmentally disabled:
 - Assistance finding and obtaining affordable housing and housing close to services, assistance with addressing legal and fair housing issues, grants or loans to make modifications to make a home accessible to a disabled resident,
5. Female-head of households with children:
 - Housing close to daycare, assistance with addressing legal and fair housing issues

6. Farmworkers:
 - Translation assistance for non-English speaking persons, assistance with purchasing or renting a home
7. Persons in need of emergency shelter:
 - Assistance with being housed in an emergency shelter, transitional housing, or supportive housing.
8. Other:
 - Assistance being housing in transitional or supportive housing.

The following were identified as the primary barriers to service providers of their service population related to finding or staying in housing:

- Identifying and locating services for clients
- Shortage of low income housing
- Long waiting lists for financial assistance and for affordable housing
- Housing costs and inadequate income to pay for housing costs
- Lack of decent rental units and landlords willing to work with low income families and maintain units

The following services and actions were identified as needed to provide or improve housing or human services in the City:

- More housing, including affordable housing
- Year-round homeless shelter
- Housing availability
- Hold property owners accountable and provide incentives to rent units

Overall, one of the primary comments echoed throughout the housing stakeholder survey was the need for more affordable housing and assistance provided to various populations in finding and obtaining affordable housing. The Housing Plan (Chapter 6) provides multiple policies and programs under Goals 2 and 3 to increase the amount of affordable and special needs housing and to increase access to housing. These policies were strengthened to encourage increased cooperation and efforts between organizations and ensure that the City continues to work with various County departments and non-profit and private organizations to address these concerns.

HOUSING ELEMENT REVIEW

The public Preliminary Draft Housing Element was made available on the City’s website on May 21, 2020 and via a June 3, 2020 email to stakeholders and survey participants. A public notice, a press release, and emails to persons that have requested to be on the Housing Element Update

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contact list as well as all of the stakeholders contacted for the stakeholders survey was circulated identifying the availability of the Preliminary 6th Cycle Housing Element, summarizing key findings, and identifying how and where to comment on the Draft Housing Element, including via email, mailed letter, phone call to City staff, or through the planned hearing. The Preliminary 6th Cycle Housing Element was made available for public review from May 22 through June 30, 2020. In addition, opportunities to comment are provided at the Planning Commission and City Council hearings as described below.

The Planning Commission will hold a public hearing to review the 6th Cycle Housing Element, receive and consider public input, and consider a recommendation to the City Council on June 10, 2020. The City Council will then hold a public hearing on July 7, 2020 to consider the Planning Commission's recommendation, review the 6th Cycle Housing Element, receive and consider public input, and consider adoption of the Housing Element.

Appendix A

Inventory of Residential Sites

APPENDIX A: INVENTORY OF RESIDENTIAL SITES

PARCEL	General Plan	Zoning	Status	HOUSE #	STREET	Acres	Existing Units	Single Family Maximum	Single Family Realistic	Multi-family Maximum	Multi-family Realistic	Income Range
025-036-03	RES	R-1	VAC	1300	SIXTH	0.05		1	1			AM
026-122-26	RES	R-1	VAC	1022	ELEVENTH	0.06		1	1			AM
026-052-17	RES	R-1	VAC	463	SUNSET	0.07		1	1			AM
026-073-04	RES	R-1	VAC	335	ROBLES	0.07		1	1			AM
026-082-10	RES	R-1	VAC	535	SUNSET	0.07		1	1			AM
026-052-28	RES	R-1	VAC	410	FOREST	0.08		1	1			AM
026-073-08	RES	R-1	VAC	287	ROBLES	0.08		1	1			AM
025-564-20	RES	R-1	VAC	45	LILY COVE	0.09		0	0			AM
026-052-16	RES	R-1	VAC	479	SUNSET	0.09		1	1			AM
026-052-15	RES	R-1	VAC	483	SUNSET	0.09		1	1			AM
026-074-14	RES	R-1	VAC	356	HILLCREST	0.09		0	0			AM
026-072-38	RES	R-1	VAC	2324	LOCH	0.09		1	1			AM
026-051-04	RES	R-1	VAC	452	SUNSET	0.10		0	0			AM
025-212-16	RES	R-1	VAC	455	SEVENTH	0.10		0	0			AM
025-083-06	RES	R-1	VAC	1030	SECOND	0.10		1	1			AM
026-073-07	RES	R-1	VAC	323	ROBLES	0.11		1	1			AM
026-061-13	RES	R-1	VAC	472	SAYRE	0.11		0	0			AM
026-072-15	RES	R-1	VAC	264	ROBLES	0.11		1	1			AM
026-073-06	RES	R-1	VAC	331	ROBLES	0.11		1	0			AM
026-072-16	RES	R-1	VAC	256	ROBLES	0.11		1	1			AM
026-073-09	RES	R-1	VAC	271	ROBLES	0.11		0	0			AM
026-052-14	RES	R-1	VAC	491	SUNSET	0.11		1	1			AM
026-082-09	RES	R-1	VAC	541	SUNSET	0.11		1	1			AM
026-073-03	RES	R-1	VAC	341	ROBLES	0.11		1	1			AM
026-091-15	RES	R-1	VAC	420	FAIRVIEW	0.11		1	1			AM
026-091-16	RES	R-1	VAC	430	FAIRVIEW	0.11		1	1			AM
026-073-02	RES	R-1	VAC	343	ROBLES	0.11		1	1			AM
026-073-05	RES	R-1	VAC	333	ROBLES	0.12		1	1			AM
026-092-12	RES	R-1	VAC	2110	GREEN	0.12		1	1			AM
026-051-08	RES	R-1	VAC	422	SUNSET	0.12		1	1			AM
026-072-14	RES	R-1	VAC	286	ROBLES	0.12		1	1			AM
026-082-04	RES	R-1	VAC	591	SUNSET	0.12		1	1			AM
026-082-08	RES	R-1	VAC	553	SUNSET	0.12		1	1			AM

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026-082-05	RES	R-1	VAC	531	SUNSET	0.12		1	1		AM
026-082-07	RES	R-1	VAC	521	SUNSET	0.12		1	1		AM
025-652-17	RES	R-1	VAC	621	THIRD	0.13		1	1		AM
025-093-06	RES	R-1	VAC	1201	BERRY	0.13		1	1		AM
026-072-37	RES	R-1	VAC	2332	LOCH	0.13		0	0		AM
025-656-09	RES	R-1	VAC	170	N LAKEVIEW	0.13		1	1		AM
025-656-10	RES	R-1	VAC	175	N ESTEP	0.13		1	1		AM
026-313-28	RES	R-1	VAC	1945	LAKESHORE	0.13		1	1		AM
026-071-16	RES	R-1	VAC	410	SUNSET	0.14		1	1		AM
025-036-02	RES	R-1	VAC	1254	SIXTH	0.14		0	0		AM
025-741-13	RES	R-1	VAC	1245	WRIGLEY	0.14		1	1		AM
025-741-12	RES	R-1	VAC	1241	WRIGLEY	0.14		1	1		AM
025-731-15	RES	R-1	VAC	1263	FENWAY	0.14		1	1		AM
026-072-17	RES	R-1	VAC	242	ROBLES	0.15		1	1		AM
025-073-13	RES	R-1	VAC	982	FIFTH	0.15		1	0		AM
025-741-04	RES	R-1	VAC	1242	WRIGLEY	0.15		1	1		AM
026-381-09	RES	R-1	VAC	728	FOURTEENTH	0.15		1	1		AM
025-731-17	RES	R-1	VAC	1271	FENWAY	0.15		1	1		AM
025-741-05	RES	R-1	VAC	1238	WRIGLEY	0.15		1	1		AM
025-731-16	RES	R-1	VAC	1267	FENWAY	0.15		1	1		AM
026-051-07	RES	R-1	VAC	428	SUNSET	0.15		1	1		AM
025-093-07	RES	R-1	VAC	1209	BERRY	0.15		1	1		AM
025-367-04	RES	R-1	VAC	698	FOURTH	0.16		1	1		AM
026-061-55	RES	R-1	VAC	475	HILLCREST	0.16		1	1		AM
025-741-11	RES	R-1	VAC	1391	YANKEE	0.16		1	1		AM
025-741-06	RES	R-1	VAC	1234	WRIGLEY	0.16		1	1		AM
025-741-08	RES	R-1	VAC	1226	WRIGLEY	0.16		1	1		AM
025-741-07	RES	R-1	VAC	1230	WRIGLEY	0.17		1	1		AM
026-256-01	RES	R-1	VAC	589	TENTH	0.17		1	0		AM
025-741-10	RES	R-1	VAC	1394	YANKEE	0.17		1	1		AM
025-075-01	RES	R-1	VAC	974	FOURTH	0.17		1	1		AM
025-073-23	RES	R-1	VAC	1032	FIFTH	0.17		1	1		AM
025-741-09	RES	R-1	VAC	1227	WRIGLEY	0.18		1	1		AM
025-093-08	RES	R-1	VAC	1217	BERRY	0.18		1	1		AM
026-383-06	RES	R-1	VAC	520	FOURTEENTH	0.18		1	1		AM

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026-051-06	RES	R-1	VAC	432	SUNSET	0.19		1	1		AM
026-383-04	RES	R-1	VAC	544	FOURTEENTH	0.19		1	1		AM
025-093-09	RES	R-1	VAC	1225	BERRY	0.19		1	1		AM
025-366-12	RES	R-1	VAC	730	FIFTH	0.20		1	1		AM
025-042-13	RES	R-1	VAC	634	SPURR	0.21		1	1		AM
025-043-06	RES	R-1	VAC	1020	SIXTH	0.21		1	1		AM
026-051-05	RES	R-1	VAC	446	SUNSET	0.21		1	1		AM
025-073-14	RES	R-1	VAC	780	FIFTH	0.21		1	1		AM
026-383-05	RES	R-1	VAC	540	FOURTEENTH	0.21		1	1		AM
026-332-21	RES	R-1	VAC	1032	ADAMS	0.21		1	1		AM
025-093-10	RES	R-1	VAC	1233	BERRY	0.22		1	1		AM
025-205-06	RES	R-1	VAC	655	CHERRY	0.23		1	1		AM
025-036-04	RES	R-1	VAC	1290	SIXTH	0.23		1	1		AM
025-093-12	RES	R-1	VAC	1249	BERRY	0.23		1	1		AM
026-482-04	RES	R-1	VAC	1312	MELLOR	0.24		1	1		AM
026-256-05	RES	R-1	VAC	521	TENTH	0.24		1	1		AM
025-161-11	RES	R-1	VAC	935	SECOND	0.24		1	1		AM
025-073-21	RES	R-1	VAC	994	FIFTH	0.24		1	1		AM
025-093-11	RES	R-1	VAC	1241	BERRY	0.25		1	1		AM
025-041-27	RES	R-1	VAC	1130	CENTRAL PARK	0.25		1	1		AM
026-403-01	RES	R-1	VAC	991	TWENTIETH	0.25		1	1		AM
026-082-02	RES	R-1	VAC	561	SUNSET	0.25		1	1		AM
026-062-12	RES	R-1	VAC	457	FAIRVIEW	0.26		1	1		AM
025-051-09	RES	R-1	VAC	900	CENTRAL PARK	0.26		1	1		AM
025-093-13	RES	R-1	VAC	1257	BERRY	0.27		1	1		AM
025-093-14	RES	R-1	VAC	1265	BERRY	0.27		1	1		AM
026-151-37	RES	R-1	VAC	656	CLEAR LAKE	0.29		2	1		AM
026-151-40	RES	R-1	VAC	594	CLEAR LAKE	0.29		2	1		AM
026-151-38	RES	R-1	VAC	632	CLEAR LAKE	0.30		2	1		AM
025-036-08	RES	R-1	VAC	1250	SIXTH	0.30		2	1		AM
026-052-01	RES	R-1	VAC	2382	HARTLEY	0.32		2	1		AM
026-021-02	RES	R-1	VAC	1385	SHADY	0.32		2	1		AM
025-077-01	RES	R-1	VAC	850	THIRD	0.33		2	1		AM
025-652-09	RES	R-1	VAC	650	SECOND	0.34		2	1		AM
026-511-30	RES	R-1	VAC	1282	TWENTIETH	0.34		2	1		AM

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026-122-50	RES	R-1	VAC	1657	ALDEN	0.35		2	2		AM
026-051-09	RES	R-1	VAC	474	SUNSET	0.36		2	2		AM
026-122-51	RES	R-1	VAC	1651	ALDEN	0.36		2	2		AM
026-031-09	RES	R-1	VAC	2440	LAKESHORE	0.37		2	2		AM
026-122-49	RES	R-1	VAC	1665	ALDEN	0.38		2	2		AM
026-412-10	RES	R-1	VAC	855	ANASTASIA	0.38		2	2		AM
005-051-11	RES	R-1	VAC	305	CHESTER	0.38		2	2		AM
026-031-22	RES	R-1	VAC	2415	BEACH	0.40		2	2		AM
025-084-14	RES	R-1	VAC	1010	COMPTON	0.41		2	2		AM
025-203-03	RES	R-1	VAC	700	MANZANITA	0.42		3	2		AM
026-491-11	RES	R-1	VAC	1764	MELLOR	0.48		3	2		AM
026-082-03	RES	R-1	VAC	581	SUNSET	0.49	1	2	1		AM
025-074-12	RES	R-1	VAC	1048	COMPTON	0.49		3	2		AM
026-031-20	RES	R-1	VAC	2430	WINTER	0.53		3	3		AM
026-122-57	RES	R-1	VAC	1403	WILD OAK	0.58		4	3		AM
026-482-01	RES	R-1	VAC	1316	MELLOR	0.60		4	3		AM
026-301-14	RES	R-1	VAC	1261	CENTRAL PARK	0.60		4	3		AM
026-471-02	RES	R-1	VAC	1542	MELLOR	0.62		4	3		AM
026-481-11	RES	R-1	VAC	1265	MELLOR	0.71	1	4	3		AM
025-035-02	RES	R-1	UND	1240	CENTRAL PARK	0.73	1	4	3		AM
026-021-42	RES	R-1	VAC	1343	SHADY	0.82		6	4		AM
026-131-18	RES	R-1	VAC	1200	NINTH	0.85		6	4		AM
025-035-03	RES	R-1	VAC	1220	CENTRAL PARK	0.86		6	5		AM
025-041-26	RES	R-1	VAC	1130	NINTH	0.88		6	5		AM
026-322-13	RES	R-1	VAC	700	ADAMS	0.91		6	5		AM
025-191-01	RES	R-1	VAC	801	MANZANITA	0.91		6	5		AM
026-081-01	RES	R-1	VAC	550	SUNSET	1.17		8	6		AM
025-441-43	RES	R-1	VAC	1297	CRAIG	1.18		8	3		AM
026-122-25	RES	R-1	VAC	1122	ELEVENTH	1.24		9	7		AM
005-038-36	RES	R-1	VAC	12	QUEEN ANN	1.28		9	7		AM
026-301-22	RES	R-1	VAC	1265	CENTRAL PARK	1.36		9	7		AM
026-021-48	RES	R-1	UND	1170	BOGGS	1.38	1	9	7		AM
026-332-12	RES	R-1	VAC	850	ADAMS	1.48		10	8		AM
026-341-03	RES	R-1	VAC	1180	BOGGS	1.62		11	9		AM
005-038-35	RES	R-1	VAC	20	QUEEN ANN	1.64		11	9		AM

APPENDIX A: INVENTORY OF RESIDENTIAL SITES

025-062-24	RES	R-1	VAC	1366	BERRY	1.91		13	11			AM
026-471-01	RES	R-1	VAC	1601	MELLOR	2.02	1	13	10			AM
005-030-10	RES	R-1	VAC	1320	CRAIG	2.26		16	13			AM
026-021-11	RES	R-1	VAC	1385	SHADY	2.41	1	16	13			AM
025-062-02	RES	R-1	UND	1255	SIXTH	2.64	1	18	6			AM
005-038-37	RES	R-1	VAC	8	QUEEN ANN	2.70		19	15			AM
026-342-08	RES	R-1	VAC	1255	BOGGS	2.71		19	15			AM
026-321-14	RES	R-1	VAC	880	BOGGS	2.71		19	15			AM
025-092-03	RES	R-1	VAC	1301	BERRY	2.77		20	16			AM
025-062-23	RES	R-1	VAC	1370	BERRY	2.79		20	16			AM
026-341-04	RES	R-1	UND	1150	BOGGS	2.84	1	19	15			AM
026-491-09	RES	R-1	VAC	1810	MELLOR	2.86		20	16			AM
025-062-13	RES	R-1	UND	1240	BERRY	2.87	1	19	15			AM
025-034-01	RES	R-1	VAC	1370	SIXTH	3.02		22	17			AM
026-122-34	Office	R-1	VAC	1192	ELEVENTH	3.04		22	17			AM
025-074-05	RES	R-1	UND	995	FOURTH	3.05	1	21	16			AM
026-122-45	HDR	R-1	UND	1320	ELEVENTH	3.19	1	22	17			AM
026-321-11	RES	R-1	VAC	750	BOGGS	3.23		23	18			AM
025-033-01	RES	R-1	VAC	1300	HEIGHT	3.29		24	19			AM
025-431-16	RES	R-1	VAC	1255	MARTIN	3.56		25	20			AM
026-021-09	RES	R-1	VAC	1343	SHADY	3.66		26	21			AM
026-021-10	RES	R-1	VAC	1351	SHADY	3.66		26	21			AM
026-122-53	RES	R-1	VAC	1600	MIKES	3.90		28	22			AM
026-361-01	RES	R-1	UND	1100	TWENTIETH	4.02	1	28	22			AM
026-021-17	RES	R-1	VAC	2403	HARTLEY	4.14		30	24			AM
026-122-56	RES	R-1	UND	1310	ELEVENTH	4.16	1	29	23			AM
025-062-01	RES	R-1	UND	1301	SIXTH	4.36	1	30	11			AM
025-441-08	RES	R-1	VAC	1296	CRAIG	4.37		31	25			AM
026-021-08	RES	R-1	UND	1285	SHADY	4.51	1	31	25			AM
026-361-02	RES	R-1	VAC	1101	TWENTIETH	5.29		38	30			AM
025-092-04	RES	R-1	UND	1295	ARMSTRONG	5.34	1	37	30			AM
026-122-05	RES	R-1	VAC	1411	ALDEN	5.48		40	32			AM
026-122-47	RES	R-1	UND	1200	ELEVENTH	5.52	1	39	31			AM
026-021-41	RES	R-1	VAC	1343	SHADY	5.88		42	34			AM
026-122-01	RES	R-1	UND	1451	WILD OAK	6.00	1	42	34			AM

APPENDIX A: INVENTORY OF RESIDENTIAL SITES

026-461-01	RES	R-1	UND	1825	MELLOR	6.64	1	47	37			AM
025-093-16	RES	R-1	VAC	1200	ARMSTRONG	7.09		51	41			AM
026-122-09	RES	R-1	UND	1170	ELEVENTH	7.86	1	56	44			AM
025-431-21	RES	R-1	VAC	1395	MARTIN	8.27	1	59	47			AM
026-021-49	RES	R-1	VAC	1160	BOGGS	8.64		63	50			AM
005-030-51	RES	R-1	VAC	1310	CRAIG	14.18		103	82			AM
005-030-49	RES	R-1	VAC	1453	MARTIN	17.41	1	126	100			AM
026-021-34	RES	R-1	VAC	2447	HARTLEY	26.66		194	155			AM
005-035-19	RES	R-1	VAC	450	LINDA	28.96	12	199	157			AM
total R-1 Sites						296.39	34	2,065	1,627	-	-	
026-161-21	RES	R-2	VAC	1832	HARTLEY	0.23				4	3	M
025-311-14	RES	R-2	VAC	450	ARMSTRONG	0.15				2	2	M
026-194-03	RES	R-2	VAC	375	THIRTEENTH	0.09		1	1	0	0	M
026-221-09	RES	R-2	VAC	1166	POOL	0.21				4	3	M
026-122-22	RES	R-2	VAC	1134	ELEVENTH	0.18				3	2	M
026-251-06	RES	R-2	VAC	1041	MANZANITA	0.13				2	2	M
026-142-11	RES	R-2	VAC	1893	HARTLEY	0.28				5	4	M
026-122-23	RES	R-2	VAC	1146	ELEVENTH	0.17				3	2	M
026-222-02	RES	R-2	VAC	670	ELEVENTH	0.50				9	7	M
025-301-05	RES	R-2	VAC	510	ARMSTRONG	0.20				3	3	M
026-043-17	RES	R-2	UND	375	TWENTIETH	0.20	1			2	2	M
total R-2 Sites						2.35	1	1	1	37	30	
025-431-12	HDR	R-3	UND	520	S SMITH	3.40	1			97	77	M**
026-482-09	HDR	R-3	UND	830	ELEVENTH	1.62	1			46	36	M**
005-042-15	HDR	R-3	UND	1339	BROTEN	1.76	1			50	39	M**
005-042-20	HDR	R-3	UND	1343	BROTEN	3.03	1			86	69	M**
026-243-02	HDR	R-3	VAC	257	CLEAR LAKE	0.12				3	2	M
026-193-03	HDR	R-3	VAC	340	THIRTEENTH	0.17				4	3	M
025-321-10	HDR	R-3	VAC	265	FIRST	0.29				8	6	M
025-231-01	HDR	R-3	VAC	295	NINTH	0.29				8	6	M
026-231-03	HDR	R-3	VAC	310	CLEAR LAKE	0.39				11	9	M
025-441-25	HDR	R-3	VAC	1293	CRAIG	2.45				71	28	M*
025-431-37	HDR	R-3	*	975	BEVINS	3.10	*			90	72	VL/L
025-451-01	HDR	R-3	*	400	BEVINS	1.60	*			47	38	VL/L
025-431-35	HDR	R-3	*	1075	MARTIN	2.20	*			63	51	VL/L

APPENDIX A: INVENTORY OF RESIDENTIAL SITES

total R-3 Sites						13.53	4	-	-	584	436	
005-038-21	RR	R-5	VAC	97	QUEEN ANN	0.08		1	1	0	0	AM
005-050-07	RR	R-5	VAC	2210	S MAIN	3.38				65	52	M/AM
026-031-29	RR	R-5	VAC	2200	LAKESHORE	6.08				117	46	M/AM
005-050-03	RR	R-5	VAC	2240	S MAIN	4.79	1			91	72	M/AM
005-038-24	RR	R-5	VAC	91	QUEEN ANN	0.05		1	1	0	0	AM
005-038-20	RR	R-5	VAC	2031	HAMPTON PARK	0.04		1	1	0	0	AM
005-038-27	RR	R-5	VAC	2030	HAMPTON PARK	0.07		1	1	0	0	AM
005-038-19	RR	R-5	VAC	2029	HAMPTON PARK	0.04		1	1	0	0	AM
005-038-29	RR	R-5	VAC	2026	HAMPTON PARK	0.11		2	1	0	0	AM
005-038-18	RR	R-5	VAC	2027	HAMPTON PARK	0.04		1	1	0	0	AM
005-038-17	RR	R-5	VAC	2025	HAMPTON PARK	0.04		1	1	0	0	AM
005-038-16	RR	R-5	VAC	2023	HAMPTON PARK	0.04		1	1	0	0	AM
005-038-15	RR	R-5	VAC	2021	HAMPTON PARK	0.04		1	1	0	0	AM
005-038-33	RR	R-5	VAC	1930	S MAIN	0.70		0	0	13	10	AM
total R-5 Sites						15.51	1	11	10	286	180	

*See Table 4-4 for site details

**May also be appropriate for very low/low but assumed for moderate

Appendix B

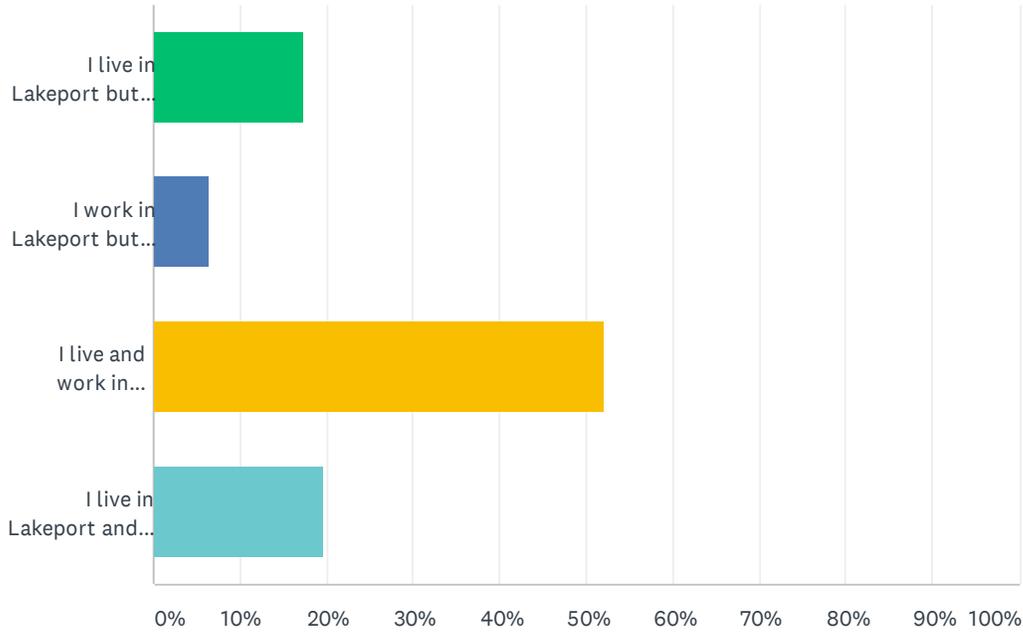
Survey Response Data

Lakeport Housing Element Survey (Community-wide)

Lakeport Housing Element Stakeholders Survey

Q1 Do you live and/or work in the City of Lakeport?

Answered: 46 Skipped: 0

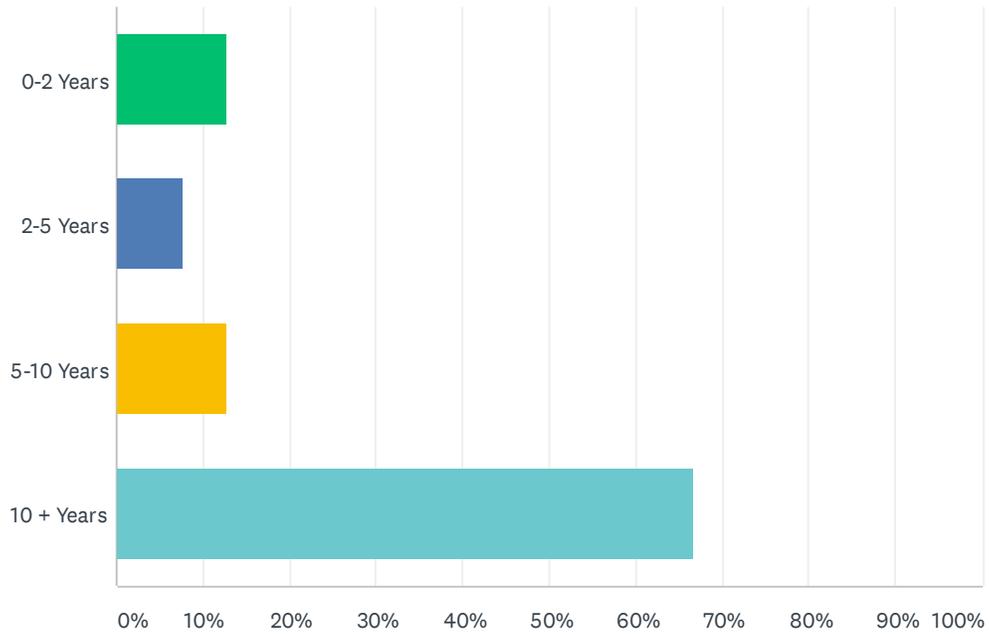


ANSWER CHOICES	RESPONSES
I live in Lakeport but work somewhere else	17.39% 8
I work in Lakeport but live somewhere else	6.52% 3
I live and work in Lakeport	52.17% 24
I live in Lakeport and do not currently work/I am retired	19.57% 9
TOTAL	46

#	IF YOU LIVE SOMEWHERE OTHER THAN THE CITY OF LAKEPORT, WHERE DO YOU LIVE?	DATE
1	Santa Rosa	6/4/2020 4:53 PM
2	Clearlake Oaks, Can.	5/25/2020 3:25 AM
3	Finley	5/20/2020 6:46 PM
4	unincorporated Lakeport	5/18/2020 4:50 PM
5	Lower Lake	3/23/2020 9:08 AM

Q2 How long have you lived in the City of Lakeport?

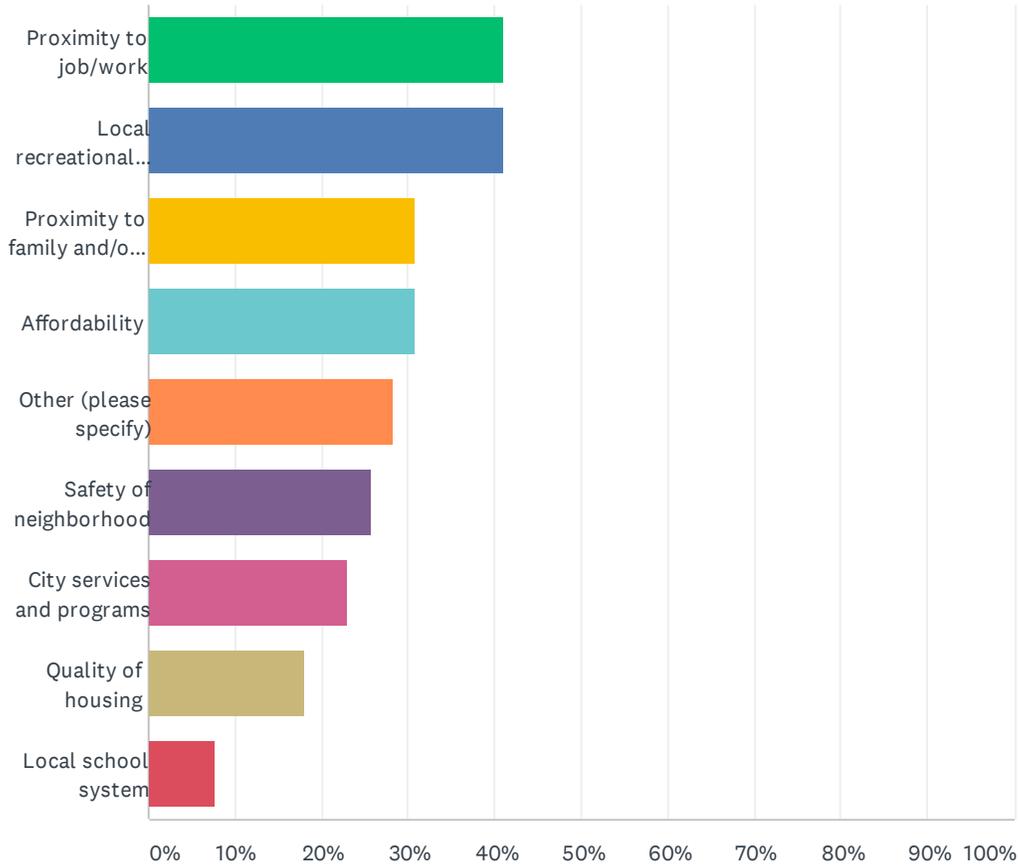
Answered: 39 Skipped: 7



ANSWER CHOICES	RESPONSES	
0-2 Years	12.82%	5
2-5 Years	7.69%	3
5-10 Years	12.82%	5
10 + Years	66.67%	26
TOTAL		39

Q3 Why have you chosen to live in Lakeport? (Select all that apply)

Answered: 39 Skipped: 7



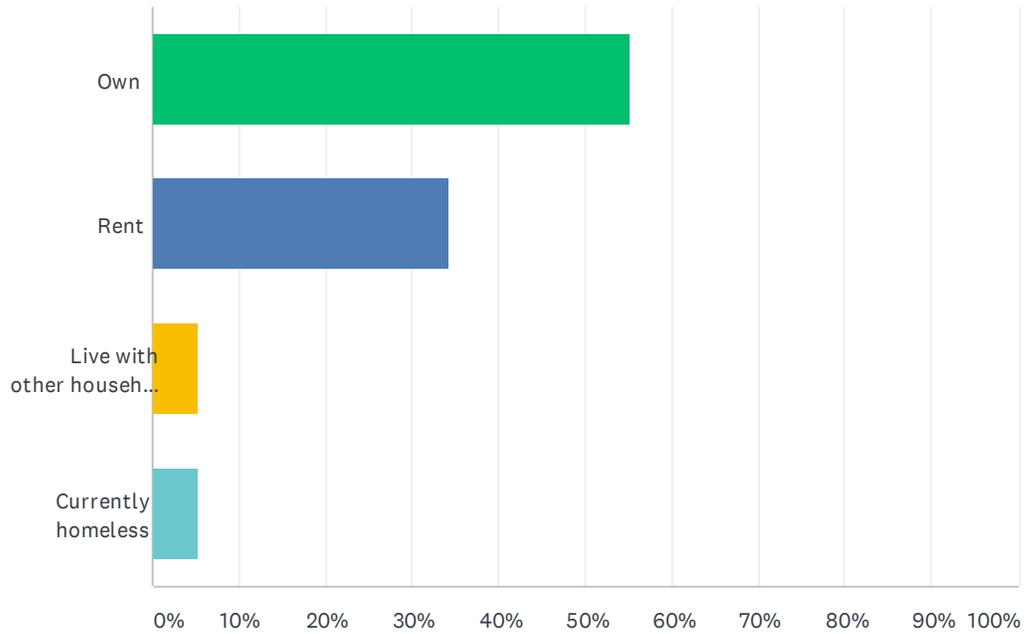
ANSWER CHOICES	RESPONSES	
Proximity to job/work	41.03%	16
Local recreational amenities and scenery	41.03%	16
Proximity to family and/or friends	30.77%	12
Affordability	30.77%	12
Other (please specify)	28.21%	11
Safety of neighborhood	25.64%	10
City services and programs	23.08%	9
Quality of housing	17.95%	7
Local school system	7.69%	3
Total Respondents: 39		

Lakeport Housing Element Update Survey

#	OTHER (PLEASE SPECIFY)	DATE
1	Most handi- accessible town in county	6/5/2020 1:02 PM
2	Grew up here	5/28/2020 11:35 AM
3	Family	5/26/2020 12:31 PM
4	Inherited house	5/26/2020 12:17 PM
5	Closer to stores/restaurants	5/26/2020 9:49 AM
6	Grew up here	5/19/2020 11:35 PM
7	I choose it. I grew up here and returned after college	5/19/2020 8:11 PM
8	Best Police Department	5/19/2020 11:46 AM
9	Childhood home	5/19/2020 11:18 AM
10	Great place for retirement in the future	3/30/2020 5:12 PM
11	like small town environment	3/22/2020 11:56 AM

Q4 Do you currently own or rent your home?

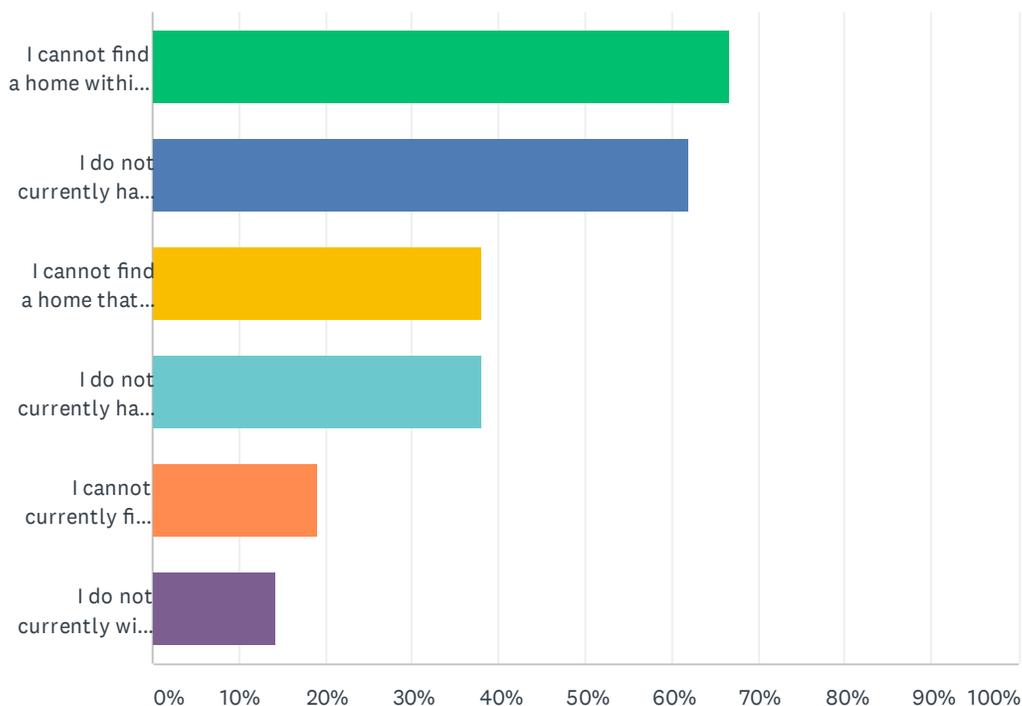
Answered: 38 Skipped: 8



ANSWER CHOICES	RESPONSES	
Own	55.26%	21
Rent	34.21%	13
Live with other household (Neither own nor rent)	5.26%	2
Currently homeless	5.26%	2
TOTAL		38

Q5 If you wish to own a home in Lakeport but do not currently own one, what issues are preventing you from owning a home at this time? (Choose all that apply)

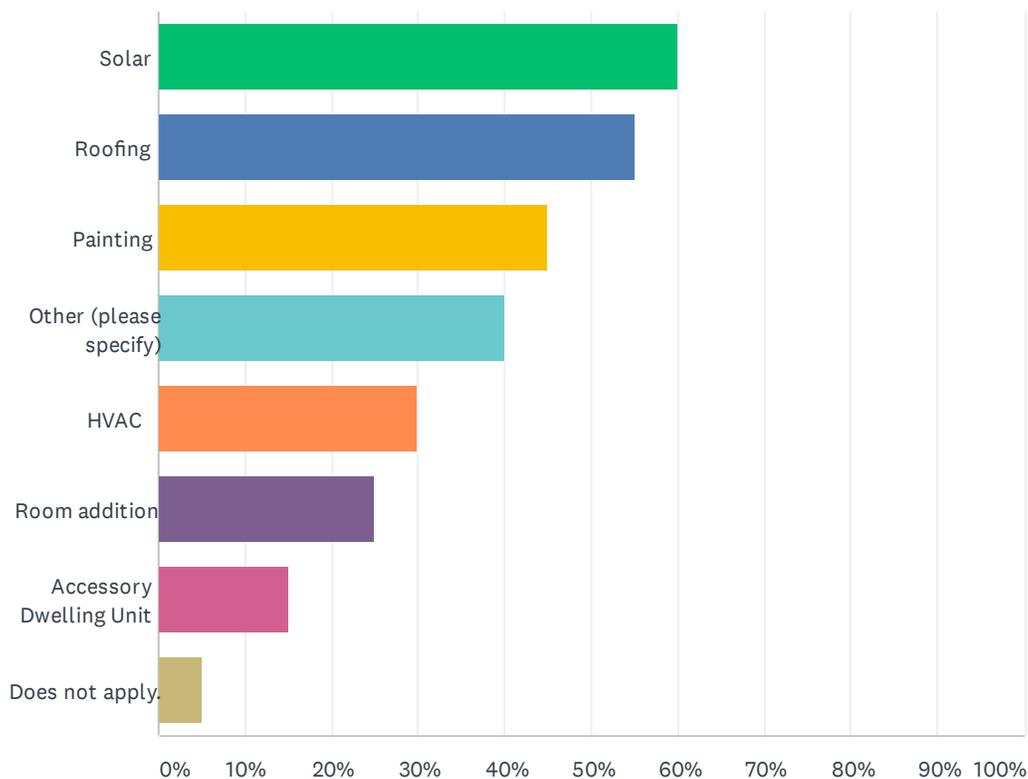
Answered: 21 Skipped: 25



ANSWER CHOICES	RESPONSES	
I cannot find a home within my target price range in Lakeport	66.67%	14
I do not currently have the financial resources for an adequate down payment	61.90%	13
I cannot find a home that suits my living needs in Lakeport (housing size, disability accommodations)	38.10%	8
I do not currently have the financial resources for the monthly mortgage payment	38.10%	8
I cannot currently find a home that suits my quality standards in Lakeport	19.05%	4
I do not currently wish to own a home in Lakeport	14.29%	3
Total Respondents: 21		

Q6 Which of the following housing upgrades or expansions have you considered making on your home?

Answered: 20 Skipped: 26



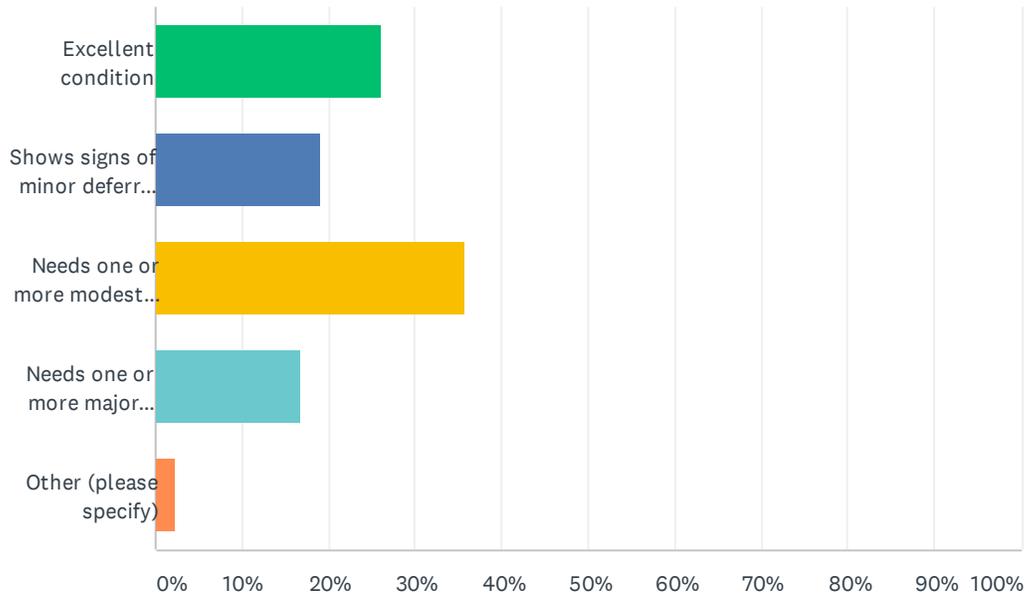
ANSWER CHOICES	RESPONSES	
Solar	60.00%	12
Roofing	55.00%	11
Painting	45.00%	9
Other (please specify)	40.00%	8
HVAC	30.00%	6
Room addition	25.00%	5
Accessory Dwelling Unit	15.00%	3
Does not apply.	5.00%	1
Total Respondents: 20		

Lakeport Housing Element Update Survey

#	OTHER (PLEASE SPECIFY)	DATE
1	Window upgrade	5/22/2020 8:10 PM
2	Remodel	5/19/2020 11:39 AM
3	Landscaping	5/19/2020 10:25 AM
4	siding	5/19/2020 10:18 AM
5	remodel with new garage and expansion	4/1/2020 1:25 PM
6	landscaping/interior renovations	3/30/2020 5:12 PM
7	bathroom remodel	3/24/2020 12:25 PM
8	Have all been done in our 20 years in the house including kitchen reno, carpeting, new windows	3/21/2020 1:48 PM

Q7 How would you rate the physical condition of the unit you live in?

Answered: 42 Skipped: 4

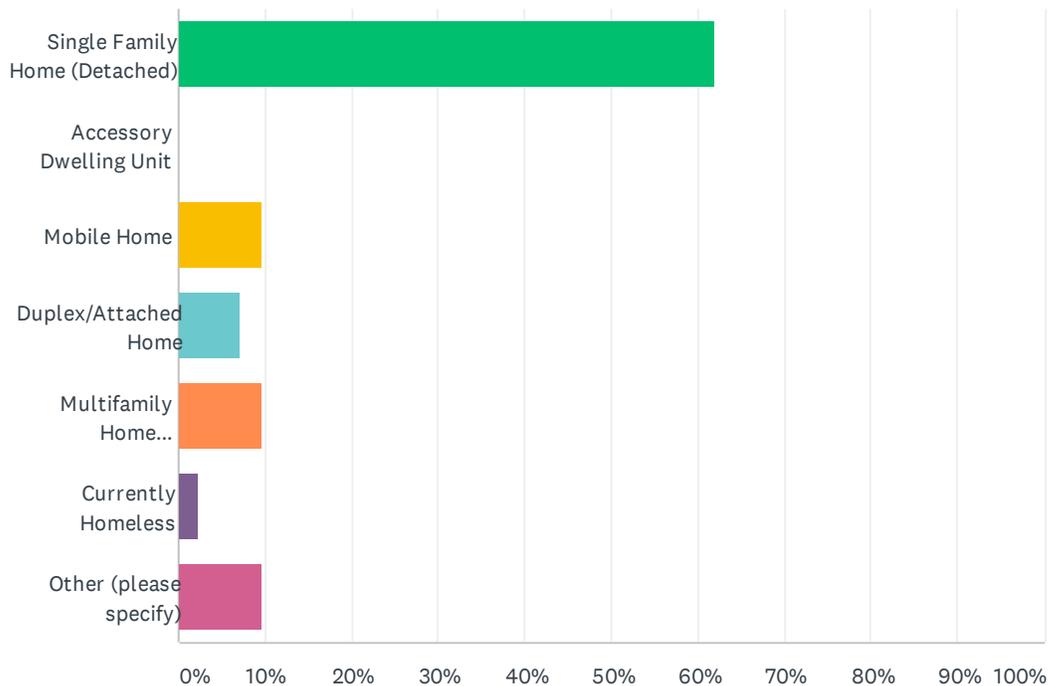


ANSWER CHOICES	RESPONSES	
Excellent condition	26.19%	11
Shows signs of minor deferred maintenance (i.e., peeling paint, chipped stucco, etc.)	19.05%	8
Needs one or more modest rehabilitation improvements (i.e., new roof, new wood siding, etc.)	35.71%	15
Needs one or more major upgrades (i.e., new foundation, new plumbing, new electrical, etc.)	16.67%	7
Other (please specify)	2.38%	1
TOTAL		42

#	OTHER (PLEASE SPECIFY)	DATE
1	Homeless	5/25/2020 8:32 AM

Q8 Select the type of housing that best describes your current home:

Answered: 42 Skipped: 4

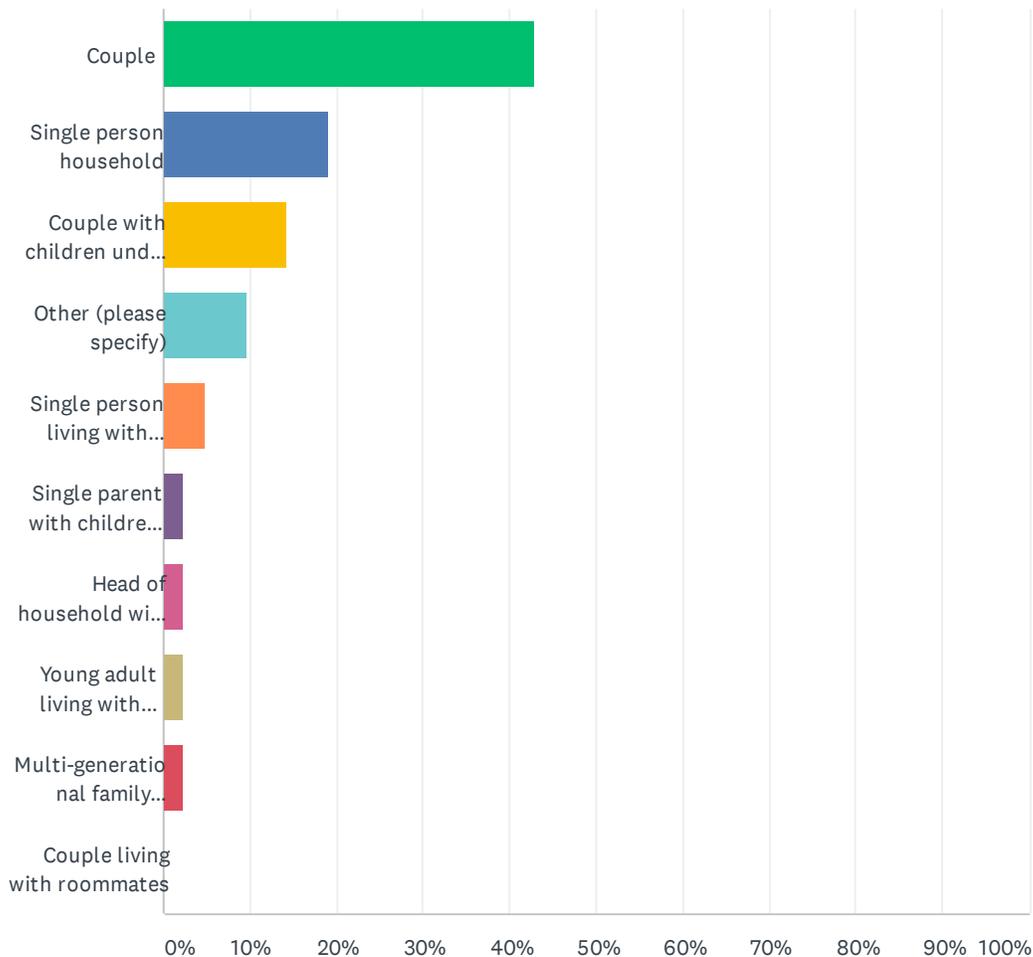


ANSWER CHOICES	RESPONSES	
Single Family Home (Detached)	61.90%	26
Accessory Dwelling Unit	0.00%	0
Mobile Home	9.52%	4
Duplex/Attached Home	7.14%	3
Multifamily Home (Apartment/Condominium)	9.52%	4
Currently Homeless	2.38%	1
Other (please specify)	9.52%	4
TOTAL		42

#	OTHER (PLEASE SPECIFY)	DATE
1	Long term resident Hotel	5/29/2020 8:07 AM
2	Studio apartment	5/20/2020 9:50 PM
3	Townhome	5/19/2020 10:28 AM
4	Hotel	5/19/2020 10:12 AM

Q9 Which of the following best describes your household type?

Answered: 42 Skipped: 4



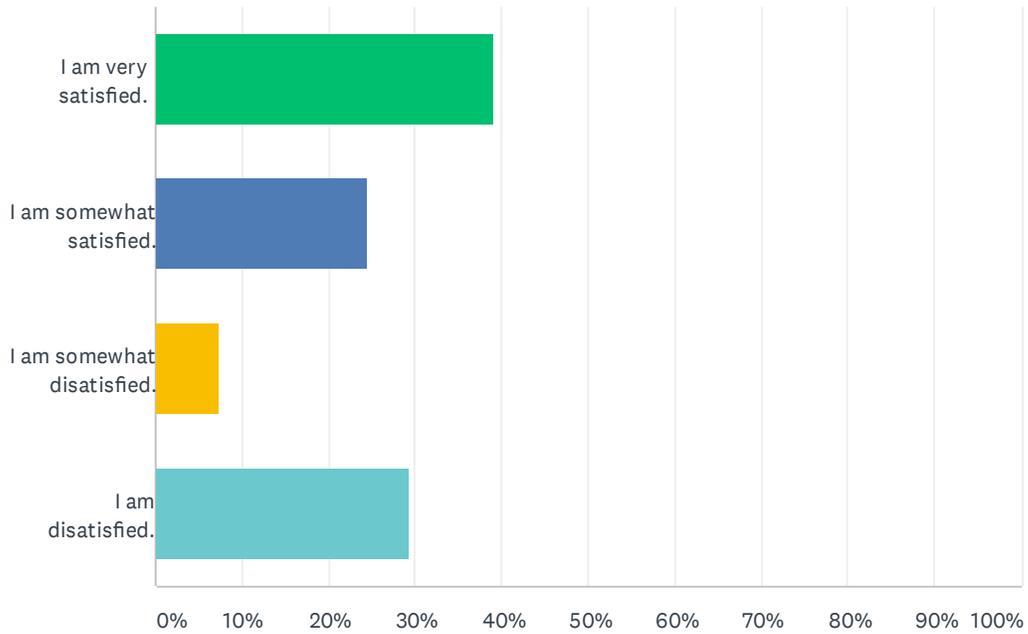
ANSWER CHOICES	RESPONSES	
Couple	42.86%	18
Single person household	19.05%	8
Couple with children under 18	14.29%	6
Other (please specify)	9.52%	4
Single person living with roommates	4.76%	2
Single parent with children under 18	2.38%	1
Head of household with children under 18	2.38%	1
Young adult living with parents	2.38%	1
Multi-generational family household (Grandparents, Children, and Grandchildren all under the same roof)	2.38%	1
Couple living with roommates	0.00%	0
TOTAL		42

Lakeport Housing Element Update Survey

#	OTHER (PLEASE SPECIFY)	DATE
1	Homeless	5/25/2020 8:32 AM
2	single parent w/ kids under 18 AND multi generational family household	4/7/2020 2:07 PM
3	parents with adult child	4/1/2020 1:35 PM
4	Young adult living with one parent	3/31/2020 8:08 AM

Q10 How satisfied are you with your current housing situation?

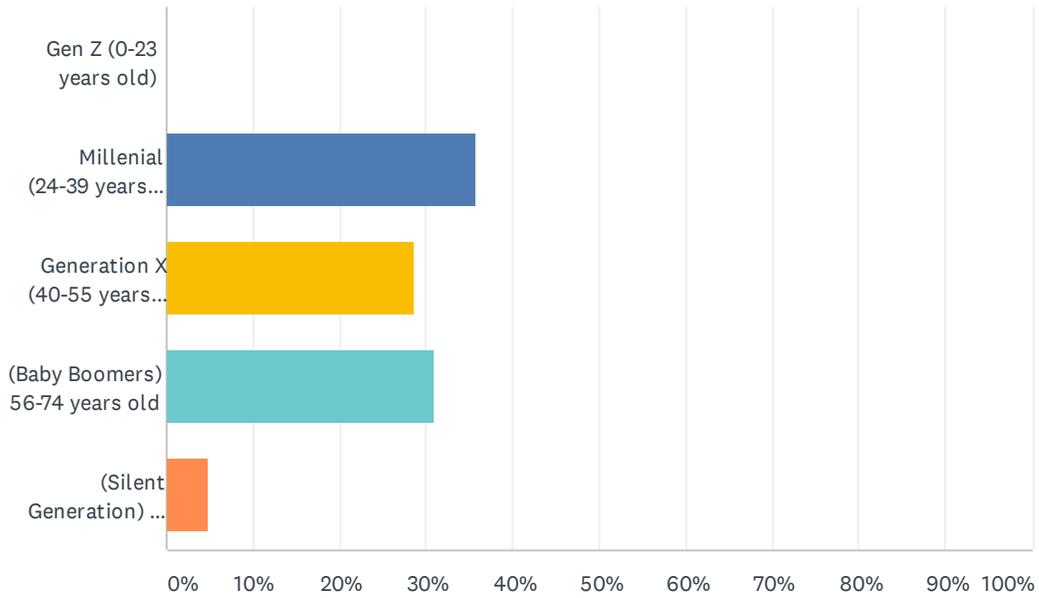
Answered: 41 Skipped: 5



ANSWER CHOICES	RESPONSES	
I am very satisfied.	39.02%	16
I am somewhat satisfied.	24.39%	10
I am somewhat dissatisfied.	7.32%	3
I am dissatisfied.	29.27%	12
TOTAL		41

Q11 What age range most accurately describes you?

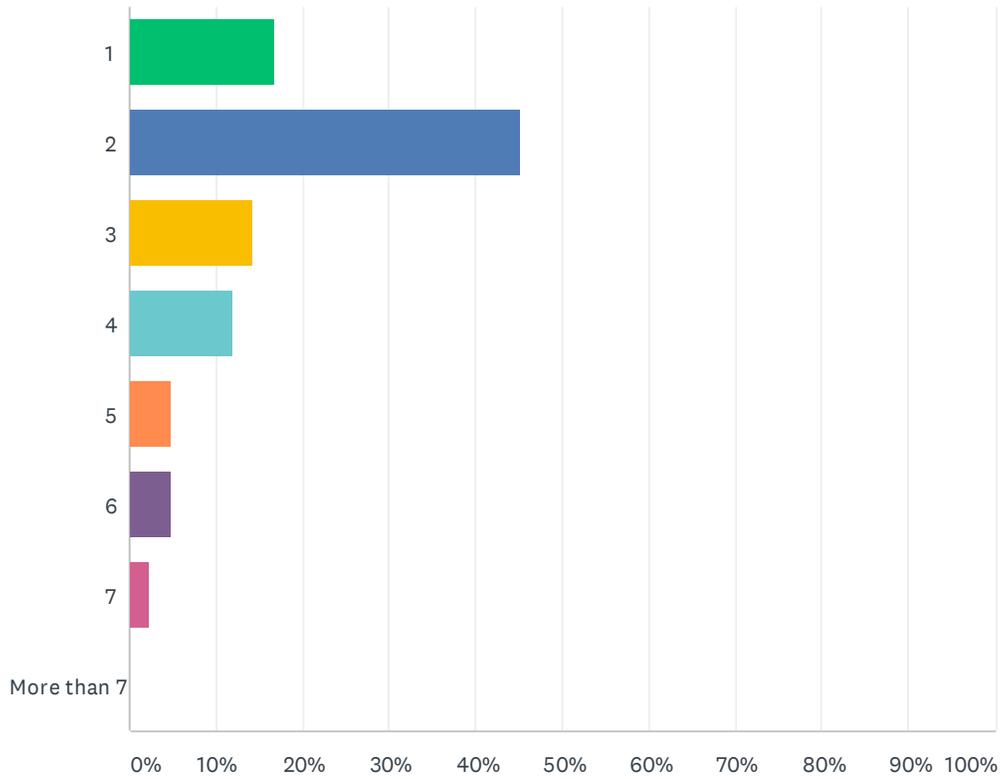
Answered: 42 Skipped: 4



ANSWER CHOICES	RESPONSES	
Gen Z (0-23 years old)	0.00%	0
Millennial (24-39 years old)	35.71%	15
Generation X (40-55 years old)	28.57%	12
(Baby Boomers) 56-74 years old	30.95%	13
(Silent Generation) 75 + years old	4.76%	2
TOTAL		42

Q12 How many people live in your household

Answered: 42 Skipped: 4

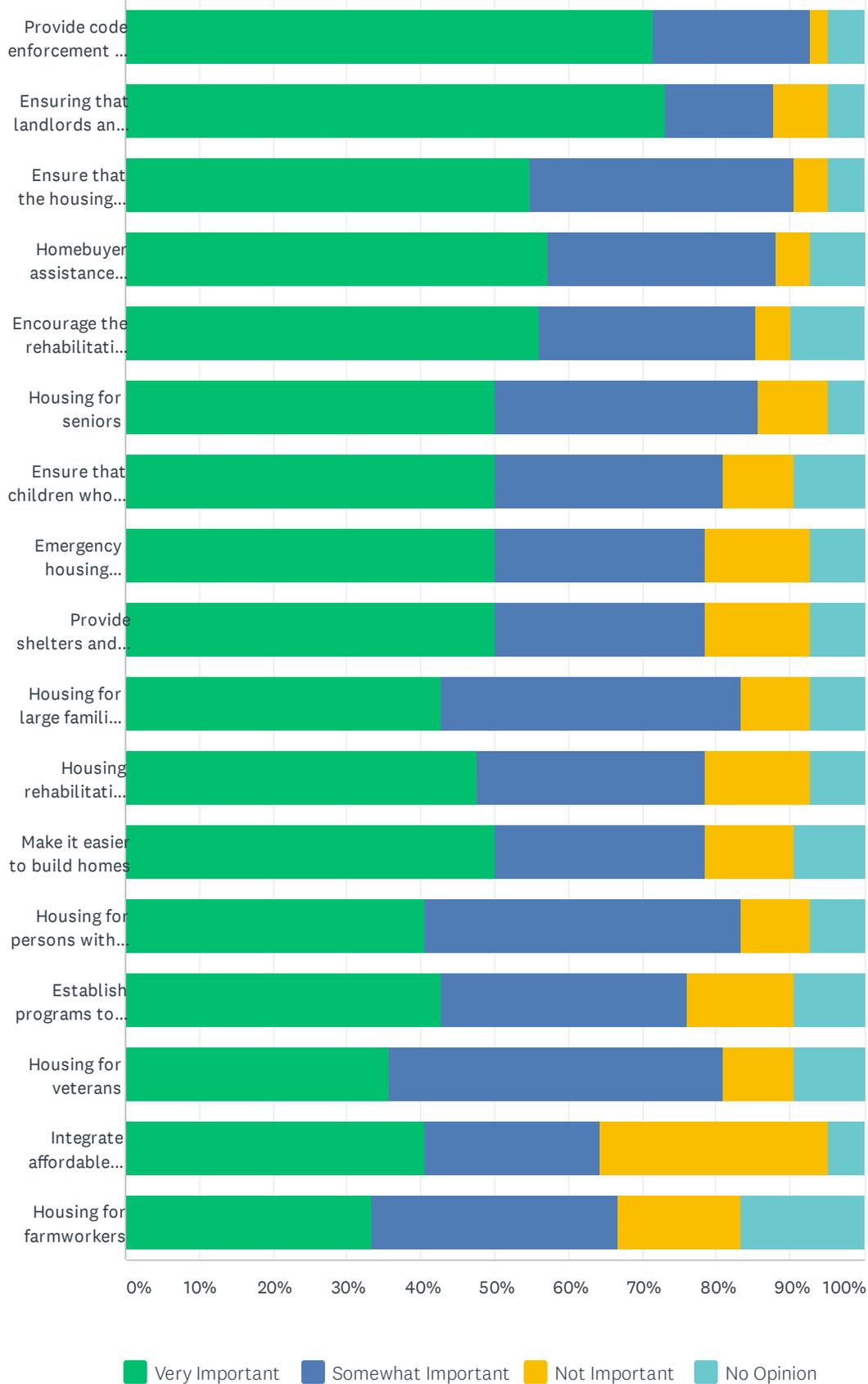


ANSWER CHOICES	RESPONSES	
1	16.67%	7
2	45.24%	19
3	14.29%	6
4	11.90%	5
5	4.76%	2
6	4.76%	2
7	2.38%	1
More than 7	0.00%	0
TOTAL		42

Q13 Rank the priority of the following issues for Lakeport

Answered: 42 Skipped: 4

Lakeport Housing Element Update Survey

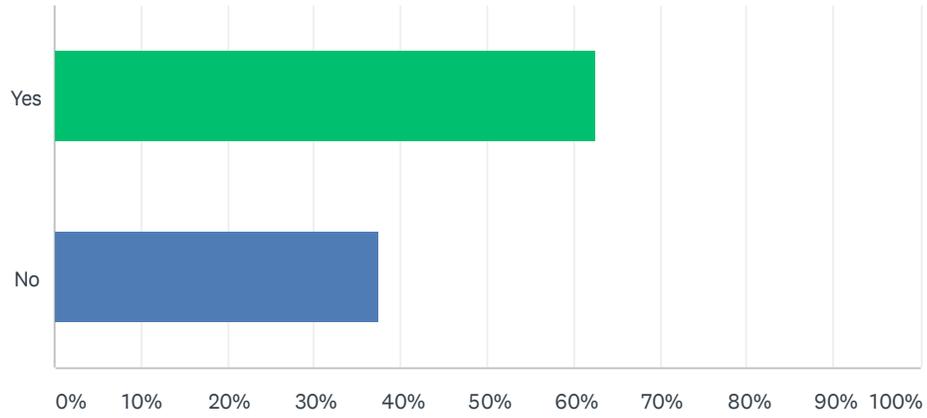


Lakeport Housing Element Update Survey

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	NO OPINION	TOTAL	WEIGHTED AVERAGE
Provide code enforcement and programs to help maintain and uplift neighborhoods that have areas of blight, disrepair, or have suffered from the economy	71.43% 30	21.43% 9	2.38% 1	4.76% 2	42	1.40
Ensuring that landlords and developers follow fair housing practices when renting or selling homes	73.17% 30	14.63% 6	7.32% 3	4.88% 2	41	1.44
Ensure that the housing market in Lakeport provides a diverse range of housing types, including single-family homes, townhomes, apartments, and condominiums to meet the varied needs of local residents	54.76% 23	35.71% 15	4.76% 2	4.76% 2	42	1.60
Homebuyer assistance programs, such as a first-time homebuyer loan or grant program	57.14% 24	30.95% 13	4.76% 2	7.14% 3	42	1.62
Encourage the rehabilitation of existing housing stock in older neighborhoods	56.10% 23	29.27% 12	4.88% 2	9.76% 4	41	1.68
Housing for seniors	50.00% 21	35.71% 15	9.52% 4	4.76% 2	42	1.69
Ensure that children who grow up in Lakeport can afford to live in Lakeport	50.00% 21	30.95% 13	9.52% 4	9.52% 4	42	1.79
Emergency housing assistance (assistance with utility bills and/or loan payment)	50.00% 21	28.57% 12	14.29% 6	7.14% 3	42	1.79
Provide shelters and transitional housing for the homeless, along with services to help move people into permanent housing	50.00% 21	28.57% 12	14.29% 6	7.14% 3	42	1.79
Housing for large families, veterans, and/or persons with disabilities.	42.86% 18	40.48% 17	9.52% 4	7.14% 3	42	1.81
Housing rehabilitation or repair loan program	47.62% 20	30.95% 13	14.29% 6	7.14% 3	42	1.81
Make it easier to build homes	50.00% 21	28.57% 12	11.90% 5	9.52% 4	42	1.81
Housing for persons with disabilities	40.48% 17	42.86% 18	9.52% 4	7.14% 3	42	1.83
Establish programs to help at-risk homeowners keep their homes, including mortgage loan programs	42.86% 18	33.33% 14	14.29% 6	9.52% 4	42	1.90
Housing for veterans	35.71% 15	45.24% 19	9.52% 4	9.52% 4	42	1.93
Integrate affordable housing throughout the community to create mixed-income neighborhoods	40.48% 17	23.81% 10	30.95% 13	4.76% 2	42	2.00
Housing for farmworkers	33.33% 14	33.33% 14	16.67% 7	16.67% 7	42	2.17

Q14 Do you feel that the different housing types in Lakeport currently meet your housing needs?

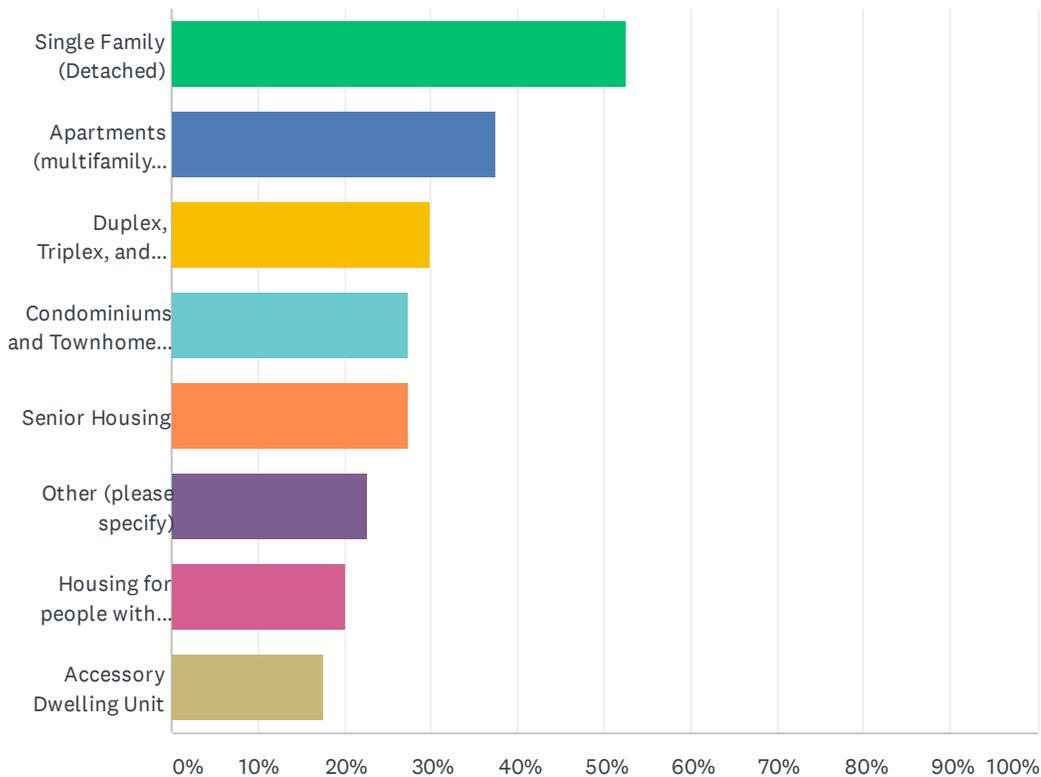
Answered: 40 Skipped: 6



ANSWER CHOICES	RESPONSES	
Yes	62.50%	25
No	37.50%	15
TOTAL		40

Q15 What types of housing are most needed in the City of Lakeport?

Answered: 40 Skipped: 6



ANSWER CHOICES	RESPONSES	
Single Family (Detached)	52.50%	21
Apartments (multifamily rental homes)	37.50%	15
Duplex, Triplex, and Fourplex Units	30.00%	12
Condominiums and Townhomes (multifamily ownership homes)	27.50%	11
Senior Housing	27.50%	11
Other (please specify)	22.50%	9
Housing for people with disabilities (Please specify in comment field below)	20.00%	8
Accessory Dwelling Unit	17.50%	7
Total Respondents: 40		

Lakeport Housing Element Update Survey

#	OTHER (PLEASE SPECIFY)	DATE
1	Affordable housing for families that have special needs children	6/5/2020 1:10 PM
2	Mobility impaired wheelchair accessible for lower income SSI recipients	5/26/2020 10:42 AM
3	Apartments	5/19/2020 10:36 AM
4	change laws/restrictions concerning ADU's and tiny houses	4/7/2020 2:07 PM
5	I don't know what is needed and how would I as a layperson know?	4/1/2020 1:35 PM
6	More insulation like apartments in states with snowy winters have. For insulation against weather and noise. Those with migraine who experience sound sensitivity are not considered disabled. Low income apartments are very low quality built and have walls so thin that the noise from neighbors, both normal and loud, exacerbates the condition and keeps one awake at night.	3/31/2020 8:08 AM
7	I've not lived here long enough to know and do not want my lack of knowledge add to the challenges you are mitigating.	3/30/2020 5:18 PM
8	Low Income Housing	3/25/2020 9:09 AM
9	homeless shelter	3/24/2020 12:34 PM

Q16 Are there any comments or concerns you would like to share with the City of Lakeport relevant to the upcoming Housing Element Update?

Answered: 22 Skipped: 24

Lakeport Housing Element Update Survey

#	RESPONSES	DATE
1	I have tried for 14 years to get into a home and have heard many promises of getting help but have yet to receive any.	6/5/2020 1:10 PM
2	My wife and I tried for years to get housing in Lakeport- dozens of renters wouldn't even check our credit score once they realized we were a couple. We looked into buying and decided that leaving the area is preferable than buying something so run down as what we were seeing. We will be leaving Lakeport July 1st for Ukiah. The first apartment complex we applied to accepted us.	5/29/2020 8:07 AM
3	We need affordable housing, but we also need help finding ways to help low wage workers the opportunity to buy a home. We also need more support for people of color to have access to these programs	5/28/2020 11:39 AM
4	None	5/26/2020 12:34 PM
5	Lower cost apartments even small ones like studios that disabled who make less then \$950 a month can afford	5/26/2020 10:42 AM
6	Would like to see mixed use/public transportation-friendly housing, smaller homes (less than 750sf), co-housing.	5/26/2020 9:54 AM
7	Fix our roads, yes, this does impact housing. My car gets beat up every time I go home	5/24/2020 10:49 AM
8	We need a program to help with paying rent	5/21/2020 3:31 PM
9	We desperately need a big chain store to replace Kmart.	5/20/2020 6:50 PM
10	Get rid of the druggies and homeless druggies. Release criminals into other counties.	5/20/2020 10:20 AM
11	Concerns about affordable housing. In order to afford housing even in Lakeport one has to live paycheck to paycheck. Also concerned about the process of making formal complaints about neighbors who continuously violate noise laws, etc.	5/19/2020 11:39 PM
12	In the city of lakeport it's quite hard for going couples with no children or not considered at workers to find housing/buy a home. There is really close to 0 opportunities for them. Thank you for listening to my opinion	5/19/2020 11:25 AM
13	We need affordable housing apartments that are ada complainant and affordable for those with incomes under 1,000 a month	5/19/2020 10:36 AM
14	No	5/19/2020 10:28 AM
15	There are not any high-quality apartment buildings in lakeport. Also, many homes/areas of lakeport are more run down than I'd like. It was difficult to find a nice home in a nice area	5/19/2020 9:48 AM
16	need to adjust project timeline due to covid19	4/1/2020 1:35 PM
17	Do residents who do not pay a city bill receive the flyer to inform of the upcoming Housing Element Update?	3/31/2020 8:08 AM
18	Overall I'm concerned that the city makes sure to support local small business as well as property owners and renters. This year is going to be tough on everyone and making sure that people get help, remain employed, is instrumental in how the city navigates this difficult time.	3/30/2020 5:18 PM
19	We need a full time homeless shelter.	3/25/2020 9:09 AM
20	More walkability: more sidewalks and repair of existing roads and sidewalks	3/24/2020 12:34 PM
21	Good luck	3/22/2020 11:25 AM
22	Exercise caution in choosing developers	3/21/2020 1:57 PM

Pages 24 through 26 are removed to protect the privacy of the respondents.

Lakeport Housing Element Stakeholders Survey

Q1 Contact Information. Please provide your name, organization you are affiliated with, and contact information.

Answered: 9 Skipped: 0

ANSWER CHOICES	RESPONSES	
Name	100.00%	9
Organization	100.00%	9
Address	100.00%	9
Address 2	0.00%	0
City	100.00%	9
State	100.00%	9
ZIP Code	100.00%	9
Country	0.00%	0
Email Address	100.00%	9
Phone Number	100.00%	9

#	NAME	DATE
1	Veronica Kontilis	6/4/2020 8:47 AM
2	Ruth Suski	5/26/2020 8:23 PM
3	Kim Hansen	5/26/2020 10:23 AM
4	Emmanuel Yennyemb	5/18/2020 10:48 AM
5	Daniel McIntire	5/18/2020 9:20 AM
6	Dolores Cose	5/14/2020 10:15 PM
7	Ashley Barrett	5/14/2020 7:21 PM
8	Dana Lewis	5/14/2020 1:24 PM
9	Teresa Wold	5/14/2020 1:05 PM

#	ORGANIZATION	DATE
1	Legal Services of Northern California	6/4/2020 8:47 AM
2	Lakeport ChristianCenter	5/26/2020 8:23 PM
3	Lake County Association of Realtors	5/26/2020 10:23 AM
4	Lake County Tribal Health Consortium Inc	5/18/2020 10:48 AM
5	Rural Communities Housing Development Corporation	5/18/2020 9:20 AM
6	People Services, Inc	5/14/2020 10:15 PM
7	People services kis-lakporr	5/14/2020 7:21 PM
8	People Services, Inc.	5/14/2020 1:24 PM
9	Department of Social Services Housing Commission	5/14/2020 1:05 PM

#	ADDRESS	DATE
1	421 N. Oak Street	6/4/2020 8:47 AM
2	455 S Forbes Street	5/26/2020 8:23 PM
3	2559 Lakeshore Blvd, Suite 1	5/26/2020 10:23 AM
4	925 Bevins court	5/18/2020 10:48 AM
5	499 Leslie Street	5/18/2020 9:20 AM
6	4195 Lakeshore blvd	5/14/2020 10:15 PM
7	870 11th st	5/14/2020 7:21 PM
8	4195 Lakeshore Blvd.	5/14/2020 1:24 PM
9	16170 Main Street Suite F	5/14/2020 1:05 PM

#	ADDRESS 2	DATE
	There are no responses.	

Lakeport Housing Element Stakeholders Survey

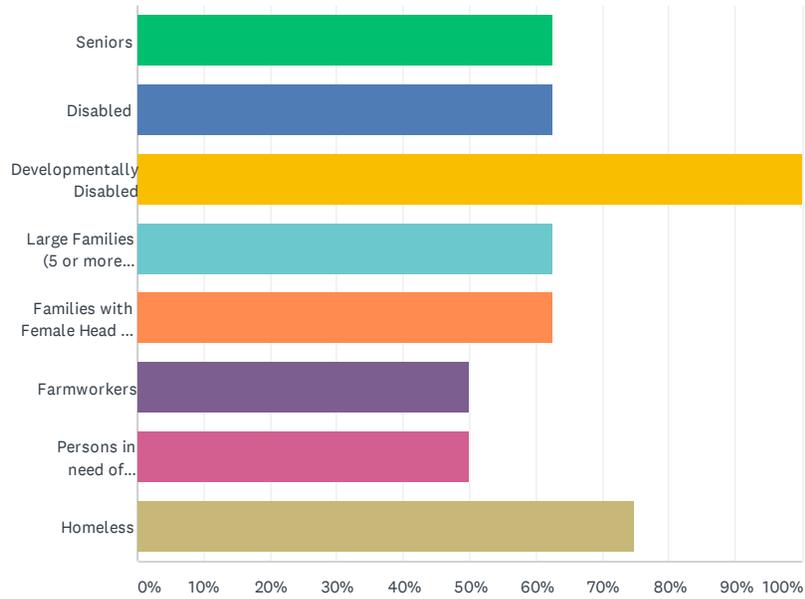
#	CITY	DATE
1	Ukiah	6/4/2020 8:47 AM
2	Lakeport	5/26/2020 8:23 PM
3	Lakeport	5/26/2020 10:23 AM
4	Lakeport	5/18/2020 10:48 AM
5	Ukiah	5/18/2020 9:20 AM
6	Lakeport	5/14/2020 10:15 PM
7	Lakeport	5/14/2020 7:21 PM
8	Lakeport	5/14/2020 1:24 PM
9	Lower Lake	5/14/2020 1:05 PM
#	STATE	DATE
1	CA	6/4/2020 8:47 AM
2	CA	5/26/2020 8:23 PM
3	CA	5/26/2020 10:23 AM
4	California	5/18/2020 10:48 AM
5	CA	5/18/2020 9:20 AM
6	Ca	5/14/2020 10:15 PM
7	Ca	5/14/2020 7:21 PM
8	CA	5/14/2020 1:24 PM
9	CA	5/14/2020 1:05 PM
#	ZIP CODE	DATE
1	95482	6/4/2020 8:47 AM
2	95453	5/26/2020 8:23 PM
3	95453	5/26/2020 10:23 AM
4	95453	5/18/2020 10:48 AM
5	95482	5/18/2020 9:20 AM
6	95453	5/14/2020 10:15 PM
7	95452	5/14/2020 7:21 PM
8	95453	5/14/2020 1:24 PM
9	95457	5/14/2020 1:05 PM
#	COUNTRY	DATE
	There are no responses.	
#	EMAIL ADDRESS	DATE
1	vkontilis@lsnc.net	6/4/2020 8:47 AM
2	lccoffice@lcchub.com	5/26/2020 8:23 PM
3	kimh@lcaor.com	5/26/2020 10:23 AM
4	emmanuel@lcthc.org	5/18/2020 10:48 AM
5	dmcintire@rchdc.org	5/18/2020 9:20 AM
6	dcose41@hotmail.com	5/14/2020 10:15 PM
7	ashleybarrett17@yahoo.com	5/14/2020 7:21 PM
8	l_dana@rocketmail.com	5/14/2020 1:24 PM
9	teresa.wold@lakecountyca.gov	5/14/2020 1:05 PM

Lakeport Housing Element Stakeholders Survey

#	PHONE NUMBER	DATE
1	707-513-1022	6/4/2020 8:47 AM
2	7072634514	5/26/2020 8:23 PM
3	707-263-9300	5/26/2020 10:23 AM
4	707-263-8382	5/18/2020 10:48 AM
5	707-463-1975 x138	5/18/2020 9:20 AM
6	7073509115	5/14/2020 10:15 PM
7	707-263-7715	5/14/2020 7:21 PM
8	7072633810	5/14/2020 1:24 PM
9	707-995-3741	5/14/2020 1:05 PM

Q2 Service Population. Which community population(s) does your organization serve? Please note that the populations identified below are based on populations identified as having special housing needs in State Housing Element Law.

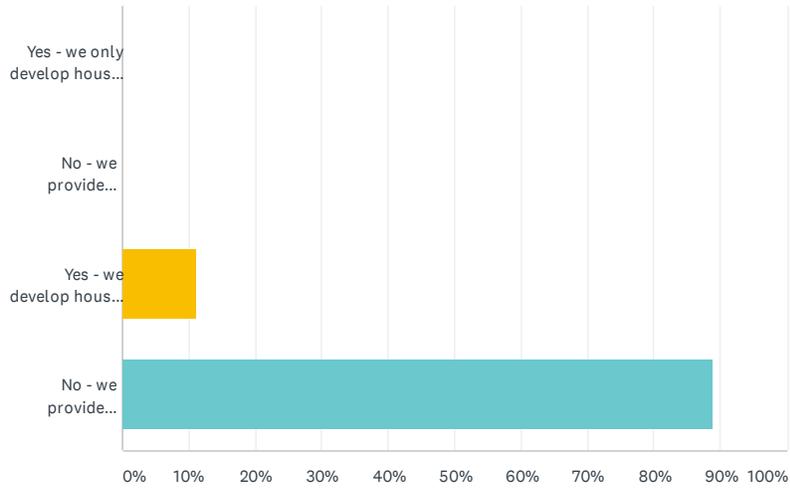
Answered: 8 Skipped: 1



ANSWER CHOICES	RESPONSES	
Seniors	62.50%	5
Disabled	62.50%	5
Developmentally Disabled	100.00%	8
Large Families (5 or more persons)	62.50%	5
Families with Female Head of Household	62.50%	5
Farmworkers	50.00%	4
Persons in need of emergency shelter	50.00%	4
Homeless	75.00%	6
Total Respondents: 8		

Q3 Does your organization develop housing?

Answered: 9 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes - we only develop housing and do not provide additional supportive services	0.00%	0
No - we provide supportive services but do not develop housing	0.00%	0
Yes - we develop housing and provide supportive services to individuals and/or households	11.11%	1
No - we provide supportive services but do not develop housing	88.89%	8
TOTAL		9

Q4 What are typical costs of single family and multifamily development?

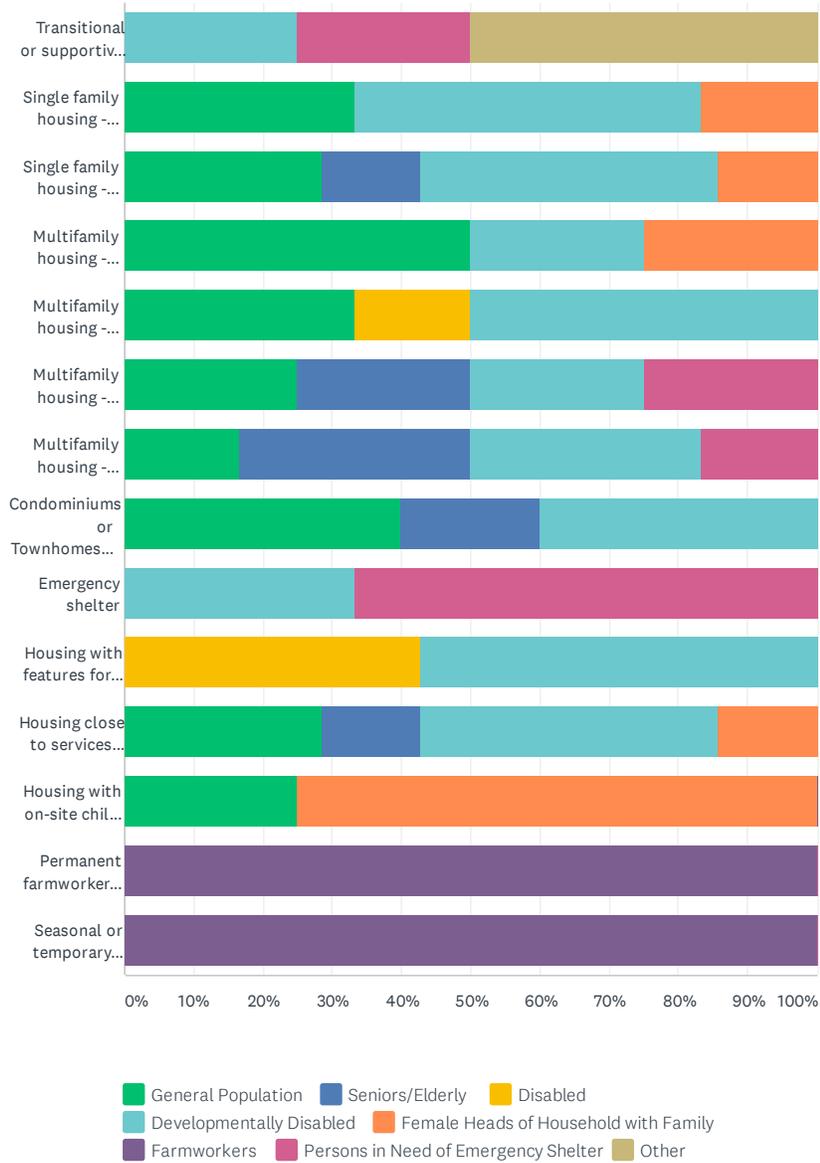
Answered: 0 Skipped: 9

ANSWER CHOICES	RESPONSES	
Land cost (per acre)	0.00%	0
Local fees and regional impact fees (per unit)	0.00%	0
Site improvements (grading, access, utilities, etc.) (per acre)	0.00%	0
Building Construction (per square foot)	0.00%	0
Other Costs	0.00%	0

#	LAND COST (PER ACRE)	DATE
	There are no responses.	
#	LOCAL FEES AND REGIONAL IMPACT FEES (PER UNIT)	DATE
	There are no responses.	
#	SITE IMPROVEMENTS (GRADING, ACCESS, UTILITIES, ETC.) (PER ACRE)	DATE
	There are no responses.	
#	BUILDING CONSTRUCTION (PER SQUARE FOOT)	DATE
	There are no responses.	
#	OTHER COSTS	DATE
	There are no responses.	

Q5 Housing Types. What are the primary housing types needed by the population your organization services? Please check all that apply.

Answered: 7 Skipped: 2



Lakeport Housing Element Stakeholders Survey

	GENERAL POPULATION	SENIORS/ELDERLY	DISABLED	DEVELOPMENTALLY DISABLED	FEMALE HEADS OF HOUSEHOLD WITH FAMILY	FARMWORKERS	PERSONS IN NEED OF EMERGENCY SHELTER
Transitional or supportive housing	0.00% 0	0.00% 0	0.00% 0	25.00% 1	0.00% 0	0.00% 0	25.00% 1
Single family housing - market rate	33.33% 2	0.00% 0	0.00% 0	50.00% 3	16.67% 1	0.00% 0	0.00% 0
Single family housing - affordable to extremely low, very low, and low income households	28.57% 2	14.29% 1	0.00% 0	42.86% 3	14.29% 1	0.00% 0	0.00% 0
Multifamily housing - market rate	50.00% 2	0.00% 0	0.00% 0	25.00% 1	25.00% 1	0.00% 0	0.00% 0
Multifamily housing - affordable to extremely low, very low, and low income households	33.33% 2	0.00% 0	16.67% 1	50.00% 3	0.00% 0	0.00% 0	0.00% 0
Multifamily housing - senior market rate	25.00% 1	25.00% 1	0.00% 0	25.00% 1	0.00% 0	0.00% 0	25.00% 1
Multifamily housing - senior, affordable to extremely low, very low, and low income households	16.67% 1	33.33% 2	0.00% 0	33.33% 2	0.00% 0	0.00% 0	16.67% 1
Condominiums or Townhomes (individually-owned units with common landscaping, parking, and community amenities)	40.00% 2	20.00% 1	0.00% 0	40.00% 2	0.00% 0	0.00% 0	0.00% 0
Emergency shelter	0.00% 0	0.00% 0	0.00% 0	33.33% 2	0.00% 0	0.00% 0	66.67% 4
Housing with features for a disabled person (ramp, grab bars, low counters and cabinets, assistive devices for hearing- or visually-impaired persons)	0.00% 0	0.00% 0	42.86% 3	57.14% 4	0.00% 0	0.00% 0	0.00% 0
Housing close to services (grocery stores, financial, personal, and social services, etc.)	28.57% 2	14.29% 1	0.00% 0	42.86% 3	14.29% 1	0.00% 0	0.00% 0
Housing with on-site child daycare	25.00% 1	0.00% 0	0.00% 0	0.00% 0	75.00% 3	0.00% 0	0.00% 0
Permanent	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%

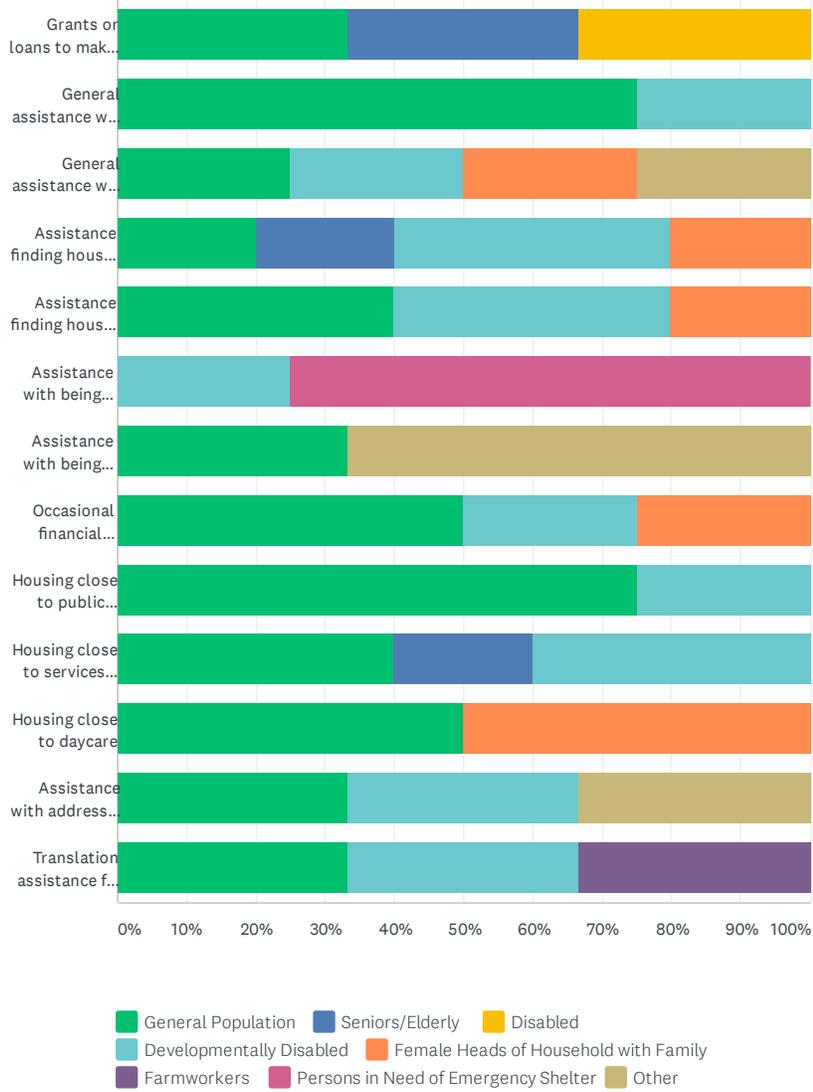
Lakeport Housing Element Stakeholders Survey

farmworker housing	0	0	0	0	0	4	0
Seasonal or temporary farmworker housing	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	100.00% 3	0.00% 0

#	OTHER (PLEASE SPECIFY)	DATE
1	*Question is not permitting me to check more than one option per row so I will be sending my response separately by email	6/4/2020 9:22 AM

Q6 Housing Needs and Services. What are the primary housing needs of the population(s) that your organization serves? Please check all that apply.

Answered: 5 Skipped: 4



Lakeport Housing Element Stakeholders Survey

	GENERAL POPULATION	SENIORS/ELDERLY	DISABLED	DEVELOPMENTALLY DISABLED	FEMALE HEADS OF HOUSEHOLD WITH FAMILY	FARMWORKERS	PERSONS IN NEED OF EMERGENCY SHELTER
Grants or loans to make modifications to make a home accessible to a disabled resident	33.33% 1	33.33% 1	33.33% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0
General assistance with renting a home	75.00% 3	0.00% 0	0.00% 0	25.00% 1	0.00% 0	0.00% 0	0.00% 0
General assistance with purchasing a home	25.00% 1	0.00% 0	0.00% 0	25.00% 1	25.00% 1	0.00% 0	0.00% 0
Assistance finding housing affordable to extremely low income (<30% of median income) households	20.00% 1	20.00% 1	0.00% 0	40.00% 2	20.00% 1	0.00% 0	0.00% 0
Assistance finding housing affordable to lower income (<30% of median income) households	40.00% 2	0.00% 0	0.00% 0	40.00% 2	20.00% 1	0.00% 0	0.00% 0
Assistance with being housed in an emergency shelter	0.00% 0	0.00% 0	0.00% 0	25.00% 1	0.00% 0	0.00% 0	75.00% 3
Assistance with being housed in transitional or supportive housing	33.33% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Occasional financial assistance to pay rent, mortgage, and/or utilities	50.00% 2	0.00% 0	0.00% 0	25.00% 1	25.00% 1	0.00% 0	0.00% 0
Housing close to public transportation	75.00% 3	0.00% 0	0.00% 0	25.00% 1	0.00% 0	0.00% 0	0.00% 0
Housing close to services (grocery stores, financial, personal, and social services, etc.)	40.00% 2	20.00% 1	0.00% 0	40.00% 2	0.00% 0	0.00% 0	0.00% 0
Housing close to daycare	50.00% 2	0.00% 0	0.00% 0	0.00% 0	50.00% 2	0.00% 0	0.00% 0
Assistance with addressing discrimination, legal rent or mortgage practices,	33.33% 1	0.00% 0	0.00% 0	33.33% 1	0.00% 0	0.00% 0	0.00% 0

Lakeport Housing Element Stakeholders Survey

tenant/landlord
mediation, or
other fair
housing issues

Translation assistance for non-english speaking persons	33.33% 1	0.00% 0	0.00% 0	33.33% 1	0.00% 0	33.33% 1	0.00% 0
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#	OTHER (PLEASE SPECIFY)	DATE
1	*Question is not permitting me to check more than one option per row so I will be sending my response separately by email	6/4/2020 9:22 AM

Q7 What are the primary barriers your organization and/or service population encounter related to finding or staying in housing?

Answered: 6 Skipped: 3

#	RESPONSES	DATE
1	For finding housing, the primary barriers are: lack of rental housing, generally; lack of affordable rental housing and long wait lists for subsidized housing complexes; housing affordability issues re: lack of sufficient income to pay for security deposit and first month's rent; low supply of affordable homes. For staying in housing, the primary barriers are: fixed incomes or low incomes v. rent increases and rising costs of living; living in substandard housing that a landlord refuses to repair.	6/4/2020 9:22 AM
2	No housing available	5/26/2020 8:28 PM
3	Identifying and locating the services for our patients	5/18/2020 10:57 AM
4	Shortage of low income housing .	5/14/2020 10:22 PM
5	Long waiting lists for financial assistance. Low inventory.	5/14/2020 2:34 PM
6	Lack of decent rental units and landlords willing to work with low income families.	5/14/2020 1:13 PM

Q8 What services or actions are needed to provide or improve housing or human services in the City?

Answered: 6 Skipped: 3

#	RESPONSES	DATE
1	Continue building affordable housing targeted to low, very low, and extremely low income households, especially the latter two. Creating a year-round homeless shelter.	6/4/2020 9:22 AM
2	More housing	5/26/2020 8:28 PM
3	Housing availability	5/18/2020 10:57 AM
4	Unknown	5/14/2020 10:22 PM
5	unknown	5/14/2020 2:34 PM
6	Do something about empty swellings were squatters can be found. Hold property owners accountable and provide incentive to rent their units.	5/14/2020 1:13 PM

Q9 What services or actions are needed to improve access to regional services?

Answered: 5 Skipped: 4

#	RESPONSES	DATE
1	None that I can think of.	6/4/2020 9:22 AM
2	Bring the resources locally and make them accessible to residents	5/18/2020 10:57 AM
3	More public transportation	5/14/2020 10:22 PM
4	unknown	5/14/2020 2:34 PM
5	Local agencies need to communicate better and share resources. We all serve the same community.	5/14/2020 1:13 PM

Q10 Are there any other housing priorities, issues, or concerns that you would like to identify to assist the City in identifying housing needs and developing appropriate programs to address housing needs?

Answered: 5 Skipped: 4

#	RESPONSES	DATE
1	Mobilehome Parks and Recreational Vehicle Parks are an important housing option for our clients, and we are concerned that MH Parks and RV Parks are becoming unaffordable for our clients, who are largely seniors and persons with disabilities on fixed incomes. MH Parks and RV Parks are also an important affordable housing option for Farmworkers.	6/4/2020 9:22 AM
2	Housing availability and affordability	5/18/2020 10:57 AM
3	None	5/14/2020 10:22 PM
4	Not at this time.	5/14/2020 2:34 PM
5	Too many families looking for affordable housing and simply not enough rentals in their price range.	5/14/2020 1:13 PM

Appendix C: Stakeholder List

Area Agency on Aging
California Children's Services
Catholic Charities
Chamber of Commerce
Clear Lake Baptist Church
Conser Land Surveying
County of Lake Health Services
EA Family Services
First Baptist Church
Habitat for Humanity
Harbor on Main Youth Center
Hope Harbor Warming Center
Lake Co. Department of Social Services
Lake County Agriculture Department
Lake County Bible Fellowship
Lake County Board of Realtors
Lake County Contractors
Lake County Farm Bureau
Lake County Food Stamp Program, CalWORKs, & Lake County General Relief Program
Lake County Homeless Continuum of Care
Lake County In-Home Supportive Services
Lake County Office of Education
Lake County Office of Education Homeless Student Services
Lake Family Resource Center
Lakeport Church of Christ
Lakeport Main Street Association
Lakeport Senior Center, Inc.
Lakeport Unified School District
Legal Services of Northern California
Long-term Care Ombudsman
LUK United Methodist Ministries
New Life Foursquare Church
North Coast Opportunities - Lakeport Office / Rural Communities Childcare
North Coast Opportunities - New Digs Rapid Rehousing
Pacific West Architecture
Pacific West Communities
Parish of St. Mary Immaculate
People Services - Educational Opportunities
People Services - Konocti Connections
People Services - Konocti Industries
People Services - Konocti Instructional Services Lakeport
People Services - Konocti Transportation Services
People Services - Rehabilitation Services
People Services, Inc.

Appendix C: Stakeholder List

Redwood Coast Regional Center – Lakeport Office
Redwood Community Services
Rural Communities Housing Development Corp (RCHDC)
Ruzicka Associates
St. John's Episcopal Church
The Big Valley Band of Pomo Indians
The Scotts Valley Band of Pomo Indians
United Christian Parish

Appendix C: Stakeholder List

Area Agency on Aging
California Children's Services
Catholic Charities
Chamber of Commerce
Clear Lake Baptist Church
Conser Land Surveying
County of Lake Health Services
EA Family Services
First Baptist Church
Habitat for Humanity
Harbor on Main Youth Center
Hope Harbor Warming Center
Lake Co. Department of Social Services
Lake County Agriculture Department
Lake County Bible Fellowship
Lake County Board of Realtors
Lake County Contractors
Lake County Farm Bureau
Lake County Food Stamp Program, CalWORKs, & Lake County General Relief Program
Lake County Homeless Continuum of Care
Lake County In-Home Supportive Services
Lake County Office of Education
Lake County Office of Education Homeless Student Services
Lake Family Resource Center
Lakeport Church of Christ
Lakeport Main Street Association
Lakeport Senior Center, Inc.
Lakeport Unified School District
Legal Services of Northern California
Long-term Care Ombudsman
LUK United Methodist Ministries
New Life Foursquare Church
North Coast Opportunities - Lakeport Office / Rural Communities Childcare
North Coast Opportunities - New Digs Rapid Rehousing
Pacific West Architecture
Pacific West Communities
Parish of St. Mary Immaculate
People Services - Educational Opportunities
People Services - Konocti Connections
People Services - Konocti Industries
People Services - Konocti Instructional Services Lakeport
People Services - Konocti Transportation Services
People Services - Rehabilitation Services
People Services, Inc.

Appendix C: Stakeholder List

Redwood Coast Regional Center – Lakeport Office
Redwood Community Services
Rural Communities Housing Development Corp (RCHDC)
Ruzicka Associates
St. John's Episcopal Church
The Big Valley Band of Pomo Indians
The Scotts Valley Band of Pomo Indians
United Christian Parish

General Plan 2025

City of Lakeport



Prepared for
City of Lakeport Community Development Department

August 2009



Quad Knopf

General Plan 2025

City of Lakeport

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I. INTRODUCTION

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The Lakeport General Plan is the official document used by decision makers and citizens to guide and interpret the City's long range plans for development of land and conservation of resources. All California cities and counties are required by State law to have a general plan that addresses seven specific topics, called elements, which include: Land Use; Transportation; Housing; Open Space; Conservation; Safety and Noise. General Plans may also include optional elements dealing, for example, with design and community identity. The Lakeport General Plan includes the seven mandatory Elements as well as three optional Elements including an Urban Boundary Element, Community Design Element and Economic Development Element.

The General Plan must contain a land use map that describes the location and boundaries of each land use designation, such as Industrial, Single Family Residential, or Park, and the specific restrictions that apply to each designation. In addition, the Plan contains policies and supporting information adequate to make informed decisions concerning the future of the community. The Plan identifies methods for improving public facilities and services to meet the anticipated growth, and establishes a framework for the implementation of the City's zoning, subdivision and other land use regulations.

The General Plan represents an agreement among the residents of Lakeport on basic community values, ideals, and aspirations to govern a shared environment. The Plan has a long-term horizon, addressing a 20-year time frame. At the same time, it brings a deliberate, overall direction to the day-to-day decisions of the City Council, Planning Commission, and city staff.

Public Participation

In 2004, the City decided to update its General Plan to provide the public decision-makers and private developers with clearer and more effective policy guidance. A General Plan Advisory Committee was established by the City and met a total of seven times in public sessions to review and fine-tune each element of the Draft General Plan.

The result of this effort is a General Plan built upon the ideas of Lakeport residents—a guide in text and maps to the opportunities and conditions for new development based on a balance among the social, environmental and economic needs of the community.

The Planning Area

The General Plan applies to both public and privately owned land within the City's boundaries and its Sphere of Influence (SOI). The SOI is unincorporated land representing the ultimate future boundaries of the City. This area is currently under County jurisdiction, and regulated by Lake County's General Plan and Zoning Ordinance. State law permits the City to plan for areas outside of its boundaries, if those areas have a direct relationship to the City's planning needs. Although the County is not bound by Lakeport's General Plan, the City will work with the County to assure that County land use decisions within the Lakeport SOI are compatible with this General Plan.

How to Use this General Plan

The General Plan will be used by the City Council and the Planning Commission to guide land use and planning-related decisions. The City's staff will use the Plan on a day-to-day basis to administer and regulate land use and development activity. The public can use this Plan to understand Lakeport's approach to land use planning and the community's standards with regard to urban design, conserving natural resources, future development and neighborhood conservation. The development community can use the Plan to analyze potential development patterns for proposed projects.

The General Plan is divided into chapters corresponding to the following plan elements: Land Use; Urban Boundary; Transportation; Community Design; Economic Development; Conservation; Open Space, Parks and Recreation; Noise; and Safety. The Housing Element was previously adopted in July, 2004 and certified by the State of California Department of Housing and Community Development (HCD). Each chapter starts with a discussion of purpose, existing and future conditions and the goals of the City as they related to the chapter. These are followed by a brief overview and analysis of the major factors related to the issues and goals. At the end of each chapter are policies and implementation programs that will guide the City's actions during the life of the Plan. Goals, policies, implementation programs and standards are defined below:

- **Goal:** a general expression of community values. It indicates, in a general manner, an ideal future or condition to which planning efforts are directed.
- **Policy:** a specific statement that guides decision making and how a goal will be implemented and may include standards, objectives, maps or a combination of these components. It indicates a clear commitment by the City Council.
- **Implementation Program:** a specific action, procedure or technique to carry out policies of the General Plan.
- **Standards:** policy statements which include a specific quantitative measure of performance.

The text of the Plan should be considered in relation to the Land Use Map. The boundaries of land use designations shown on this map are based on existing land use patterns and natural and man-made features. They are not precise legal boundaries. The Zoning Map provides the precise legal boundaries of the Zoning Districts that are consistent with the underlying General Plan Land Use designations.

The Organization and different topics covered by the General Plan are indicated in the Table of Contents. Many of the technical terms used in the Plan are defined in the Glossary (see Appendix A). Separate technical documents (bound separately) include the Background Report and the Environmental Impact Report.

Intent of the Plan

The General Plan takes a long range and comprehensive perspective to the year 2025. It also addresses immediate land-use related problems.

New and significant policies contained in the updated General Plan include the following:

- A proposed modification to the SOI that includes the proposed Specific Plan Area south of the current SOI, elimination of the area immediately north of the city, and minor modifications to the southwestern portion of the sphere to remove agricultural areas.
- Combining the low and medium density residential designations to allow for greater flexibility in considering re-zoning requests.
- General guidelines for how the proposed Specific Plan Area should be developed.
- An Economic Development Element.
- Significant revisions to the Community Design Element.
- New policies on human services and human care facilities such as child care centers and elderly care facilities.
- A change to the Land Use designation from major retail to office for several parcels located north of Eleventh Street adjacent to Hwy 29.
- Policies related to the use of Best Management Practices.
- An annexation to the south side of the city to the west of State Highway 29 that encompasses approximately 121 acres.

Administering the General Plan

Once adopted, the General Plan does not remain static. State law permits up to four General Plan Amendments per year (Government Code Section 65358). Most amendments propose a change in land use designation of a particular property. As time goes on, the City may determine that it is also necessary to revise portions of the text to reflect changing circumstances or philosophy.

State law provides direction on how Lakeport can maintain the plan as a contemporary policy guide: It requires the City's Community Development Department to report annually to the City Council on the "status of the plan and its implementation" (Government Code Section 65400[b]). In addition, the City should comprehensively review the Plan every five years to determine whether or not it is still in step with community values and conditions.

State law requires that any decision to amend the General Plan be based on factual information and analysis, termed "findings of fact." These findings are the rationale for making a decision

either to approve or deny a project. The following minimum findings should be made for each General Plan Amendment:

1. The proposed General Plan Amendment is deemed to be in the public interest.
2. The proposed General Plan Amendment is consistent and compatible with the rest of the General Plan and any implementation programs that may be affected.
3. The potential impacts of the proposed General Plan Amendment have been assessed and have been determined not to be detrimental to the public health, safety, or welfare.
4. The proposed General Plan Amendment has been processed in accordance with the applicable provisions of the California Government Code and the California Environmental Quality Act (CEQA).

City initiated amendments, as well as amendments requested by other public agencies, are subject to the same basic processes and requirements described above to ensure compatibility and consistency with the General Plan. This includes appropriate environmental review, public notice, and public hearings leading to an official action by a resolution of the City Council.

II. LAND USE ELEMENT

II. LAND USE ELEMENT

Purpose

The Land Use Element functions as a guide for the ultimate pattern of development for the City at build-out. The Land Use Element has perhaps the broadest scope of the seven mandatory elements of the General Plan. It provides an overview of the land use characteristics, objectives, policies, and implementation programs for achieving the City's land use goals over the next 20 years. The General Plan Land Use Map, which is also a part of this Element, graphically represents the City's land use goals and objectives.

Existing Land Use

Existing land use information is essential to an understanding of current development patterns and acreages devoted to particular land uses. Existing land use information and a vacant and underutilized land use inventory for the Lakeport Planning Area was developed by the Lakeport Community Development Department. The information was then entered into a geographic information system at the parcel level, then used for statistical analysis and mapping.

General Plan Land Use Classification System

To translate objectives and policies of the Land Use Element into diagram or map form, a set of designations or classifications must be adopted to serve as a guide for general land use distribution. Determining the land use designation for any area is generally based on multiple criteria, which may include:

- Existing patterns of development when compatible with objectives, policies, and programs of the General Plan;
- Accessibility/Circulation;
- Availability of public services and facilities and potential for their expansion or extension;
- Geo-physical characteristics of the area such as slope, wetland or flood prone designation, soils, geography, vegetative cover, and biological significance;
- Existing parcel size;
- Desire to protect or buffer certain uses from other, incompatible uses.

The Land Use Element establishes 11 land use designations with which development must be consistent. For each designation, the uses allowed and the standards of density and intensity are specified. Other policies relating to these land use designations are found in the policy section of the Land Use Element and throughout the General Plan.

The boundaries of land use designations shown in [Figure 1](#) are based on existing land use patterns and natural and man-made features, and are not precise legal boundaries. To accurately interpret the General Plan Land Use Map, refer to the Zoning Map which provides the precise legal boundaries for the Zoning Districts consistent with the underlying General Plan Land Use designations.

The General Plan establishes designations for land both in the City and outside the City limits within the City's Sphere of Influence as defined by the Local Agency Formation Commission (LAFCO). The Sphere of Influence is the ultimate physical boundary of the City. Land within the Sphere of Influence is subject to land use designations assigned by Lake County. The General Plan Land Use Map will identify the City's pre-zone designation for land within the Sphere of Influence which may be annexed in the future.

General Plan Land Use Designations

RESIDENTIAL (R)

Designates areas suitable for single family dwellings up to 7.3 units per acre and multifamily developments comprising up to four units within a single structure at a maximum density of 19.3 dwelling units per acre. Consistent zoning districts include, but are not limited to, R-1 and R-2.

HIGH DENSITY RESIDENTIAL (HDR)

Designates areas suitable for multifamily residential development at a density of 19.4 to 29.0 dwelling units per acre. Senior multifamily¹ uses are permitted at a density not exceeding 45 dwelling units per acre. The high density residential designation allows convalescent and other hospital uses. Limited office uses would be permitted with a Conditional Use Permit pursuant to criteria contained in the Zoning Ordinance. Consistent zoning districts include, but are not limited to, R-3 and R-5.

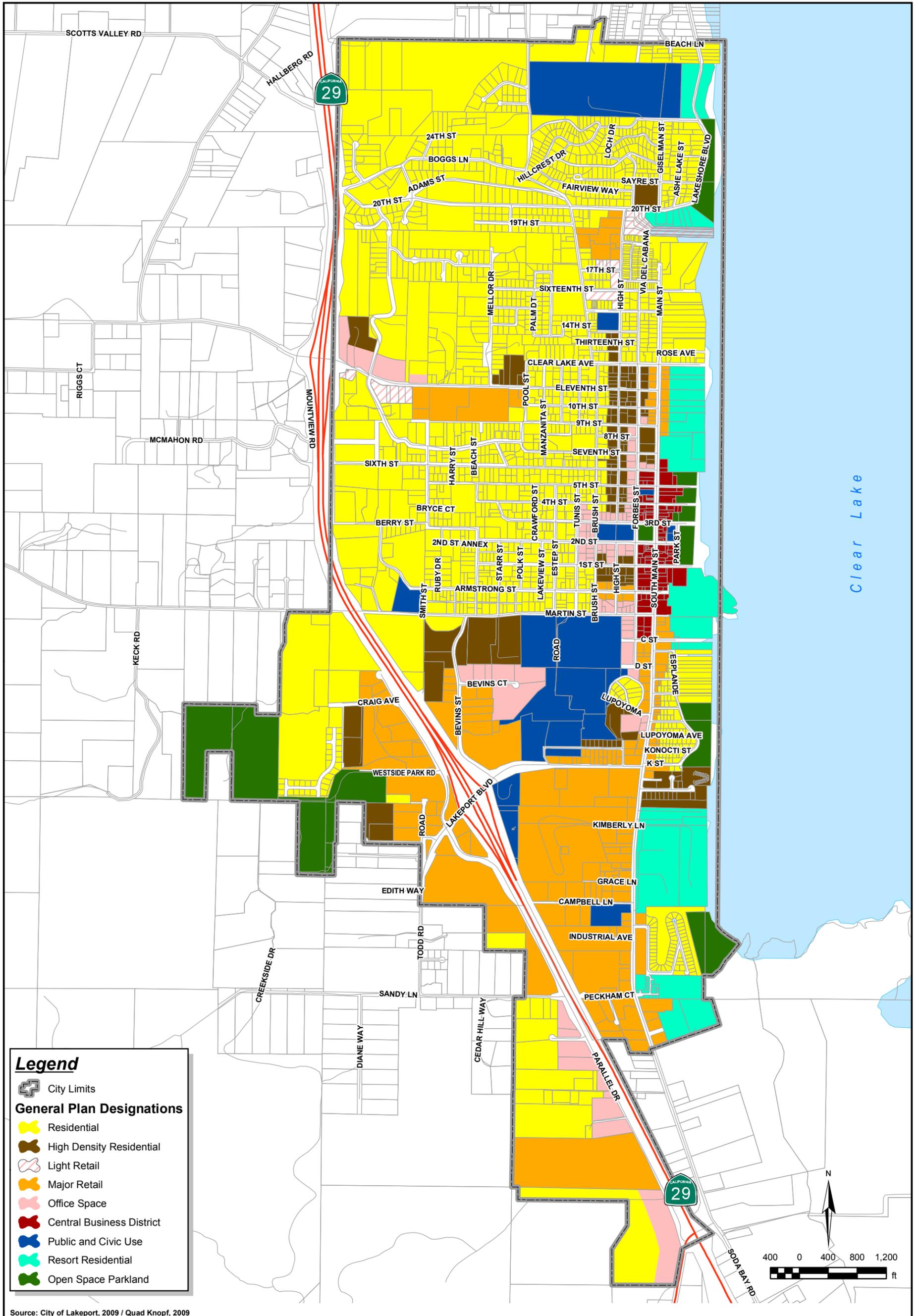
LIGHT RETAIL (LR)

This designation is intended to provide for small neighborhood oriented retail establishments, either on individual sites or in small shopping centers. Typical light retail uses include, but are not limited to: food markets; self-service laundries; variety shops; and the broad class of retail business known as convenience goods outlets. These sites typically provide required on-site parking on well-designed sites with good access. Maximum Floor Area Ratio (FAR) of 0.35. Consistent zoning districts include, but are not limited to, C-1.

MAJOR RETAIL (MR)

This designation is the principal retail designation for the Lakeport area; the place for regional and local serving retail establishments, specialty shops; banks; professional offices, motels; business and personal services. Other uses permitted in this designation include commercial

¹ Senior Multifamily uses are residential developments where at least the majority the residents are 55 years of age or older.



trade services, construction sales and services, warehousing and mini storage. This designation is typically assigned to larger parcels that can provide sufficient land for a shopping center; located on a major arterial street and established commercial areas with off-street parking and/or clusters of street- front stores. Maximum FAR of 0.45. Consistent zoning districts include, but are not limited to, C-1, C-2 and C-3.

RESORT RESIDENTIAL (RR)

Designates areas suitable for a mixture of resort uses, primarily along the shores of Clear Lake at a density of up to 87 units per acre for hotels, motels, and resorts and 43.5 units per acre for campground or overnight recreational vehicle uses, recreational vehicle, or tent equivalent to 1 unit. Residential uses are permitted at the High Density Residential density of 19.4 to 29 units per acre. Limited retail uses consistent and compatible with lakefront recreational uses are permitted in this designation. Commercial uses related to the lake-oriented, recreational characteristics of this designation are permitted at a maximum FAR of 0.35. Consistent zoning districts include, but are not limited to, R-5.

OFFICE SPACE (O)

This designation is intended to provide space for offices, encompassing general office uses, business, medical and professional offices, office buildings and office parks with ancillary commercial and retail services. Multifamily residential land uses are permitted at densities consistent with the High Density Residential designation provided that such housing has sufficient on-site parking, site improvements and landscaping to be attractive and compatible with surrounding land uses. Conversion of existing structures to office uses is encouraged when the character of the building and of the surrounding areas is maintained. Maximum FAR of 0.6. Consistent zoning districts include, but are not limited to, Professional Office (“PO”).

CENTRAL BUSINESS DISTRICT (CBD)

This designation has been established for the oldest commercial areas in the community comprising many historic structures and businesses. This designation permits office, commercial and retail uses, as well as mixed use developments. Residential uses are permitted at a density of up to 19 units per acre if combined with (and subservient to) commercial land uses, such as office and retail. Maximum FAR of 1.0. Consistent zoning districts include, but are not limited to, Central Business (“CB”).

INDUSTRIAL (I)

This designation is used for industrial activities and uses, provided such uses do not generate excessive adverse environmental impacts. Other uses permitted in this designation include offices, warehousing and agricultural products sales and services. Consistent zoning districts include, but are not limited to, I and C-3.

PARKLAND/OPEN SPACE (P/OS)

This designation applies to areas of land devoted to the preservation of natural resources, agriculture, outdoor recreation, existing and proposed parkland (both developed and undeveloped) and related uses such as golf courses. This designation is intended to assist and enhance public health and safety. Refer to the Conservation, Open Space and Parks Elements for detailed policies regarding parkland and open space areas. Consistent zoning districts include, but are not limited to, Open Space (“OS”).

PUBLIC AND CIVIC USES (PUB)

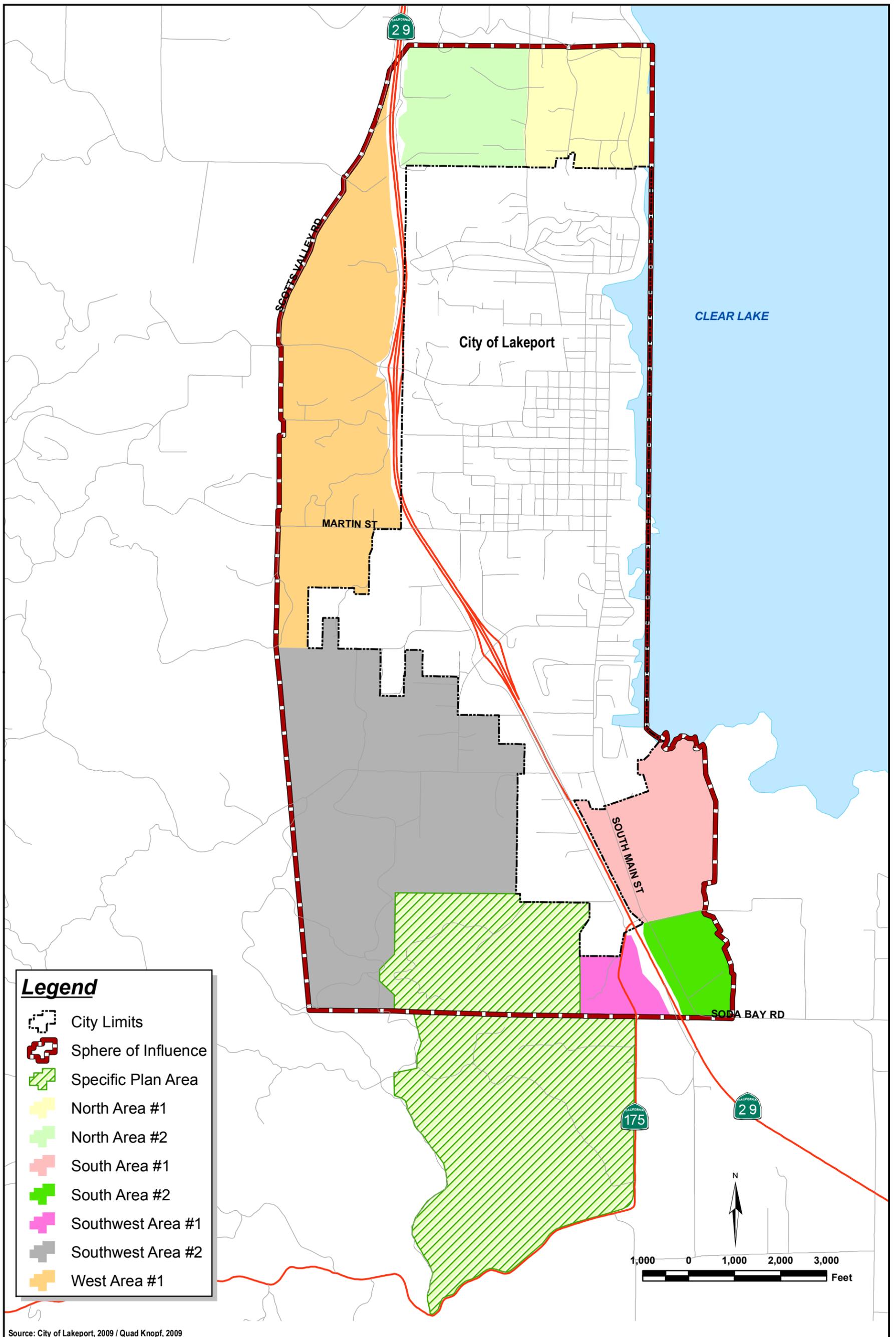
This designation includes public buildings and facilities, utility facilities and related easements, public libraries, city offices, fire and police stations and school sites. Maximum FAR of 0.35. Consistent zoning districts include, but are not limited to, Public and Civic Uses (“PCU”).

SPECIFIC PLAN AREA (SPA)

This designation covers the city-owned property and a few private properties south of the current SOI but within the proposed SOI (see [Figure 2](#)). The area is proposed for single and multiple-family residential; including cooperative ownership properties to serve the vacation market; a golf course; and limited commercial, such as a clubhouse or restaurant. Based on the recommended density range of 1-2 units per acre, the Specific Plan Area could see between 600 and 1,200 residential units at buildout. Consistent zoning districts include, but are not limited to, R-1, R-2, R-3, R-5, UR, and C-1.

The Specific Plan Area designation will require the preparation of a Specific Plan in accordance with the state Planning and Zoning Law, Chapter 3, Local Planning, Article 8 (Specific Plans). This statute specifically provides for the preparation of specific plans after adoption of a General Plan. The contents of a Specific Plan are mandated by state law and include:

- a) A specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:
 1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;
 2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;
 3. Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable;
 4. A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2) and (3).



-
- b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

A specific plan may also address any other subjects which in the judgment of the planning agency are necessary or desirable for implementation of the general plan. The specific plan is also required to comply with the California Environmental Quality Act (CEQA) including the preparation of the required environmental documentation for the adoption of the specific plan. In this case, it is likely that an Environmental Impact Report would be required.

The Specific Plan Area is a high priority for the City for a number of reasons. First it is the site of the City's wastewater treatment, storage, and disposal facilities which must be operational at all times and expanded periodically in order to comply with the Regional Water Quality Control Board (RWQCB) permit and accommodate future growth. Second, a preliminary analysis has been completed that indicates that the existing treatment facility could be upgraded to tertiary treatment and the treated water used to irrigate parks, golf course, landscaping, and food crops (subject to RWQCB permit). This is beneficial because water is a valuable commodity in Lakeport. Third, the City has had an interest in the feasibility of developing a golf course for many years.

This Specific Plan Area has not been subject to any public land use evaluation or planning process by the City of Lakeport except for the development activities associated with the wastewater treatment facilities. Prior to the submittal of an application to LAFCO to amend the City's Sphere of Influence to include the Specific Plan area, the City will be required to complete a Specific Plan for this area in accordance with state Planning and Zoning laws. See the Urban Boundary Element for related policies and programs.

Summary of Maximum Densities Permitted in each Land Use Designation

The maximum building intensity and population density [for residential districts] that would be permitted by each Land Use Designation are summarized in [Table 1](#). It should be emphasized that these figures provide the maximum potential building and population that could occur without taking into account the constraints imposed by the natural environment, vehicular access, the provision of necessary services, and the standards contained in the Community Design Element. The City may restrict the maximum density figures indicated below to take into account these factors.

Floor Area Ratio (FAR) has been used to define the maximum permitted building intensity for non-residential land uses. FAR is the ratio of the square footage of the building to the site (see [Table 1](#)). Refer to the Glossary for a more detailed definition of this term.

**Table 1
Building Intensity and Population Density by Land Use Designation**

Land Use Designation	Approximate Population Density	Building Intensity
Residential	17 to 45 persons per acre	7.3 (R-1) to 19.3 (R-2) units/acre maximum
High Density Residential	67 persons per acre	29 units/acre
Resort Residential	200 persons per acre	87 units/acre hotels 43.5 units/acre RV & campgrounds
Very Low Density Residential	5 persons per acre	2 units/acre
Light Retail		Maximum FAR 0.35
Major Retail		Maximum FAR 0.45
Industrial		Maximum FAR 0.35
Office		Maximum FAR 0.6
Central Business District		Maximum FAR 1.0
Parkland /Open Space	N/A	Maximum FAR 0.1
Public and Civic Uses		Maximum FAR 0.35
Specific Plan Area	2 to 6 persons per acre	2 units/acre maximum

OBJECTIVES, POLICIES & PROGRAMS

Residential Designations

Below are the land use policies related to residential areas. For detailed information on housing types and program policies, refer to the Housing Element, and for design policies, refer to the Community Design Element.

OBJECTIVE LU 1: TO PRESERVE AND ENHANCE EXISTING RESIDENTIAL NEIGHBORHOODS AND PROMOTE THE DEVELOPMENT OF NEW RESIDENTIAL DEVELOPMENT THAT COMPLIMENTS THE EXISTING CHARACTER AND RURAL NATURE OF LAKEPORT.

Policy LU 1.1: Housing Density. Provide for the addition of all types of housing at a broad range of densities and prices.

Program LU 1.1-a: Review the Zoning Ordinance in relation to General Plan designations and recommend rezoning where appropriate.

Policy LU 1.2: Neighborhood Orientation. Encourage new residential areas to have a “neighborhood” orientation.

Program LU 1.2-a: Encourage new neighborhood development to link with other neighborhoods and the downtown central business district with pedestrian and bicycle trails

Responsibility: Community Development and Public Works Departments.

Policy LU 1.3: Scale and Character. Preserve the scale and character of existing neighborhoods in Lakeport.

Policy LU 1.4: Safety. Facilitate safe, quiet residential neighborhoods free of natural and manmade hazards.

Policy LU 1.5: Mixed Use. Encourage a mix of land uses where appropriate to promote a vibrant community and to reduce traffic, while addressing the need to minimize land use conflicts.

Policy LU 1.6: Coordination of Infrastructure. Coordinate land development with the provision of services and infrastructure.

Program LU 1.6-a: The City shall encourage residential density consistent with R-2 Zoning throughout areas of western Lakeport that currently lack developed and cohesive infrastructure. Development at R-2 densities should include infrastructure improvements concurrent with all new residential development.

Responsibility: Community Development and Public Works Departments.

Policy LU 1.7: Prezone. When pre-zoning or rezoning property to the R-1 or R-2 zoning designations, the City shall take into account the following:

- The current inventory of parcels zoned R-1 and R-2 and weigh that against the need for more low density or higher density residential units
- Surrounding uses and their compatibility with R-1 or R-2 zoning
- Availability of infrastructure

Policy LU 1.8: Specific Plan Area. The City shall implement the provisions of Section 65450 through 65457 of the California Government Code and complete a Specific Plan for the area designated Specific Plan Area upon inclusion of the area within the Lakeport Sphere of Influence, prior to pre-zoning, annexation, and applications for development (entitlement) proposals.

The Specific Plan for the Specific Plan Area shall include a text and diagram which specify the distribution, location, and extent of uses of land, including open space, public and private transportation, sewage, water, drainage, solid waste, energy, and other essential facilities proposed to be located within the area covered by the Plan and needed to support the land uses described in the Plan.

The Specific Plan shall include standards and criteria by which all development will proceed, and the standards for the conservation, development, and

utilization of natural resources, along with a program to implement measures, including regulations, programs, public works projects, and financing measures to carry out the above.

The Specific Plan shall also include a statement as to the relationship of the Specific Plan to the General Plan (Land Use Element).

Retail, Office and Central Business District

The policies below are concerned with establishing balanced commercial development citywide. The location of commercial development is indicated in Figure 1.

OBJECTIVE LU 2: TO ENSURE THE ADEQUATE PROVISION OF COMMERCIAL LAND TO MEET EXISTING AND ANTICIPATED COMMUNITY NEEDS WHILE RESPECTING THE CHARACTER AND SMALL TOWN CHARM OF LAKEPORT.

Policy LU 2.1: Economic Benefits. Facilitate commercial, retail and office development which benefits the local economy, provides employment for residents of the City and provides goods and services needed by the entire community.

Program LU 2.1-a: Zone sufficient land for commercial, retail and office uses to accommodate Lakeport's share of the regional market and projected increases in employment.

Program LU 2.1-b: Continue to develop and make information available to potential property owners, developers and realtors identifying the City's commercial/retail needs, and sites suitable for retail use as well as for office and hotel developments.

Responsibility: Community Development Department.

Policy LU 2.2: Shopping Convenience. Maintain convenience shopping in proximity to residential areas.

Program LU 2.2-a: Promote development of neighborhood-oriented mixed-use centers that provide convenience shopping.

Program LU 2.2-b: Maintain adequate land zoned for convenience retail uses near residential areas.

Responsibility: Community Development Department.

Policy LU 2.3: 11th Street and Lakeport Boulevard Corridors. Prepare and adopt an Improvement Plan for the 11th Street and Lakeport Boulevard corridors taking into account: the location of residential, office, retail and commercial uses; traffic movement and parking; relationship to the surrounding residential

neighborhoods; and urban design amenities such as sidewalk width; public open spaces; landscaping; and signage.

Policy LU 2.4: Pedestrian Orientation. Emphasize compact form and pedestrian orientation in new community and neighborhood shopping areas.

Policy LU 2.5: Efficient Site Design. Encourage efficient site design that minimizes the number of driveways, provides adequate parking and integrates site design with adjacent developments.

Policy LU 2.6: Neighborhood Identity. Contribute to neighborhood identity by providing for local shopping centers that many residents can reach by foot or bicycle.

Policy LU 2.7: Local-Serving Offices. Encourage offices serving the needs of local residents to locate in and near Downtown.

Policy LU 2.8: Bed and Breakfast Inns. Revise the Zoning Ordinance to allow Bed and Breakfast Inns as a permitted use, rather than a conditionally permitted use, in the Central Business District.

Service Commercial Zoning

To date there have been relatively few industrial and manufacturing jobs in Lakeport in comparison with other cities in California. Service commercial uses are now preferred in areas that were once designated industrial. Improvements to regional transportation facilities and increasing reliance on telecommunications in business, will give the local economy an opportunity to become more diversified.

Land designated for service commercial uses are located in two areas with good highway and street access in the southern portion of the City, adjacent to South Main Street. One is located within City limits between Industrial Drive and Peckham Court, the other in the Sphere of Influence on South Main Street and is identified in [Figure 2](#) as South Area # 2. These areas require additional City services and road access. A Specific Plan should be prepared for this area because of constraints such as insufficient road ROW, lack of utilities and infrastructure and services.

It is intended that the industrial uses be restricted to those which are non-polluting and have few adverse impacts on the environment.

OBJECTIVE LU 3: TO PROVIDE FOR SUFFICIENT COMMERCIAL TO SUPPORT THE LOCAL EMPLOYMENT BASE, GENERATE REVENUE FOR THE CITY, AND COMPLIMENT THE EXISTING LAND USES IN LAKEPORT.

Policy LU 3.1: Preserve Major Retail. Preserve the Major Retail land use designation. General Plan amendments to re-designate Major Retail land to other uses shall be discouraged.

Program LU 3.1-a: Require a fiscal and economic impact analysis for General Plan amendments to change land use designations for commercial areas. General Plan amendments to change designations to other uses shall be permitted only if clearly demonstrated that this change will not adversely affect the diversity of the City’s economy and employment base.

Responsibility: Community Development Department.

Policy LU 3.2: Encourage Access. Encourage the establishment of improvement districts, increased involvement of the Redevelopment Agency, and other means of providing additional City services and roads to designated areas.

Policy LU 3.3: Environmental Compatibility. Limit uses to those which are compatible with the rural environment and which do not endanger the quality of the environment and scenic beauty on which Lakeport’s tourism depends.

Policy LU 3.4: Ancillary Uses. Permit limited ancillary commercial, retail and service uses in areas to serve the needs of the businesses and employees located in these employment centers and to reduce vehicle trips.

Policy LU 3.5: Designate Truck Routes. Designate appropriate truck routes and “heavy commercial streets” in order to accommodate truck traffic and avoid unanticipated conflicts.

Policy LU 3.6: Minimize Community Impacts. Design development to minimize potential community impacts adversely affecting residential and commercial areas in relation to local and regional air quality and odor, adequacy of municipal services, local traffic conditions, visual quality, and noise levels.

Policy LU 3.7: Buffers. Buffer industrial and heavy commercial land uses from adjacent residential, commercial, and recreational areas.

Policy LU 3.8: Design Standards. The City should consider adopting design standards for major retail areas.

Policy LU 3.9: Planned Development. A Planned Development Combining District (PD) shall be required for the area generally bound by Kimberly Lane, South Main Street, Campbell Lane and Hwy 29. This is to ensure a creative and efficient approach to the use of land, to provide for greater flexibility in the design of development projects and to address the need for roadway, water, sewer and storm drainage infrastructure.

Infill Development

The development of vacant or underdeveloped land within the City is referred to as infill. Lakeport has a high proportion of vacant and undeveloped land: twenty five percent of the land

within City limits remains vacant and another 12% is underdeveloped². Most of this land is located near or adjacent to City boundaries in the west, northwest and northern areas of Lakeport.

One of the goals of the General Plan is to encourage the development of vacant and underdeveloped properties through infill development, with additional single and multifamily residential housing on the west side of Lakeport.

Many vacant and underdeveloped parcels do not have the full range of urban services. Obstacles that have prevented development of vacant and underdeveloped areas include the relatively high cost of providing urban services, the lack of adequate roads, rough terrain, and relatively high construction costs. Lakeport can encourage the development of vacant and underused parcels by using innovative subdivision standards, obtaining grant funds to provide public services and utilities, establishing of special assessment districts, reimbursement agreements, and amending the General Plan and the Zoning Ordinance and to increase the permitted density for specific areas. *[Note: The Transportation Element contains implementation programs facilitating improvements to the road system serving vacant and undeveloped land.]*

OBJECTIVE LU 4: TO ENCOURAGE AND FACILITATE INFILL DEVELOPMENT WHICH COMPLIMENTS THE CHARACTER OF LAKEPORT.

Policy LU 4.1: Facilitate Infill Development. Establish special assessment districts, reimbursement agreements, or other similar methods to facilitate development of vacant and underdeveloped properties. Utilize grant funds and/or low interest loan funds wherever feasible to reduce the costs of providing infrastructure and urban services.

Policy LU 4.2: Flexible Standards. Revise and update the Zoning and Subdivision Ordinances within 3 years of approval of this General Plan Update to establish innovative and flexible subdivision standards that encourage infill development.

Policy LU 4.3: Density Increases. Consider amendments to the General Plan and the Zoning Ordinance to increase residential density of vacant and underdeveloped land within City limits where such an increase in density is found to be necessary for development to take place. Approval of density increases shall consider the impacts on City services, the existing development pattern, traffic, schools, other public services and the standards contained in the Community Design Element.

Infrastructure and Public Services

The adequacy of the City's infrastructure and the provision of basic City services are among the most critical issues facing the community. The availability and condition of the infrastructure

² Underdeveloped land is defined as having uses much below the maximum permitted by the General Plan. For example a ten acre parcel with one dwelling located in an area designated as High Density Residential would be considered underdeveloped.

system has a direct impact on the quality of life, the economic stability, and future growth of the City. It is an objective of the Lakeport General Plan to ensure that adequate potable water supplies, sewer treatment, storm drainage facilities, and other basic services are available for both the current and future population anticipated by this Plan.

POTABLE WATER

OBJECTIVE LU 5: TO DEVELOP A LONG-TERM SOLUTION TO ISSUES REGARDING THE SUPPLY, STORAGE, AND DISTRIBUTION OF POTABLE WATER TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF LAKEPORT RESIDENTS AND IMPROVE THE ECONOMIC STABILITY OF THE COMMUNITY;

(Policies and programs related to maintaining and improving water quality are contained in the Safety Element.)

Policy LU 5.1: Water System Master Plan. Maintain and update a Water System Master Plan every five years and identify capital improvements required to meet anticipated demand.

Program LU 5.1-a: Develop and adopt a comprehensive capital improvement plan as part of the annual budget process. Prioritize improvements required to maintain and expand the water system.

Program LU 5.1-b: Finance and construct potable water infrastructure improvements required to meet future demand identified in the Water System Master Plan.

Responsibility: Community Development and Public Works Departments.

Policy LU 5.2: Water Expansion Fees. Evaluate and adjust periodically, as appropriate, water expansion fees to reflect the actual cost of providing water service and capacity.

Policy LU 5.3: Revenue Sources. Actively pursue all available sources of revenue to secure debt service in order to maintain and expand the water system, including redevelopment funds.

Policy LU 5.4: Water Conservation. Devise and implement appropriate water conservation ordinances.

Program LU 5.4-a: Utilize the latest wastewater reclamation and recycling technology.

Responsibility: Community Development and Public Works Departments.

Policy LU 5.5: New Development Water Connections. Require new development and projects involving extensive renovations within City limits to connect to the City potable water system.

SEWER SERVICE

OBJECTIVE LU 6: TO ENSURE ADEQUATE WASTEWATER TREATMENT CAPACITY TO MEET THE NEEDS OF THE COMMUNITY, AND MAINTAIN HIGH STANDARDS OF OPERATION TO PROTECT THE PUBLIC HEALTH AND ENVIRONMENTAL QUALITY OF THE COMMUNITY.

Policy LU 6.1: Wastewater System Master Plan Update. Prepare and update a Wastewater System Master Plan.

Program LU 6.1-a: Finance and construct the improvements identified in the Wastewater System Master Plan.

Responsibility: Community Development and Public Works Departments.

Policy LU 6.2: Sewer System Expansion. Expand the sewer system capacity to meet projected growth, correct deficiencies and comply with State waste discharge standards.

Policy LU 6.3: Sewer Expansion Fees. Evaluate and adjust periodically, as needed, sewer expansion fees and monthly service charges to reflect the actual cost of providing sewer service and capacity.

Policy LU 6.4: Sewer System Funding Sources. Continue to explore all sources of financing and revenues, including redevelopment tax increment revenues that are available for the improvement of the sewer system.

STORM DRAINAGE SYSTEM

Lakeport is traversed by several streams and drainage areas which flow into Clear Lake. The development that has occurred during the past ten years has accentuated existing drainage problems and has increased the potential for flooding. Continued construction of new buildings increases the area of impermeable surface and thus the amount of stormwater that flows through the City's storm drain system.

This section of the General Plan presents policies and implementation programs to ensure that improvements to the City's storm drainage system are provided commensurate with new development. The Safety Element contains more detailed discussion of flood hazards and the policies and programs designed to reduce the risk of flooding; overall priorities for improvements to the City's storm drain system; and area-specific improvements required by the City.

Description and Performance of Stormwater Best Management Practices

A stormwater Best Management Practice (BMP) is a technique, measure or structural control that is used for a given set of conditions to manage the quantity and improve the quality of stormwater runoff in the most cost-effective manner. BMPs can be either engineered and constructed systems ("structural BMPs") that improve the quality and/or control the quantity of runoff such as detention ponds and constructed wetlands, or institutional, education or pollution prevention practices designed to limit the generation of stormwater runoff or reduce the amounts of pollutants contained in the runoff ("non-structural BMPs"). No single BMP can address all stormwater problems. Each type has certain limitations based on drainage area served, available land space, cost, pollutant removal efficiency, as well as a variety of site-specific factors such as soil types, slopes, depth of groundwater table, etc. Careful consideration of these factors is necessary in order to select the appropriate BMP or group of BMPs for a particular location.

Goals of Stormwater Best Management Practices

Stormwater BMPs can be designed to meet a variety of goals, depending on the needs of the practitioner. In existing urbanized areas, BMPs can be implemented to address a range of water quantity and water quality considerations. For new urban development, BMPs should be designed and implemented so that the post-development peak discharge rate, volume and pollutant loadings to receiving waters are the same as pre-development values. In order to meet these goals, BMPs can be implemented to address three main factors: flow control, pollutant removal and pollutant source reductions.

In areas undergoing new development or redevelopment, the most effective method of controlling impacts from stormwater discharges is to limit the amount of rainfall that is converted to runoff. By utilizing site design techniques that incorporate on-site storage and infiltration and reduce the amounts of directly connected impervious surfaces, the amount of runoff generated from a site can be significantly reduced. This can reduce the necessity for traditional structural BMPs to manage runoff from newly developed areas. There are a number of practices that can be used to promote on-site storage and infiltration and to limit the amount of impervious surfaces that are generated. However, the use of on-site infiltration can be limited in certain areas due to factors such as slope, depth to the water table, and geologic conditions.

- *Site design features* such as providing rain barrels, dry wells or infiltration trenches to capture rooftop and driveway runoff, maintaining open space, preserving stream buffers and riparian corridors, using porous pavement systems for parking lots and driveways, and using grassed filter strips and vegetated swales in place of traditional curb-and-gutter type drainage systems can greatly reduce the amount of stormwater generated from a site and the associated impacts.
- *Street construction features* such as placing sidewalks on only one side of the street, limiting street widths, reducing frontage requirements and reducing the radius of cul-de-sacs also have the potential to significantly reduce the amount of impervious surfaces and therefore the amount of rainfall that is converted to runoff.

-
- *Construction practices* such as minimizing disturbance of soils and avoiding compaction of lawns and greenways with construction equipment can help to maintain the infiltrative capacity of soils.

OBJECTIVE LU 7: TO DEVELOP AND MAINTAIN A STORM DRAINAGE SYSTEM WHICH ENSURES THE SAFETY AND WELFARE OF RESIDENTS, VISITORS AND PROPERTY IN LAKEPORT.

Policy LU 7.1: Storm Drain Capacity. Ensure that capacity of the storm drain system is increased as a result of new development.

Program LU 7.1-a: Revise the Subdivision and Zoning Ordinances to require all new development to adequately mitigate the impact of added impervious surfaces by a combination of on-site detention basins and/or improvements to the downstream storm drainage system to accommodate all of the anticipated increased runoff.

Program LU 7.1-b: Identify improvements to storm drain system to implement the Storm Drainage Master Plan for the Capital Improvement Program on an annual basis.

Responsibility: Community Development and Public Works Departments.

Policy LU 7.2: Master Plan Update. Update the Storm Drainage Master Plan.

Program LU 7.2-a: Fund and implement improvements identified and recommended in the Storm Drainage Master Plan.

Responsibility: Community Development and Public Works Departments.

Policy LU 7.3: Funding Sources. Consider the following means of obtaining financing to improve the City's storm drain system: the establishment of storm drain improvement/assessment districts on a basin-wide basis; low-interest loan funds; redevelopment tax increment funds; and increasing the storm drain impact fees.

Program LU 7.3-a: Carry out a reassessment of impacts fees and identify other available funding sources with the update of the Storm Drainage Master Plan.

Responsibility: Community Development and Public Works Departments.

Policy LU 7.4: Best Management Practices. Implement the most recent and most appropriate stormwater Best Management Practices (BMPs) on new development and redevelopment.

OBJECTIVE LU 8: TO ENSURE THAT AN ADEQUATE AND DIVERSE SUPPLY OF QUALITY HUMAN CARE FACILITIES AND SERVICES IS AVAILABLE IN LAKEPORT.

Policy LU 8.1: Human Services Locations. Encourage the siting of child care, disabled, mentally disabled and elderly facilities compatible with needs, land use and character, and encourage such facilities to be located near employment centers, public transportation facilities, homes, schools, community centers, and recreation facilities.

Policy LU 8.2: Child Care Centers. Facilitate development of child care centers and homes in all areas and encourage inclusion of child care centers in non-residential developments.

Program LU 8.2-a: Review the Zoning Ordinance to simplify the procedures for land use permits for child care centers.

Responsibility: Community Development Department.

Policy LU 8.3: Community Services. Encourage the retention of existing and development of new commercial uses that primarily are oriented to the residents of adjacent neighborhoods and promote the inclusion of community services (e.g., childcare and community meeting rooms).

III. URBAN BOUNDARY ELEMENT

III. URBAN BOUNDARY ELEMENT

Purpose

The purpose of the Urban Boundary Element is to define the limits for extending City services and infrastructure in order to accommodate new development anticipated within the 20-year time frame of this General Plan. The Urban Boundary Element is also intended to provide guidance related to future annexation of land from the City's Sphere of Influence. The Urban Boundary Element is not a state-mandated element; however, it is an important element because it limits leap-frog development and provides for an orderly transition from rural to urban land uses. The element recognizes the community's dedication to orderly and managed growth of the city's boundaries and the desire to maintain the rural character of many of the areas and neighborhoods within the Lakeport Sphere of Influence.

Another critical aspect to expansion of the City of Lakeport is the provision of infrastructure and services concurrent with new development and annexation. Annexations to the City must be located within the SOI and adjacent to existing City boundaries in order to be approved by the Local Agency Formation Commission (LAFCO). By State law, the City must be notified of any proposed land use changes within its SOI and be provided an opportunity to comment on the changes.

The Lake County LAFCO reviews changes to SOIs, annexations to cities and special districts in Lake County, the adequacy of public services to proposed annexations, and the effect of these actions on prime agricultural land. LAFCO has adopted local goals, objectives and policies to guide its decision-making. Lake County LAFCO's purpose with regards to SOIs is as follows:

1. To ensure orderly urban growth in the areas adjacent to a city, community or district, and in particular those areas which might reasonably become a part of such entities at some time in the future.
2. To promote cooperative planning efforts between the various cities, County and districts, to ensure proper effectuation of their respective general plans.
3. To coordinate property development standards and encourage timely urbanization with provisions for adequate and essential services such as sewer, water, fire and police protection.
4. To assist other governmental districts and agencies in planning the logical and economical extension of all governmental facilities and services, thus avoiding unnecessary duplications.
5. To assist property owners to plan comprehensively for the ultimate use and development of their land.

Applications to amend City limits, for example, are presented to LAFCO, which then approves, approves with conditions, or denies the application.

The conversion of agricultural lands to urban uses and the provision of urban services by growing communities are important issues to the County and LAFCO. Potential revenue losses to counties resulting from annexations have created problems in the relationship between cities and counties in California, and Lake County is no exception. In order to accomplish a smooth transition, the County of Lake and the City of Lakeport should enter into an agreement that outlines procedures and understandings for future annexation areas. The Lakeport area's planned growth will, at some time, require annexation to the City. Long range planning in the Lakeport SOI should reflect a vision shared by both parties, and contain a revenue stream that can be relied on for the duration of the agreement. An agreement will permit both parties to focus their limited resources on other matters; its absence will necessitate that the City and County coordinate their planning programs in a piecemeal fashion.

In determining the Sphere of Influence of each agency, LAFCO must consider and prepare a written statement of its determinations with respect to the following four factors as stated in Section 56425 (e) of the Cortese-Knox-Hertzberg Act:

- a) The present and planned land use in the area, including agricultural and open-space lands.
- b) The present and probable need for public facilities and services in the area.
- c) The present capacity of public facilities and adequacy of public services provided by the agency.
- d) Any social or economic communities of interest in the area that the Commission determines is relevant to the agency.

In order to prepare and update Spheres of Influence, LAFCO is required to conduct a review of the municipal services provided in the county, region, subregion, or other appropriate designated area. A full discussion of the policies and requirements related to annexation of land from the Sphere of Influence in to the City limits can be found in the Local Agency Formation Commission of Lake County *Policies, Standards, and Procedures*, Amended July 16, 2003. Key issues related to city annexations include:

- a) **Annexations of Streets.** Annexations shall reflect logical allocation of streets and rights of way. Specifically:
 - i) LAFCO may require inclusion of additional territory within an annexation in order to assure that the city reasonably assumes the burden of providing adequate roads to the property to be annexed. LAFCO will require cities to annex streets where adjacent lands that are in the City will generate additional traffic or where the annexation will isolate sections of county road, but will not require annexation of roads that will create isolated sections of city maintained road.
 - ii) LAFCO will favorably consider annexations with boundary lines located so that all streets and right-of-ways will be placed within the same jurisdiction as the properties which either abut thereon or use the streets and right-of-way for access. Except in

extraordinary circumstances, cities shall annex an entire roadway portion when 50% or more of the frontage on both sides of the street will be within the city after completion of the annexation.

- b) **Urban Boundaries.** LAFCO will normally adjust annexation boundaries to include adjacent urbanized areas in order to maximize the amount of developed urban land inside the city, and to minimize piece-meal annexation. As used herein, “urbanized areas” are areas that are developed for industrial, commercial or residential use with a density of at least one residential unit per 1.5 acres and which receive either public water or sewer service.
- c) **Pre-zoning Required.** The Cortese-Knox-Hertzberg Act requires the City to prezone territory to be annexed, and prohibits subsequent changes to the general plan and or pre-zoning designations for a period of two years after completion of the annexation, unless the city council makes a finding at a public hearing consistent with the provisions of GC 56375 (e). The City’s pre-zoning must take into account the likely intended development of the specific property. In instances where LAFCO amends a proposal to include additional territory, the Commission’s approval of the annexation will be conditional upon completion of pre-zoning of the new territory.

ANNEXATION APPLICATION PROCEDURES

While Cortese-Knox-Hertzberg Act permits initiation of applications to LAFCO either by resolution of the City or by direct landowner/voter petition, LAFCO prefers that the resolution procedure be utilized wherever feasible. Use of the resolution of application procedure is preferable because: 1) it involves the City early in the process to assure that the City is supportive of the proposal, and 2) better integrates CEQA processing by the City as lead agency. Each applicant shall be advised of this policy at the earliest possible time.

ESTIMATED DEMAND FOR LAND 2005 - 2025

The number of residential, commercial and industrial acres needed in the City of Lakeport through 2025 is based on population projections through 2025 (see [Table 2](#)) and an analysis of vacant and under-utilized lands currently within the City limits ([Tables 3 and 4](#)). By 2010, the population of Lakeport is estimated to be approximately 5,521 with 34 acres of residential land needed, 13 acres of commercial land needed, and 10 acres of industrial land needed. By 2025, the population of Lakeport is estimated to be approximately 6,859, with a total of 156 acres of residential land needed, 22 acres of commercial land needed and 45 acres of industrial land needed. Most of the projected land needed can be found in existing vacant infill areas within the City.

Table 2
Population and Household Projections, 2000 to 2025* – City of Lakeport

	2000*	2005*	2010*	2015*	2020*	2025*
Total Population*	4,820	5,150	5,521	5,935	6,380	6,859
Households*	1,967	2,148	2,339	2,515	2,703	2,906
Average Household Size	2.36	2.36	2.36	2.36	2.36	2.36

* DOF Lake County growth rates used for the City of Lakeport through 2025.
 **Assumes 2000 Lakeport avg. household size of 2.36 remains constant.

Source: 2000 U.S. Census, Department of Finance.

Table 3
Vacant Commercial Land Inventory – City of Lakeport

Vacant Commercial Acres	60.08
Total Vacant Parcels	24
Two Largest Vacant Parcels	19.75 and 15.62
Two Smallest Vacant Parcels	0.13 and 0.14

Source: City of Lakeport Planning Department

Table 4
Vacant Residential Land Inventory – City of Lakeport

Residential Designation	Acres
Low Density	64.16
Medium Density	3.41
High Density	16.59
Total	84.16

Source: City of Lakeport Planning Department

The anticipated future demand for land uses is presented below in [Table 5](#).

Table 5
Community Development Needs, 2005-2025* – City of Lakeport

Year	Population	Minimum Needed Residential (Acres)	Minimum Needed Commercial (Acres)	Minimum Needed Industrial (Acres)
2005	5,150	-	11	-
2010	5,521	34	13	10
2015	5,935	72	16	21
2020	6,380	112	19	33
2025	6,859	156	22	45

*Growth needs based on model GMO allocation formula.

Source: Quad Knopf, Inc.

The increased demands for land were projected in a manner that would provide for a sustainable balance between jobs and housing. Increased demand for residential land comes from the anticipated population growth in Lakeport over the next 20 years. The projected demand for additional commercial and industrial lands will provide the employment and tax revenue base needed to support the anticipated increase in population through the life of this General Plan.

The Urban Growth Boundary for the City of Lakeport is the same boundary as the Lakeport Sphere of Influence (Figure 3).

OBJECTIVES, POLICIES & PROGRAMS

OBJECTIVE UB 1: TO PROVIDE FOR AN ORDERLY AND EFFICIENT TRANSITION FROM RURAL TO URBAN LAND USES.

Policy UB 1.1: Identify Edges. Identify and use natural and man-made edges, such as Clear Lake, local roadways, and hillsides, for urban development limits and growth phasing.

Policy UB 1.2: Designate Sufficient Land. Designate an adequate amount of commercial, industrial, and residential land within the Sphere of Influence to meet anticipated land demands throughout the life of the General Plan.

OBJECTIVE UB 2: TO MINIMIZE URBAN SPRAWL AND LEAP-FROG DEVELOPMENT.

Policy UB 2.1: Infill Development. The City should encourage infill development, but recognize that infill development can only provide some of the land needed for residential development in the future.

Policy UB 2.2: Annexation Priority: The City should pursue annexations based on the following priority system:

1. Commercial and industrial land along South Main Street and Soda Bay Road.
2. Land designated as Specific Plan Area
3. Land within the southern, southwestern and western Sphere of Influence.

Policy UB 2.3: Urban Management Agreement. Work with Lake County to ensure that development outside the City limits is supportive of and complimentary to the future growth plans of the City of Lakeport. The two jurisdictions should work towards developing an urban management area agreement.

OBJECTIVE UB 3: TO IMPLEMENT GROWTH POLICIES WHICH WILL GUIDE THE TIMING, TYPE, AND LOCATION OF GROWTH, PRESERVE RESOURCE LANDS, PROTECT NATURAL FEATURES AND OPEN SPACE, AND ENCOURAGE TECHNIQUES WHICH ENCOURAGE ENERGY CONSERVATION.

Policy UB 3.1: Transitional Buffers. Utilize low density and rural residential land uses as a buffer and transition between long-term agricultural and open space uses and higher density urban development.

Policy UB 3.2: Open Space Gateways. Encourage the use of parks and open space to enhance gateways to the City.

Policy UB 3.3: Commercial and Industrial Annexations. The City shall pursue the annexation of land within the Sphere of Influence that is currently used for commercial and industrial purposes.

Policy UB 3.4: Residential Development and Annexations. Residential development should be discouraged within the Lakeport Sphere of Influence prior to annexation.

OBJECTIVE UB 4: TO DESIGNATE GROWTH AREAS THAT CAN BE SERVED BY LOGICAL INFRASTRUCTURE EXTENSIONS.

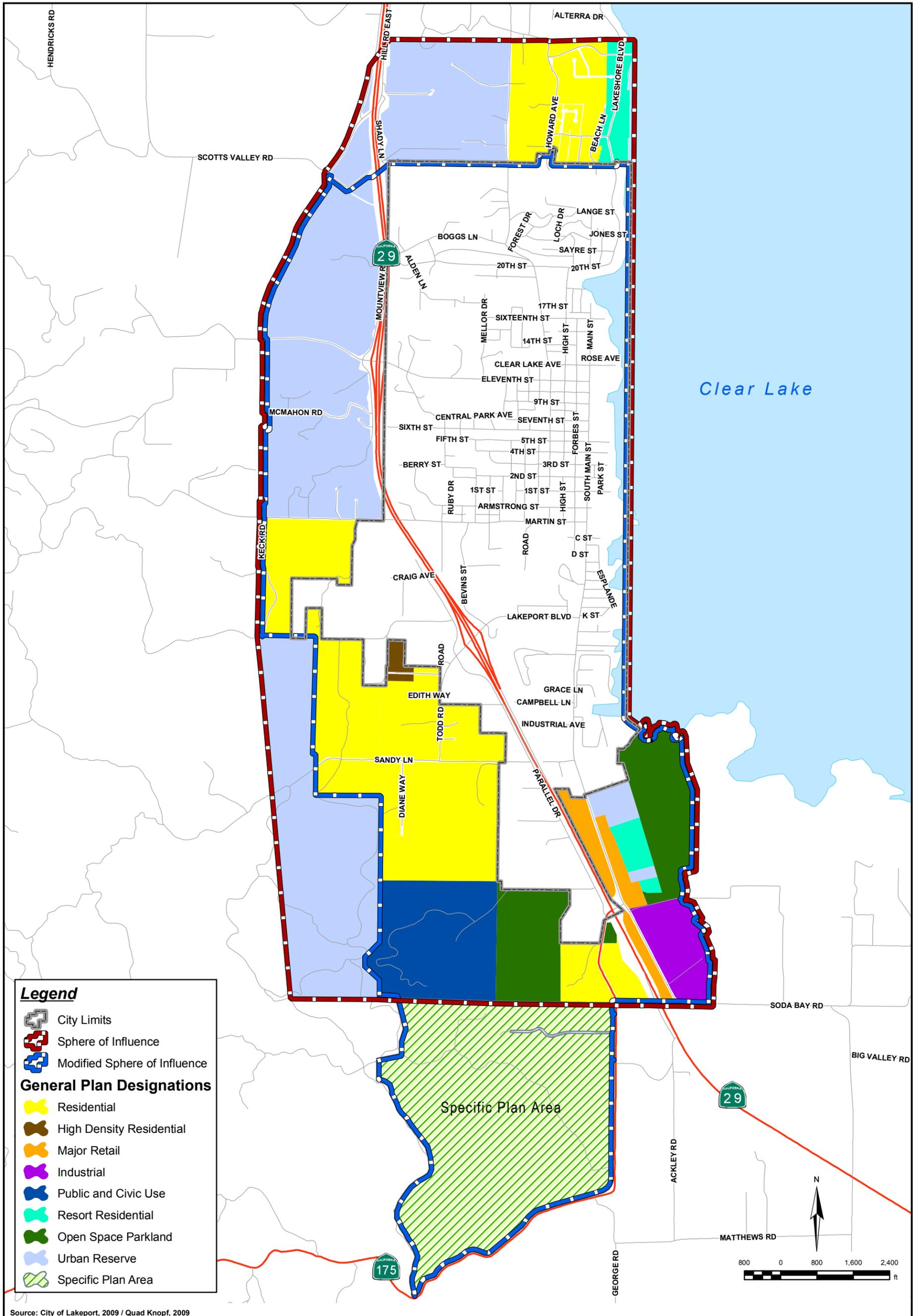
Policy UB 4.1: Urban Services Extensions. The full range of urban services including water, sewer, and storm drainage systems shall not be extended outside of the urban boundaries for the purposes of development in rural areas.

Policy UB 4.2: Urban Services and Annexations. Prior to annexation of residential land into the Lakeport City limits, it must be demonstrated that the full range of urban services including water, sewer, and storm drainage systems are in place and can sufficiently serve the area to be annexed.

Program UB 4.2-a: Annexations in the Southern SOI. Pursue annexation of commercial and industrial lands within the proposed southern SOI.

Program UB 4.2-b: Pursue application to LAFCO to amend the Sphere of Influence as shown in Figure 3.

Program UB 4.2-c: Prior to the submittal of an application to LAFCO to amend the City's Sphere of Influence to include the Specific Plan Area, the City shall prepare a Specific Plan in accordance with the state Planning and Zonings Law, Chapter 3, Local Planning, Article 8 (Specific Plans). Specific issues that must be addressed include, but are not limited to, maintaining adequate sewer treatment capacity to meet the future needs of Lakeport; hillside development regulations; the presence of environmentally-sensitive habitat including oak woodlands; Lampson Airport flight path corridor; storm water drainage and water quality; and transportation/circulation impacts.



**CITY OF LAKEPORT SOI
GENERAL PLAN LAND USE DESIGNATIONS**

Figure 3

IV. TRANSPORTATION ELEMENT

IV. TRANSPORTATION ELEMENT

Purpose

It is a requirement of Government Code §65302(b) that every General Plan include a Transportation Element which consists of “the general location and extent of existing and proposed thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the General Plan.” This Transportation Element is in conformance with the requirements of the Government Code.

The Transportation Element discusses transportation issues for the City and the Sphere of Influence. The Element describes the existing circulation system and travel characteristics. It also projects future traffic, based on the build-out of the land uses described in the Land Use Element and identifies the resulting anticipated roadway deficiencies. Policies and implementation programs contained in this Element provide a guide for decisions regarding transportation system improvements to accommodate Lakeport’s anticipated growth.

The Transportation Element is organized in the following manner: each issue is first briefly described with relevant background information; then policies and implementing programs are presented.

Goals

The City has the following goals for transportation:

- Develop a City and area-wide circulation system that is safe and efficient.
- Develop and manage a street and highway system which accommodates future growth.
- Improve safety on streets for vehicles, pedestrians and cyclists.
- Preserve the peace and quiet of residential areas.
- Reduce dependence on the automobile.
- Regard the quality of life in Lakeport as important as mitigating traffic problems.

Traffic Volume and Level of Service

“Level of Service” is a qualitative measure of traffic operating conditions whereby a letter grade, ‘A’ through ‘F’, corresponding to progressively worsening traffic operating conditions, is assigned to an intersection or roadway segment. At a signalized intersection, the LOS is determined by comparing existing traffic volumes and future forecasts to Level of Service thresholds employed by applicable planning agencies. Level ‘A’ represents free flow conditions and level ‘F’ represents jammed conditions where traffic flow is at or over the capacity of the roadway and consequently moves very slowly. The current Level of Service design standard is a level ‘C.’ [Table 6](#) below explains in more detail the Level of Service Concept.

**Table 6
Roadway Classification System Descriptions**

Level of Service	Description	V/C Ratio
A	Relatively free-flow. No restrictions to vehicle maneuverability of speed. Very slight delay.	0.00-0.60
B	Stable Flow. Some slight reduction in maneuverability and speed. Vehicle platoons form. This is a suitable level of operation for rural design. Slight delay.	0.61-0.70
C	Stable flow operation. Higher volumes. More restrictions on maneuverability and speed. Acceptable delay.	0.71-0.80
D	Approaching unstable flow operation. Queues develop. Little freedom to maneuver. Tolerable delays for short periods.	0.81-0.90
E	Unstable flow or operation. Low operating speed; momentary stoppages. This condition is not uncommon in peak hours. Congestion and intolerable delays.	0.91-1.00
F	Forced flow or operation. There are many stoppages. The highway acts as a vehicle storage area. Jammed.	1.00+

LEVEL OF SERVICE THRESHOLDS

No readily identifiable thresholds have previously been used which equate daily traffic volumes with general planning Levels of Service. Thus thresholds previously developed by the Florida Department of Transportation and employed by many California planning agencies have been used to identify Levels of Service thresholds on City streets.

According to the Florida Department of Transportation the presence of a raised median could increase Level of Service thresholds by about 5 percent. While the presence of wider shoulders and or bicycle lanes will promote overall safety, the general capacity of the street may not be affected by this extra width. Resulting LOS thresholds are presented in [Table 7](#) below while the definitions of each street type are presented in [Table 8](#) and the classifications for each major roadway are shown in [Table 9](#).

**Table 7
General Level of Service Thresholds Based on Daily Traffic Volumes**

Street Classification	Lanes	Control	Daily Traffic Volume at LOS		
			C	D	E
Collector	2	Undivided	9,100	14,600	15,600
Arterial	2	Undivided	11,200	15,400	16,300
	4	Undivided	24,700	31,100	32,800
Freeway	4	Divided	46,000	56,000	63,000

* FDOT Table 4 -1 urban arterial with 2.00 to 4.5 signalized intersections per mile

Source: KdAnderson Transportation Engineers, May 2007.

Table 8
Definitions of Street Types

Street Type	Definition
Freeway	A freeway is a divided highway with full-control of access. Complete separation of conflicting traffic movements is provided. It is thus the highest form of roadway design, and is intended to provide for the expeditious movement of large volumes of traffic between, across, around or through a city, area, or a region. It is not intended to provide access to abutting land.
Arterial	The primary function of an arterial is to provide for: [1] traffic movement between areas and across portions of a city; [2] direct service to principal traffic generators; and [3] a connection to the freeway-expressway system. A subordinate function of arterials is the provision of direct access to abutting land. Since the primary function of this street type is to provide for the movement of vehicles rather than afford access to abutting land or temporary parking for vehicles, arterial streets are typically subject to regulation and control of parking, turning movements, entrances, exits, and curb use where conditions warrant. Control of access may also be required at some locations.
Collector	Collector streets link small areas of neighborhoods to the arterial street system. They also carry much of the through-traffic within residential, industrial, and commercial areas and serve to connect adjacent neighborhoods. An important part of their function is to provide access to abutting property.
Local Street	Local streets are intended to provide direct access to residential, commercial, industrial or other abutting land. These streets should serve local traffic movements and are not intended to handle through-traffic.

Table 9
Roadway Classifications

Name of Roadway	Freeway	Arterial	Collector	Local
Adams Street			•	
Armstrong Street			•	
Bevins Street			•	
Boggs Lane			•	
Central Park Avenue			•	
Clear Lake Avenue		• Main & High	• High & Pool	
Compton			•	
Craig Avenue			•	
Crystal Lake Way			•	
Eleventh Street		•		
First Street			•	
Forbes street		•		
Giselman Street			•	
Green Street			•	
Hartley Street			•	
High Street		• Clear Lake & 20 th		
Hill Road East			•	

Name of Roadway	Freeway	Arterial	Collector	Local
Hill Road			•	
Howard Avenue			•	
Industrial Avenue			•	
Kimberly Lane			•	
Lakeport Boulevard		•		
Lakeshore Boulevard		•		
Lange Street			•	
Larrecou Lane			•	
Loch Drive			•	
Main Street		•		
Martin Street		•		
McMahan Road			•	
Mellor Drive			•	
Mountview Road			•	
Page Drive			•	
Parallel Drive		•		
Park Street			•	
Rainbow Road			•	
Pool Street			•	
Roscoe Street			•	
Russel Street			•	
Sandy Lane			•	
Second Street			•	
Shady Lane			•	
Sixteenth Street			•	
Sixth Street			•	
Smith Street			•	
Soda Bay Road		•		
Spurr Street			•	
State Route 20	•			
State Route 29	•			
State Route 175	•			
Third Street			•	
Todd Road		•		
Twentieth Street			•	

EXISTING ROADWAY NETWORK AND TRAFFIC FLOW

Lakeport's roadway network is defined and constrained by two barriers: Clear Lake on the East and State Highway 29 on the West. The majority of the city is laid out in a rectangular grid pattern which is interrupted by hilly terrain. In these hilly areas the street system becomes discontinuous and through traffic is difficult. Many of the City's streets are narrow, not improved to current standards, and will require upgrading. In addition, further development of the street system between Bevins and Main Streets is prevented by large areas devoted to public facilities such as the City corporation yard and the Lake County Fairgrounds.

Although construction of the State Highway 29 freeway has reduced congestion downtown, it is now a barrier inhibiting east-west circulation through the Planning Area. Access across State Route 29 is only available at: Eleventh Street; Martin Street; Lakeport Boulevard; the South Main Street intersection with Highway 29; and the Hill Road crossing, as indicated in [Figure 4](#).

State Route 29 permits vehicles to bypass the downtown area and carries the largest amount of traffic through Lakeport. When the HW 29 bypass was constructed in 1970, it carried between 2,000 and 4,000 vehicles per day significantly reducing the amount of through traffic on Main Street and other city streets. Lakeport has grown considerably resulting in an increase in traffic volumes on Main Street. Traffic volumes will continue to increase commensurate with population growth in Lakeport and the County.

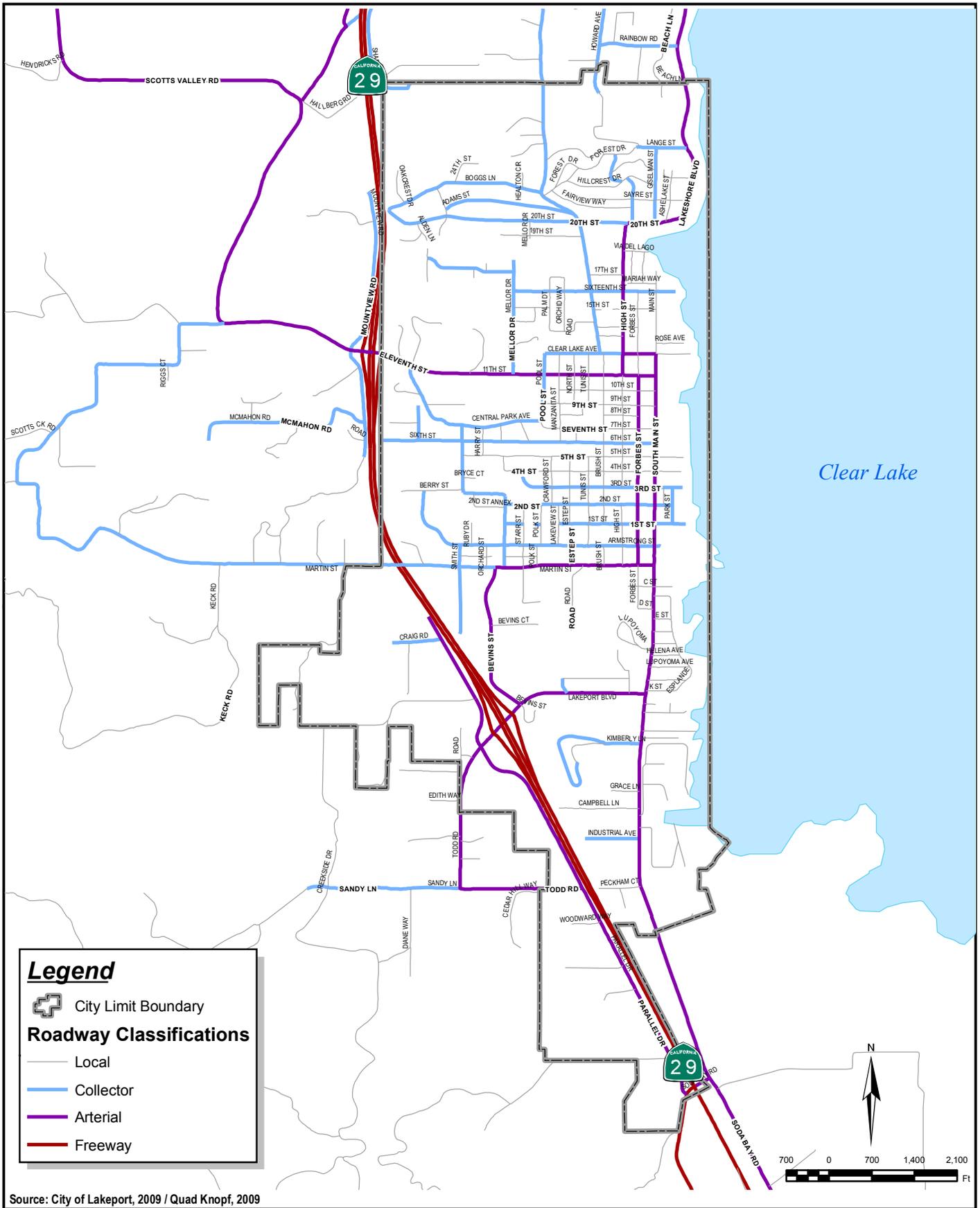
Traffic volumes continue to increase on arterials and many collectors, particularly in the downtown area. The central core, bounded by First, Third, Forbes and Park Streets, generates more vehicular traffic than anywhere else in Lakeport. The majority of north-south through traffic is carried on State Route 29 and on the Main Street, High Street, Lakeshore Boulevard corridor. East/west traffic volumes are the highest on Lakeport Boulevard and Eleventh Street.

In January 2005 traffic counts were made at locations on major roads in Lakeport in order to supplement data available from Caltrans and other recent studies. This sample of current traffic volumes was intended to look at those roads which already carry major traffic volumes and which are expected to carry high traffic volumes in the future. Count locations are presented in [Figure 5](#), while the counts themselves are described in [Table 10](#). The current daily traffic volumes on most of these roads fall within the Level of Service 'C' standard, indicating that current traffic conditions in the community are good.

Table 10
January 2005 Daily Traffic Volumes and Levels of Service

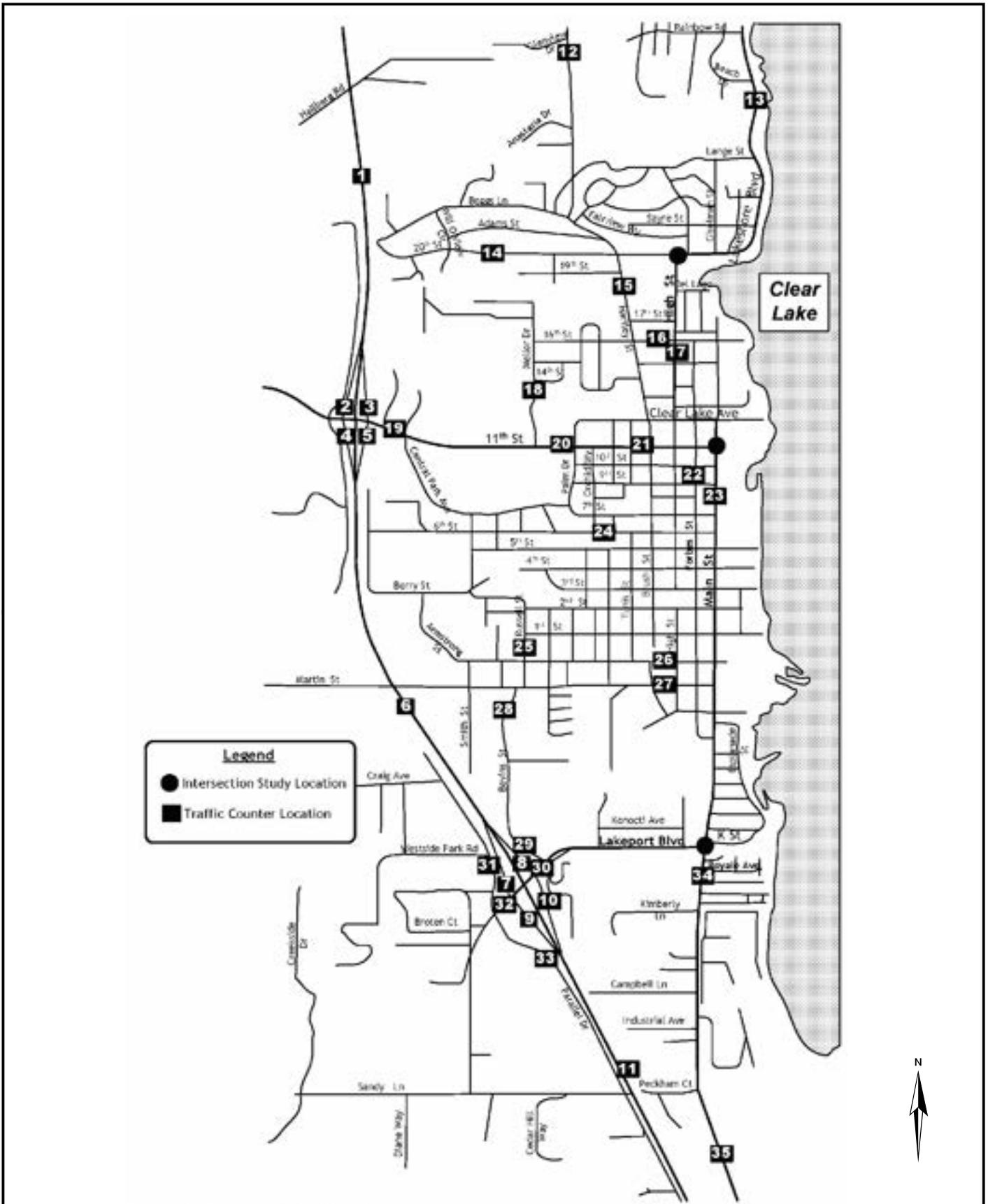
Road	Location from	To	Count #	Year 2005		
				Lanes	Daily Volume (1/05)	LOS
State Highway						
SR 29	Park Way	11 th Street	1	Free 4	12,700	A
	Southbound off	To 11 th Street	2	1	2,100	C
	Northbound on	From 11 th Street	3	1	1,900	C
	Southbound on	From 11 th Street	4	1	3,000	C
	Northbound off	To 11 th Street	5	1	3,300	C
	11 th Street	Lakeport Blvd	6	Free 4	14,600	A
	Southbound off	To Lakeport	7	1	3,200	C
	Northbound on	From Lakeport	8	1	3,500	C
	Southbound on	From Lakeport	9	1	3,000	C
	Northbound off	To Lakeport	10	1	3,000	C
	Lakeport Blvd	SR 175	11	Art 4	13,100	A
SR 175	south		Art 4	12,500	A	
SR 175	Hopland	SR 29		Art 2	820	C
City Streets						
Hartley Street	Anastasia Drive	20 th Street	12	Col 2	670	C
Lakeshore Blvd	Lange Street	Beach Lane	13	Art 2	4,930	C
20 th Street	Will O View Circle		14	Col 2	420	C
Hartley Street	19 th Street	17 th Street	15	Col 2	2,020	C
16 th Street	Hartley Street	High Street	16	Col 2	870	C
High Street	15 th Street	16 th Street	17	Art 2	8,200	C
Mellor Drive	14 th Street	11 th Street	18	Col 2	1,050	C
11 th Street	SR 29	Central Park Ave	19	Art 2	11,020	C
11 th Street	Mellor Drive	Pool Street	20	Art 2	11,030	C
11 th Street	Tunis Street	Brush Street	21	Art 2	9,100	C
Forbes Street	Eighth Street	Ninth Street	22	Art 3	3,840	C
Main Street	7 th Street	9 th Street	23	Art 2	9,200	C
Sixth Street	Manzanita Street	Brush Street	24	Col 2	510	C
Russell Street	Armstrong Street		25	Col 2	850	C
Armstrong Street	Brush Street	High Street	26	Col 2	770	C
Martin Street	Brush Street	High Street	27	Art 2	2,740	C
Bevins Street	Bevins Court	Martin Street	28	Col 2	3,480	C
Bevins Street	Lakeport Blvd	Bevins Court	29	Col 2	4,290	C
Lakeport Blvd	SR 29	Bevins Street	30	Art 2	11,925	D
Parallel Drive	north	Lakeport Blvd	31	Col 2	3,500	C
Lakeport Blvd.	Parallel Dr	SR 29	32	Art 2	11,940	D
Parallel Drive	Lakeport Blvd	Sandy Lane	33	Col 2	1,320	C
Main Street	Royale Ave	Kimberly Ln	34	Art 2	9,900	C
Main Street	Lakeport Blvd	Martin Street	35	Art 2	7,940	C
Col is Collector, Art is Arterial						

Source: KdAnderson Transportation Engineers, May 2007.



EXISTING ROAD NETWORK

Figure 4



Source: kdANDERSON Transportation Engineers, 2005 / Quad Knopf, 2009



TRAFFIC STUDY LOCATIONS

Figure 5

CURRENT PEAK HOUR LEVELS OF SERVICE

The a.m. (7:00 to 9:00 a.m.) and p.m. (4:00 to 6:00 p.m.) peak hour Levels of Service were also determined for three major intersections in Lakeport in January 2005. These locations were identified based on local knowledge of locations where improvements may soon be warranted. Levels of Service were calculated using the methodologies presented in the 2000 Highway Capacity Manual, and the results are presented in [Table 11](#). At all-way stops, the “overall” Level of Service for all motorists has been determined. At intersections controlled by side street stops, the Level of Service for the “worst” movement has been presented.

As shown, the overall Level of Service at each location is within the City’s LOS ‘C’ standard. However, the volume of traffic at the Main Street / Lakeport Blvd intersection already satisfies Caltrans Warrant No. 11 (peak hour volume) for signalization.

Table 11
Current Peak Hour Intersection Levels of Service

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour		Signal Warranted ?
		Avg Delay or v/c	LOS	Avg Delay or v/c	LOS	
1 Main Street/Lakeport Blvd	All-Way Stop	11.0 sec	B	16.3 sec	C	No*
2 Main Street /11 th Street	EB Stop	11.5 sec	B	12.1 sec	B	No
3 High Street/20 th Street	EB Stop	17.2 sec	C	12.2 sec	B	No

* Peak Hour Warrants Met.

Source: KdAnderson Transportation Engineers, May 2007.

SEASONAL TRAFFIC VARIATION

The volume of traffic on the major roads around Lakeport can vary throughout the year, primarily as a result of seasonal tourist activity. Volume observed during the late summer months (July, August and September) can be much higher than data collected in the winter. It is reasonable to expect that counts conducted in January would be indicative of “average” or “below average” conditions.

To provide perspective on this issue, data available from Caltrans regarding the volume of traffic on SR 29 and SR 175 was obtained and reviewed. To provide a rough indication of the variation, daily traffic volumes recorded in the “peak month” were compared to the reported annual average daily traffic volume. As noted in [Table 12](#), peak month volumes are an average of about 8 percent higher than the annual average.

Table 12
Seasonal Traffic Volume Variation

Road	Location from	To	Daily Traffic 2005		
			Average Annual Volume	Peak Month	Percent Increase
SR 29	Park Way	11 th Street	12,700	13,900	9.4%
	11 th Street	Lakeport Blvd	14,600	15,900	8.9%
	Lakeport Blvd	SR 175	13,100	14,000	6.9%
	SR 175	South	12,500	12,900	3.2%
SR 175	Hopland	SR 29	820	920	12.2%

Source: KdAnderson Transportation Engineer, May 2007.

HISTORIC GROWTH TRENDS

Data from the 1991 General Plan Update was compared with recent traffic counts to gain perspective on traffic conditions in Lakeport. This comparison is summarized in [Table 13](#) below. As shown, where comparable data is available, annualized growth rates have either been negative or not appreciably large.

Table 13
Historic Traffic Volume Growth Trends

Road	Location from	To	Daily Volume		
			April 1991	2003	January 2005
State Highway					
SR 29	Park Way	11 th Street	9,264	11,700	12,700
	11 th Street	Lakeport Blvd	9,068	14,000	14,600
	Lakeport Blvd	SR 175	10,965	12,600	13,100
	SR 175		9,066	12,000	12,500
SR 175	Hopland	SR 29	1,805	1,800	820
City Streets					
Hartley Street	Anastasia Drive	20 th Street			670
Lakeshore Blvd	Lange Street	Beach Lane			4,930
20 th Street	Will-O-View Circle				420
Hartley Street	19 th Street	17 th Street	2,286		2,020
16 th Street	Hartley Street	High Street			870
High Street	15 th Street	16 th Street	9,275		8,200
Mellor Drive	14 th Street	11 th Street			1,050
11 th Street	SR 29	Central Park Ave	11,000		11,020
11 th Street	Mellor Drive	Pool Street			11,030
11 th Street	Tunis Street	Brush Street	9,000		9,100
Forbes Street	8 th Street	9 th Street			3,840
Main Street	7 th Street	9 th Street	13,000		9,200
Sixth Street	Manzanita	Brush Street			510
Russell Street	Armstrong Street				850
Armstrong Street	Brush Street	High Street			770
Martin Street	Brush Street	High Street	3,479		2,740

Road	Location from	To	Daily Volume		
			April 1991	2003	January 2005
Bevins Street	Bevins Court	Martin Street	2,654		3,480
Bevins Street	Lakeport Blvd	Bevins Court			4,290
Lakeport Blvd	SR 29	Bevins Street	10,000		11,925
Parallel Drive		Lakeport Blvd			3,500
Lakeport Blvd.	Parallel Dr	SR 29			11,940
Parallel Drive	Lakeport Blvd				1,320
Main Street	Royale Ave	Kimberly Lane	9,500		9,900
Main Street	Lakeport Blvd	Martin Street			7,940

Note: A 10%-15% variation in traffic volume can be expected among various traffic counts are taken.

Source: KdAnderson Transportation Engineer, May 2007.

ROADWAY IMPROVEMENTS

Congestion on the City's arterial and collector street systems, including the downtown area will become a problem. Actions are needed to improve existing traffic flow and mitigate the impacts of existing and future land development. Major improvements to the existing system are necessary, including road widening, additional crossings over/under the freeway, new roads, additional traffic controls, including signalization of intersections, and perhaps one-way couplet systems.

The policy section recommends that traffic engineering and planning evaluation of the one-way couplets be carried out prior to their inclusion into the City's Capital Improvement Program. One-way couplets may have potentially adverse impacts on the character of the downtown area and adjacent residential neighborhoods, parking and safety.

Funds will not be available to build all the roadway improvements required to offset or significantly improve future traffic congestion in Lakeport and its Sphere of Influence. The roadway improvements listed in [Appendix B](#), however, represent the most important and cost effective improvements. These recommended improvements constitute the City's Long Range Roadway Improvement Program. The locations of these improvements are located in [Figure 6](#).

The recommended roadway improvements listed below have a high, medium and low priority rating. The following criteria have been used to develop these priorities: Criteria 1: Projects that increase the north-south capacity of the roadway network; Criteria 2: Projects that increase east-west capacity of the roadway network; and Criteria 3: Improvements to the local street network to close gaps and improve the safety and efficiency of the roadway system. The priority ranking of recommended roadway improvements should be reviewed periodically in relation to available funding and the City's changing needs.

Lakeport has several characteristics which increase the difficulty of improving the roadway system such as: hilly terrain; a relatively large amount of undeveloped land located within City limits; and many substandard roads. The policies contained below provide a systematic approach to improving the City's roadway system. Additional capacity is needed to carry the increased amount of projected traffic. The recommended improvements to the roadway system are organized under policies and implementation programs for System-wide Improvements, Route Completion, and Road Maintenance and Improvement.

The local street system in Lakeport is incomplete and has many discontinuous, narrow, and unimproved streets. In many areas hilly topography has prevented the completion of the collector system, leaving gaps in the street system. Consequently, through traffic is forced to take local streets through residential neighborhoods and through the Main Street corridor.

Poorly designed and improperly maintained roads have been a continuing problem in Lakeport. Many roads were built before City standards and planning regulations existed. The improvement of the City's roads to meet current standards will increase the capacity and safety of the roadway system.

FUNDING

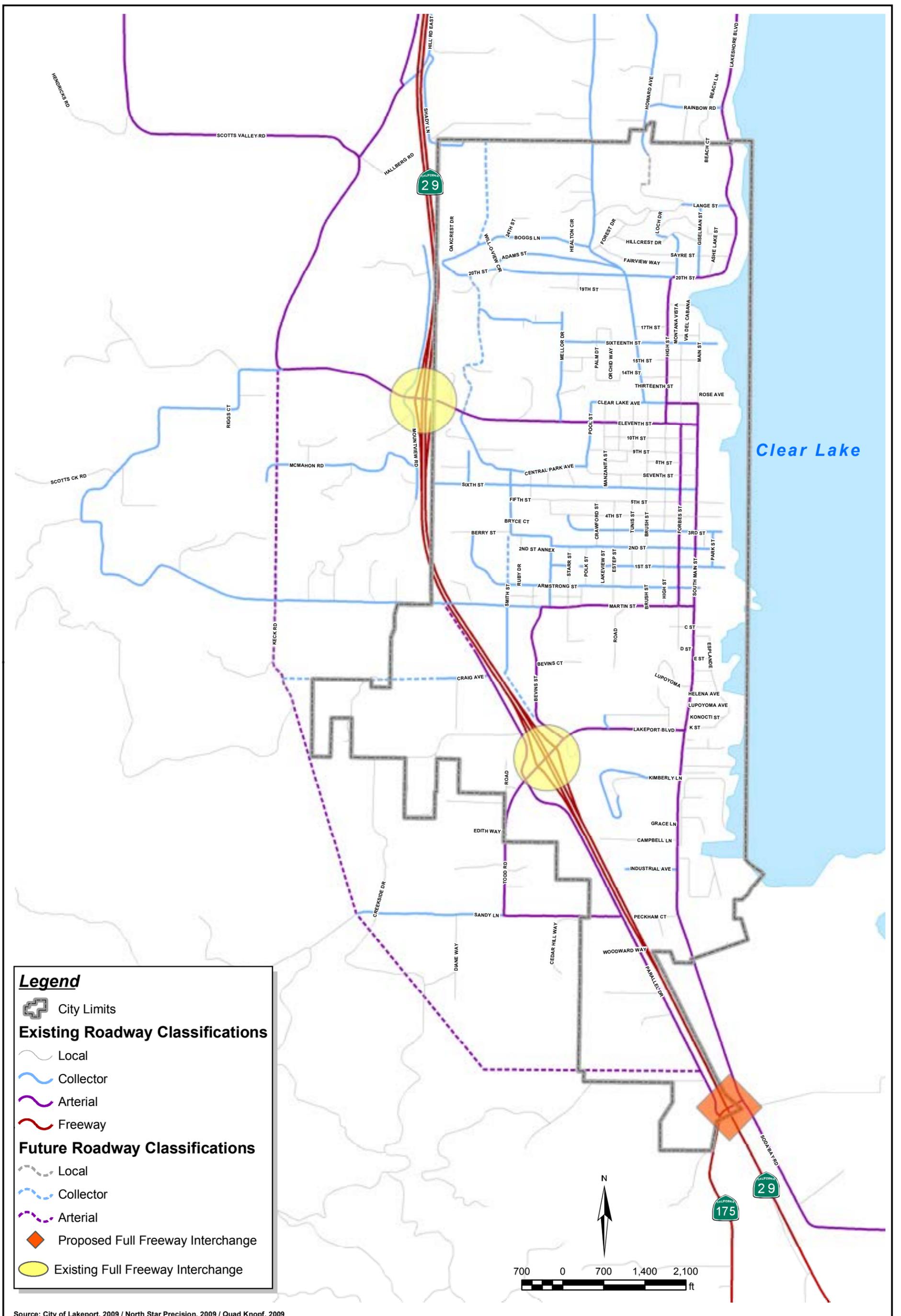
As the City continues to grow, there will be a need to identify increased revenue sources in order to maintain and improve the Lakeport street system. New development shall pay for its share of multi-modal transportation improvements required to accommodate the growth that it generates. Approval of new developments and/or financial contributions toward improvements required as the result of project approval. The transportation impacts of development occur throughout the region irrespective of jurisdictional boundaries. Development in the County near to the City will affect traffic near Lakeport, and similarly the growth of Lakeport will impact the County's roadway system. For this reason, it is necessary to establish a regional traffic mitigation fee program involving Lake County and the City.

BICYCLE TRANSPORTATION

The City has a fragmented bicycle circulation network which uses a variety of local streets. East-west routes through the City are limited. Few improvements have been made to the bikeways system in the past due to a lack of funds. The importance of a safe and comprehensive bikeways system is recognized and will be more fully incorporated into the City's transportation planning. Lakeport is a sufficiently small and compact community where it is still practical to use a bicycle for many trips. (Bikeways are also discussed in relation to paths and trails in the Conservation, Open Space and Parks Element.)

The California Street and Highways code has established three categories of bikeways based on needs and physical conditions of the right-of-way. The bikeway categories are as follows:

- Class 1 Bikeway-Bike Path-Bike Trail: these facilities are constructed on separate right-of-ways, are completely separated from the street traffic and have minimal crossflows of automobile traffic. The state standard for minimum paved width of a two-way bike path is eight feet.
- Class 2 Bikeway-Bike Lane: A restricted right-of-way for the exclusive use of bicycles with vehicle parking and crossflow by pedestrians and motorists permitted. Bike lanes are normally striped within paved areas of highways and are one-directional with a minimum standard width of five feet.



Source: City of Lakeport, 2009 / North Star Precision, 2009 / Quad Knopf, 2009

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- **Class 3 Bikeway-Bike Route:** A route for bicyclists designated by signs or other markings and shared with pedestrians and motorists. Bike routes are typically designated to provide linkages to the Bikeway system where Class 1 or 2 Bikeways cannot be provided.

The existing bikeways system in Lakeport provides a basis for expanding bicycle use for both work and recreation related trips. Increasing the number of Class 1 and 2 bikeways and providing additional bike storage facilities at public transit facilities, commercial/office developments and schools would significantly promote greater use of bicycles near the City. [Figure 7](#) indicates the existing and future bikeways in Lakeport.

FACILITIES FOR PEDESTRIANS

Many residential areas in the City are built without sidewalks. The construction of sidewalks would significantly increase pedestrian safety, particularly for children going to and from school. Funds to construct sidewalks in these areas are available from Improvement Districts where property owners agree to pay for sidewalk construction and from the City's General and Redevelopment Funds. Use of the City's General Fund to build sidewalks is unlikely, unless community-wide benefit can be demonstrated. It is recommended in the Policy section that the City carry out an inventory and map existing sidewalks in relation to schools, parks and major arterials to identify priority areas for sidewalk construction and inform the community of the financing options for such improvements.

The importance of improving facilities for pedestrians in Lakeport is acknowledged in various sections of this Plan. In some areas of the City, the lack of sidewalks represents a potential safety hazard and City policies now require that sidewalks be installed at the time of development. Providing additional pedestrian paths in the Downtown area is one of the key aspects of the Urban Design Standards. The Conservation, Open Space and Park Element identifies existing and proposed walking trails throughout the community.

Generally, sidewalks should be installed along both sides of all downtown streets, arterials, collectors and on all streets leading to public transit facilities and to schools. In low density residential areas, sidewalks on only one side of the street may be appropriate, depending on the street configuration, topography and location of the development.

In older areas already developed without sidewalks, and in low density residential areas which typically have a swale adjacent to the road instead of a sidewalk, curb and gutter, it may be preferable to build an asphalt pathway to separate pedestrians from vehicular traffic.

Adequate lighting is essential for safety for all pedestrian facilities. Much street lighting is vehicular rather than pedestrian-oriented. Pedestrian-oriented lighting is typically located lower to the ground and is more closely spaced than vehicular-oriented lighting.

PUBLIC TRANSIT

The Lakeport area is served by Lake Transit. Fixed route service links the City with Ukiah via SR 29, SR 20, and US 101 (Route &), as well as with Northshore and Southshore communities (Route 1 and Route 4) from the 3rd Street/Main Street transit hub. A door to door dial-a-ride service is also available.

Public transit is financed through a portion of the State sales tax which is reserved for that specific use. The local transportation planning agency, Lake County/City Area Planning Council (APC), is responsible for administering the funds in Lake County. Requests for new service, service changes, and service reductions are considered by the APC.

TRAFFIC SAFETY

As vehicular traffic increases and roadways and intersections become more heavily used, the potential for conflict increases. The demand for safer intersections and roadways and the necessity for appropriate measures to improve traffic operation will increase with growth. The emphasis of the policies below is to improve traffic safety below by identifying and removing roadway hazards.

AIR TRANSPORTATION

Lampson Field is located in the County outside of Lakeport's Sphere of Influence. It provides the principal air transportation facility in western Lake County. Although there are no scheduled commercial flights into Lampson Field, it has a significant volume of private aircraft operations and provides an air taxi service. The County's Master Plan for Lampson Field Airport describes the expected growth in airport operations and related development to the year 2010. The City is represented on the Airport Land Use Commission (ALUC) and is working to mitigate impact on Lakeport of the proposed Lampson Field Airport expansion. In addition, sea planes regularly land on Clear Lake near the city boundaries. Additional policies and programs relating to Lampson Field Airport are contained in the Safety Element.

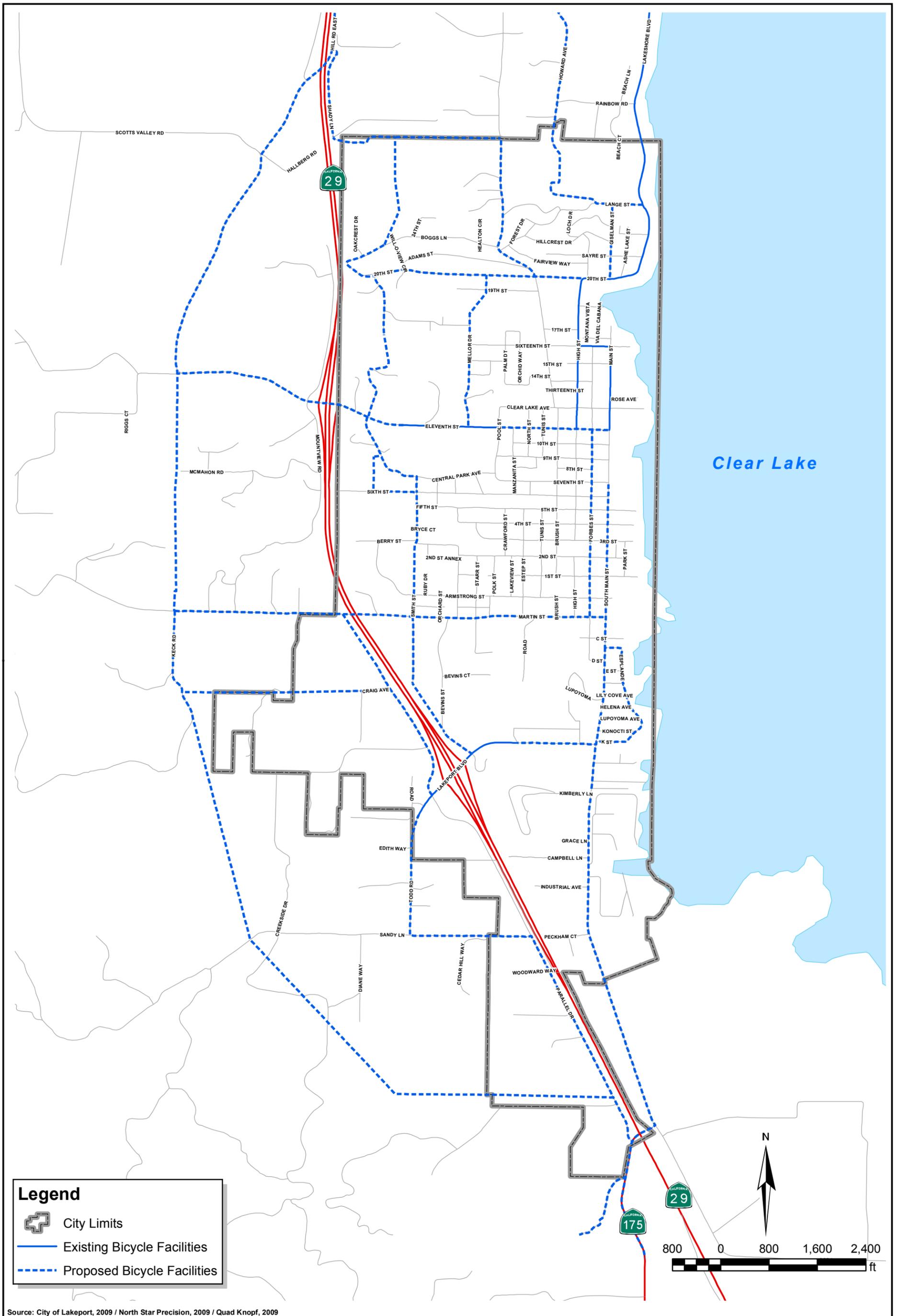
POLICES & PROGRAMS

Roadway System

Policy T 1.1: Roadway Improvements. Implement Lakeport's Five Year Roadway Capital Improvement Program.

Policy T 2.1: Signalization. Intersections should be considered for traffic signals when an analysis of traffic levels and safety factors establish a clear need for such an improvement.

Policy T 3.1: Couplet Systems. Evaluate the effectiveness, cost and impacts on urban design and community identity of the one-way couplet systems listed in Appendix B prior to implementation.



Program T 3.1-a: Carry out a thorough evaluation of the effectiveness of the one-way couplet systems listed in Appendix B that takes into consideration: their effectiveness; cost; and impacts on safety, parking, community identity, existing residential neighborhoods and on the downtown area. Ensure that Lakeport residents and business people are fully informed about the couplet evaluation study and have every opportunity to participate in its review through community workshops and public hearings.

Responsibility: Community Development and Public Works Departments

Policy T 4.1: Traffic Mitigation for New Development. Require new development to provide off-site improvements that adequately mitigate traffic problems they generate.

Policy T 5.1: Disruption of Street Improvements. Strive to make improvements to the street network in a manner that minimizes disruption to adjacent residential neighborhoods.

Program T 5.1-a: Establish, in cooperation with Caltrans and the County, mitigation measures to reduce the impact of adjacent neighborhoods for both the construction phase as well as for permanent improvements to State Routes 29 and 175 and other roadway improvements.

Responsibility: Community Development and Public Works Departments.

Program T 5.1-b: Require developers to provide setbacks, landscaping or other appropriate measures through the plan program to protect adjacent land uses from traffic impacts such as noise, air quality, and headlight glare. Develop plan lines for street improvements and keep these on file at the Public Works Department.

Responsibility: Community Development and Public Works Departments.

Policy T 6.1: Roadway Design Standards. Establish specific roadway design standards for the construction and improvement of highway arterials, collectors and local streets. The design standards shall accommodate the needs of all users including bicyclists, pedestrians, transit riders and motorists in accordance with the Complete Streets Act of 2008.

Program T 6.1-a: Revise the Zoning and Subdivision Ordinances to carry out Policy T 6.1.

Responsibility: Community Development and Public Works Departments.

Policy T 7.1: Interjurisdictional Cooperation. Cooperate with other jurisdictions to develop and implement regional solutions to traffic problems and request that the County enter into a management agreement.

Program T 7.1-a: Continue to participate in the County Area Planning Council.

Responsibility: City Council, Community Development and Public Works Departments.

Program T 7.1-b: Support efforts to obtain funding from Caltrans for improvements to the State Routes 29 and 175.

Responsibility: Community Development Department

Program T 7.1-c: Continue coordination with the Lake County 'Area Plans' to improve transportation for Lakeport.

Responsibility: Community Development and Public Works Departments

Policy T 8.1: Downtown Traffic Plan. Develop a traffic plan for the Central Business District as defined in the Community Design Element.

Program T 8.1-a: Prepare and adopt a traffic plan for the Central Business District.

Responsibility: Community Development and Public Works Departments and the Lakeport Redevelopment Agency

Policy T 9.1: Level of Service. Level of Service (LOS) shall be considered in the Environmental Review process. Level of Service, however, shall not be used as the sole quantitative performance criteria to limit development, or as a prerequisite for approving development.

Policy T 10.1: Access to Arterial or Collector Streets. Ensure that new developments which generate high traffic volumes, such as high density residential uses and commercial uses, have direct access to arterial and/or collector streets.

Policy T 11.1: Reduction of Through Traffic on Local Streets. Divert through traffic from using local streets in residential areas to arterials and collectors wherever possible.

Program T 11.1-a: Include the Roadway Classification system (Table 2-1) in the revised Zoning Ordinance.

Responsibility: Community Development Department

Program T 11.1-b: Adopt and enforce a truck route plan for Lakeport that limits truck routes to arterial and collector streets.

Responsibility: Community Development, Public Works and the Police Department

Program T 11.1-c: Consider the following traffic calming measures, as appropriate, to reduce through-traffic from using the City's local streets in residential areas:

- a) utilize one-way street systems;
- b) require narrowed and landscaped entrances to residential areas experiencing heavy through traffic as appropriate;
- c) complete the collector and arterial street system;
- d) restrict turning movements into residential areas;
- e) reduce road widths
- f) develop traffic roundabouts

Responsibility: Community Development and Public Works Departments

Policy T 12.1: Improved Traffic Movement. Facilitate free flow of vehicular traffic on arterials and collectors.

Program T 12.1-a: Restrict private access, driveways, parking lot entrances, and other curb cuts on arterial and collector roads. Adopt a standard for defining the location and proximity of curb cuts on arterials and collectors in the Zoning Ordinance.

Responsibility: Community Development and Public Works Departments

Program T 12.1-b: Revise the Zoning Ordinance to prevent new single family homes or garages fronting on arterial roads wherever possible.

Responsibility: Community Development Department

Program T 12.1-c: Discourage strip commercial uses except where they are specifically designed to reduce traffic impacts and substantial evidence is provided that significant traffic impacts will be mitigated.

Responsibility: Community Development Department

Program T 12.1-d: Revise the Zoning Ordinance to establish thresholds and guidelines for the implementation of traffic impact studies and to require traffic studies for all high traffic generating uses.

Responsibility: Community Development and Public Works Departments

Program T 12.1-e: Provide upgraded traffic control and information devices to improve circulation in areas with gaps in the roadway system.

Responsibility: Community Development and Public Works Departments

Policy T 13.1: Extension of Arterial and Collector Streets. Require the continuation of collector streets into adjacent properties, wherever possible in new developments, including the dedication of land for right of way and alignments as established by the Figure 6, to eliminate gaps in the roadway system and to facilitate traffic movement.

Policy T 14.1: Street Maintenance. Maintain an appropriate level of roadway maintenance within the City to reduce deterioration of the roadway system commensurate with available funding.

Program T 14.1-a: Prepare an annual report on roadway maintenance needs for City Council consideration and adopt and implement an annual road maintenance program.

Responsibility: Public Works Department

Program T 14.1-b: Consider weight limits for the City street system.

Responsibility: Public Works Department

Program T 14.1-c: Continue to implement a pavement management system.

Responsibility: Public Works Department

Program T 14.1-d: Develop maintenance standards for each roadway classification.

Responsibility: Public Works Department

Program T 14.1-e: Continue to coordinate long-term planning with utility companies prior to overlays.

Responsibility: Public Works Department

Policy T 15.1: Private Roads in the Sphere of Influence. Work with the County to ensure that private roads are permitted only for low density housing developments.

Program T 15.1-a: Request review of all development proposals within the Sphere of Influence from the County. Prepare written comments for County in a timely manner and negotiate an urban management agreement and common street standard.

Responsibility: Community Development Department

Policy T 16.1: Private Roads Within City. Adopt standards for private roads within the City.

Policy T 17.1: Acceptance of Roads into City Street System. Roads shall conform to the City of Lakeport standards for width, grade, structural section, etc., as contained in the Municipal Code.

Program T 17.1-a: Require that all roads and streets be constructed to City standards prior to dedication and acceptance by the City.

Responsibility: Community Development and Public Works Departments

Policy T 18.1: Traffic Mitigation Fees. Require new developments to pay for their fair share of planned roadway improvements.

Program T 18.1-a: Consider adopting and implementing a City-Wide Traffic Mitigation Fee (TMF) Program for all areas within the City based on trip generation for new development or significant enlargement of existing uses, including residential uses. (The City-Wide Traffic Mitigation Program should be coordinated with a regional TMF Program established between the City and Lake County).

Responsibility: Community Development and Public Works Departments

Program T 18.1-b: Work with Lake County and consider establishing a regional Traffic Mitigation Fee Program to jointly collect and allocate funds to improve transportation facilities.

Responsibility: Community Development and Public Works Departments

Program T 18.1-c: Review and revise as needed the Traffic Mitigation Fee Schedule every two years.

Responsibility: Community Development and Public Works Departments

Program T 18.1-d: Report on the status and use of the Traffic Mitigation Fee Fund annually with the review of the Capital Improvement Program.

Responsibility: Community Development and Public Works Departments

Program T 18.1-e: Use the City Traffic Mitigation Fee Program to carry out projects as soon as sufficient funds are received.

Responsibility: Community Development and Public Works Departments

Policy T 19.1: Funding for Street System Improvement. Utilize, as appropriate, the following funds for improvements to the City’s street system: Measure I sales tax revenue; Redevelopment funds; bonds; improvement or assessment districts; and street light districts.

Policy T 20.1: Capital Improvement Program. Adopt a Capital Improvement Program identifying required improvements to Lakeport’s transportation system.

Program T 20.1-a: The Planning Commission and the City Council shall review annually the CIP.

Responsibility: Community Development and Public Works Departments

Bicycle Transportation

Policy T 21.1: Improve the Bikeways System. Create and maintain a safe, convenient and effective bikeway system.

Program T 21.1-a: Implement the bikeway route system as shown on Figure 7.

Responsibility: Community Development and Public Works Departments

Program T 21.1-b: Actively pursue grant funding to assist in the construction of additional bikeways.

Responsibility: Community Development and Public Works Departments

Program T 21.1-c: Amend the Zoning Ordinance to require such bicycle related amenities as bike rack/storage facilities for commercial/office, industrial and high density residential developments as well as for park facilities.

Responsibility: Community Development Department

Program T 21.1-d: Publish and periodically update a map which identifies bikeways in the City and the Sphere of Influence.

Responsibility: Community Development Department

Program T 21.1-e: Construct bikeways according to the standards established by Caltran’s Planning and Design Criteria for Bikeways.

Responsibility: Community Development and Public Works Departments

Program T 21.1-f: Incorporate Class 2 bikeways into new arterial and collector streets wherever feasible.

Responsibility: Community Development and Public Works Departments

Program T 21.1-g: Continually maintain bikeways within the City, including patching and sweeping in order to remove debris. Implement a program for inspecting road cuts by contractors and utility companies to assure compliance with City standards and reduce hazards.

Responsibility: Community Development and Public Works Departments

Policy T 22.1: Dedication of Right-of-Way. Require the dedication of land for the development of bicycle facilities in all new major land developments or for proposed developments located in an area designated as part of the Bikeways Plan as show in Figure 7.

Policy T 23.1: Update Bikeways Plan. Update the Bikeways Plan within five years of adoption of the Transportation Element consistent with the Regional Bikeway Plan developed by the Lake County/City Area Planning Council.

Policy T 24.1: Coordinate Bikeways Plan. Coordinate with Lake County the development of additional bikeways with the trails system indicated in the Conservation, Open Space and Parks Element, the Lakefront Master Plan, and the requirements of the Transportation Element.

Pedestrian Facilities

Policy T 25.1: Improve Pedestrian Facilities. Create and maintain a safe and convenient pedestrian system.

Program T 25.1-a: Establish and enforce standards for sidewalks, curb and gutter and pedestrian pathways in the Municipal Code for all new developments. Curbs may be mountable or vertical.

Responsibility: Community Development and Public Works Departments

Program T 25.1-b: Permit, where appropriate, asphalt pedestrian pathways in low density single family residential areas in lieu of curb, gutter and sidewalk configurations taking into account community sentiment, frontage improvements on adjacent streets, potential for nearby additional infill development., soils conditions, and other relevant factors. Revise the Zoning and Subdivision Ordinances accordingly.

Responsibility: Community Development and Public Works Departments

Policy T 26.1: Sidewalks in New Street Improvements. Include sidewalks or pedestrian paths in all new street improvements.

Program T 26.1-a: Adopt standards for pedestrian facilities such as sidewalks, pedestrian paths, curbs, gutters, handicapped ramps in the revised Zoning and Subdivision Ordinances.

Responsibility: Community Development and Public Works Departments

Policy T 27.1: Pedestrian Facilities as Traffic Mitigation. Consider pedestrian facilities such as sidewalks and pedestrian paths as an essential traffic mitigation for new developments.

Policy T 28.1: Redevelopment Funds. TDA and CDBG Funds for Pedestrian Facilities: Utilize development tax-increment financing, TDA and Community Development Block Grant (CDBG) funds for pedestrian facilities, as appropriate.

Policy T 29.1: Handicapped Accessibility. Improve accessibility for the handicapped.

Program T 29.1-a: Continue to review all projects for handicapped access and require the installation of curb cuts, ramps and other improvements facilitating handicapped access in conformance with Title 24 of the California Administrative Code. Upgrade existing facilities as required by Title 24.

Responsibility: Community Development and Public Works Departments.

Policy T 30.1: Street Lighting. Consider street light installation, designed for pedestrian rather than vehicular lighting requirements in areas, where moderate to heavy pedestrian traffic is expected and to improve safety.

Program T 30.1-a: Establish lighting standards and specifications for pedestrian paths and sidewalks in the Zoning Ordinance.

Responsibility: Community Development and Public Works Departments

Policy T 31.1: Dedication of Land for Pedestrian Facilities. Require dedication of land for pedestrian facilities in compliance with policies contained in the Conservation, Open Space and Parks Element.

Policy T 32.1: Improvement Districts. Consider the formation of Improvement Districts in order to fund pedestrian facility improvements in developed areas of the city.

Policy T 33.1: Additional Sidewalks in Existing Residential Areas. The City shall endeavor to use all feasible and available means to construct sidewalks in priority areas.

Program T 33.1-a: Inventory and map the sidewalks in the City in relation to parks, schools and other pedestrian-intensive routes. Develop a priority for the construction of additional sidewalks. Integrate the sidewalk priority into the City’s Five Year Capital Improvement Program (CIP).

Responsibility: Community Development and Public Works Departments.

Program T 33.1-b: Inform the community, and specifically property owners in areas designated high priority for sidewalk construction, through the newspapers, direct mail and other means, of the costs, benefits and procedures for establishing an Improvement District for sidewalk construction.

Responsibility: Community Development and Public Works Departments.

Program T 33.1-c: Provide assistance for the establishment of Improvement Districts for residents of built-out areas who wish to install sidewalks or pedestrian pathways.

Responsibility: Community Development and Public Works Departments.

Public Transit

Policy T 34.1: Design Guidelines for Public Transit. The City will coordinate with Lake Transit Authority and establish design guidelines for residential and commercial development to facilitate future public transit service.

Program T 34.1-a: The City will coordinate with Lake Transit Authority and establish design guidelines in the Zoning Ordinance to facilitate the future public transit service. Consider identifying areas for the location of future bus stops, right-of-ways for bus turnouts, and facilities in high density residential developments to facilitate future use of public transit.

Responsibility: Community Development and Public Works Departments

Policy T 35.1: Dial-A-Ride and Senior Transit Services. Continue to encourage the Dial-A-Ride, Senior Transit and other transit services for persons with special transit needs.

Program T 35.1-a: Continue to monitor the operation of the Dial-A-Ride and Senior Transit services to identify problems and needs. Work with these transit service providers to provide assistance in planning routes and obtaining additional funding.

Responsibility: Community Development and Public Works Departments

Policy T 36.1: Public Transit. Continue operation of public transit and cooperate with the Area Planning Council and Lake Transit Authority to continue to implement a regional public transit system.

Responsibility: Community Development and Public Works Departments

Traffic Safety

Policy T 37.1: Speed Zones. Periodically review and adjust speed zones in accordance with the requirements of the California Vehicle Code.

Responsibility: Community Development and Public Works Departments

Policy T 38.1: Traffic Control Devices. Traffic control devices shall conform to the Manual on Uniform Control Devices or Caltrans' Traffic Manual warrants for installation, maintenance, and operation.

Program T 38.1-a: Develop and maintain traffic control device inventory and deficiency lists.

Responsibility: Public Works Department

Policy T 39.1: Roadway Safety. Increase the safety of the roadway system by removing hazards.

Program T 39.1-a: Review traffic accident records annually to determine where additional street lighting or modifications to the existing street lighting may be required.

Responsibility: Police and Public Works Departments

Program T 39.1-b: Review high accident areas annually and make recommendation for improvements to the street system. Ensure adequate enforcement of existing speed zones.

Responsibility: Police and Public Works Departments.

Program T 39.1-c: Develop safe route to school plans in cooperation with the school district and the Area Planning Council.

Responsibility: Police and Public Works Departments, the Lakeport Unified School District, and the Area Planning Council.

Policy T 40.1: Increased Safety and Accessibility. Provide roadway improvements to increase safety and accessibility for both motorists and pedestrians and to reduce congestion on existing streets.

Program T 40.1-a: Require public street right-of-way dedications as development occurs.

Responsibility: Public Works Department

Program T 40.1-b: Evaluate the feasibility of installing additional pedestrian crossings wherever necessary.

Responsibility: Community Development and Public Works Departments

Program T 40.1-c: Develop and promote a school safety and education program in collaboration with the Lakeport Unified School District.

Responsibility: Police Department

Policy T 41.1: Traffic Separation. Separate vehicular, bicycle and pedestrian traffic wherever possible.

Program T 41.1-a: Monitor and record accidents on City's streets and recommend safety-related improvements with the annual review of the City's Capital Improvement Program.

Responsibility: Police and Public Works Departments

Air Transportation

Policy T 42.1: Regional Airport Development. Consider the development of a regional airport with scheduled commercial or commuter service. Study the impact of expanding Lampson Field into a regional airport.

Program T 42.1-a: Consider such methods as participation in an airport district, joint management of the facility, or City acquisition of the airport to develop Lampson Field into regional airport.

Responsibility: City Council

Program T 42.1-b: Cooperate and work with the County to develop an Airport Master Plan and expand Lampson Field

Responsibility: City Council.

Additional policies and programs related to aircraft noise are contained in the Noise section of the Safety Element.

Policy T 43.1: Public Participation. Seek public participation in the preparation and implementation of regional and local transportation plans

Policy T 44.1: Environmental Quality. Ensure that transportation facilities do not adversely impact irreplaceable resources, such as the lakefront, riparian corridors, open space, and park facilities. Minimize the air, noise, and water pollution due to transportation facilities.

Responsibility: Community Development and Public Works Departments

Policy T 45.1: Community Character. Ensure that transportation facilities and improvements will not adversely impact or reduce the character of the community and the Central Business District.

Responsibility: Community Development and Public Works Departments

Policy T 46.1: Interagency Coordination. Continue to coordinate with Lake County and Caltrans to insure development that is occurring in the County is consistent with the City's long-term transportation policies.

Responsibility: Community Development and Public Works Departments

Policy T 47.1: County Road System. Continue coordination with the County of Lake for the provision of improvements to the County road system. Utilize the Road Network Needs Study as a basis for determining required improvements.

Responsibility: Community Development and Public Works Departments

V. COMMUNITY DESIGN ELEMENT

V. COMMUNITY DESIGN ELEMENT

Purpose

This Community Design Element is intended to address the built and natural environment. This includes the image and character of Lakeport's neighborhoods; the quality of buildings, streets, and public spaces; the community's historical attributes; and the importance Clear Lake has in defining the character of the City.

Community design is about community building. It is broader in scope than the mere appearance of a building; it concerns the built character, order, and sense of place of the area. It is the interrelationship between various components (buildings, transportation systems, open space, vistas, interaction of humans between each other and the natural environment, heritage, and economics) that, when put together, make up a total community. Good community design is building communities that are safe for children to walk to school and for the elderly to cross the street. It is how to maintain the downtown as a place where local residents, as well as visitors want to go to shop, dine, and interact with each other. It balances the often conflicting goals of respect for the environment with economic gain. It creates places for people to feel comfortable with each other and with the built environment.

Aspects of Community Design in the Built Environment

RESIDENTIAL DEVELOPMENT

Residential districts in Lakeport provide residents with a wide array of lifestyles and home choices. Over 18 percent of the housing units in Lakeport are mobile homes, most located within mobile home parks. Residential areas in the northwest portion of the City and within the Sphere of Influence are predominately large-lot rural residential neighborhoods. Residential areas near the city-center follow a more traditional small lot residential development pattern with grid streets, minimal building setbacks, and residential densities in excess of 7 units per acre.

As the residential population of Lakeport continues to grow, additional housing units and residential neighborhoods will be developed both as infill, and as new construction around the periphery of the existing developed areas of Lakeport. Future patterns of growth will have a significant impact on the character and sense of place of the City.

Safe, comfortable housing is, of course, a key element of a livable community. New development must respect the scale and intensity of adjacent older neighborhoods. New development should provide physical connections through streets, lanes and/or trails wherever possible so that pedestrians, bicycles, automobiles, and other forms of transit can move safely and easily between local destinations, and between home and work.

RURAL RESIDENTIAL DEVELOPMENT

Much of the existing residential development within the Lakeport Sphere of Influence and around the periphery of the City limits is rural in nature, with homes located on relatively large lots (1 acre and larger). These areas, commonly referred to as “Conventional Subdivisions” include residential developments where all the land is divided into houselots and streets, with the only open space typically being undevelopable wetlands, steep slopes, floodplains, and stormwater management areas.

These two figures represent land use patterns in a typical conventional subdivision. Most of the land on the project site is parceled into private lots, which leaves very little land left over for habitat preservation and open space.

Figure 8a, Conventional Subdivision Layout

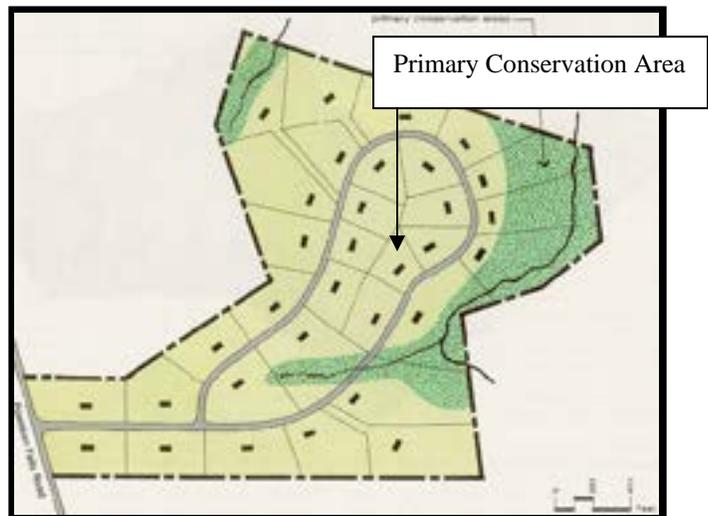


Figure 8b, Conventional Subdivision Layout



Images from Rural by Design, Randall Arendt, et al.

As future development takes place around the periphery of Lakeport, and within the Sphere of Influence, every attempt should be made to cluster residential lots where feasible. Future subdivision of large parcels or tracts of land for residential development should attempt to protect and enhance the natural environment. Primary sensitive conservation areas such as bodies of water, easements, floodplains, steep slopes, wetlands, and wooded areas should be preserved and protected from encroaching residential development. Site designs, lot layouts, and the positioning of roads and infrastructure should also respect natural buffers, historical components, landmarks, prime views, land contours and public vistas. Properly designed clustered residential development should allow every lot to front publicly owned and preserved open space.

Figure 9a, Clustered Residential Subdivision

These two figures represent clustered residential development patterns. By placing smaller lots relatively close together, large amounts of contiguous open space are preserved, which allows for improved habitat conservation, greater public access, and a network of trails which would not be possible in a conventional subdivision.



Figure 9b, Clustered Subdivision Layout



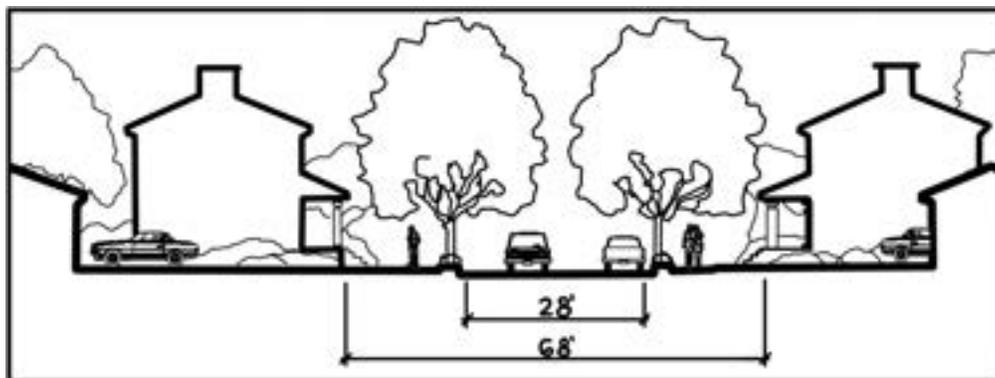
Images from Rural by Design, Randall Arendt, et al.

TRADITIONAL NEIGHBORHOOD DEVELOPMENT

Wherever practical, new residential neighborhoods and new residential developments in and around Lakeport should follow traditional neighborhood design guidelines. Traditional neighborhoods are characterized by the following traits:

- Streets are arranged on the grid system, rather than curvilinear streets with cul-de-sacs or flag lots.
- Roads are generally narrower than conventional subdivisions, and have curbs, bike lanes, and a planting strip between the road and the sidewalk.
- Development standards are flexible to allow for a variety of lots sizes, minimal setbacks, and zero lot lines.
- Where practical, garages should be placed to the rear of the parcel, accessible through an alleyway.
- Homes should be oriented towards the streets and common areas and have front porches and verandas.
- Generous planting of street trees.
- Parks and schools should be established within or near these types of residential neighborhoods.

Figure 10, Traditional Neighborhood Design Street Section



Street design can have a tremendous impact on the character and pedestrian friendliness of a neighborhood. Street trees provide shade, enhance the walking experience, and provide a safety buffer between vehicles and pedestrians. Narrow street widths act as a traffic calming measure, additionally enhancing the walkability of neighborhoods.

Traditional residential neighborhoods are particularly appropriate near or adjacent to mixed-use developments, civic facilities, schools, and parks.

INFILL, REDEVELOPMENT, AND OLDER AREA REVITALIZATION

Infill and reuse opportunities will become increasingly important as compact development within the existing urban area continues. Compact development maximizes the efficient use of land and infrastructure and avoids the intrusion of urban uses on the natural landscape. Infill and reuse strategies must also be major components of economic development and redevelopment planning. Infill uses, by definition, are additions to the existing community and must respect the pre-existing uses, patterns, and community aesthetics. Wherever possible, infill strategies should create areas which contain mixtures of complementary uses that are within safe, easy and convenient walking distance of each other.

COMMERCIAL DEVELOPMENT

Over the next 20 years Lakeport will continue to grow and expand its economic base and commercial land uses. Much like residential neighborhoods, commercial areas must serve unique purposes and adapt to suit the existing conditions and future needs of the community and the neighborhood in which they are located. The placement, design, density, and orientation of new commercial development within Lakeport will have an impact on the future character of the City.

There are a variety of forms that commercial development can take, and each has corresponding effects on other types of land uses, traffic, air quality, pedestrian accessibility, and aesthetic quality.

LINEAR DEVELOPMENT

Linear commercial development, or strip development, typically focuses on lining new offices and businesses along a single major roadway. This type of growth creates a “strip” of commercial uses, typically encompassing both sides of a roadway. Characteristics of linear development include the following:

- Parking is situated in the front of the building, with lots generally running the length of the building
- Buildings are set back relatively far back from the roadway to allow for larger parking areas in front of the development.
- Parking lots are provided for individual buildings, increasing the total amount of land needed for new developments.
- Landscaping improvements must cover a large linear area around the front and sides of lots, increasing the amount of landscaping needed to effectively screen and shield buildings.

Figure 11
Linear Commercial Development



NODAL DEVELOPMENT

Nodal, or clustered, commercial development groups offices and businesses around major intersections, allowing for a more concentrated pattern of growth. By clustering similar or complimentary land uses, nodal development allows for such conveniences as shared parking and access, pedestrian friendly site design, common public open spaces, and reduced overall land consumption. Characteristics of nodal development include the following:

- Parking is set to the rear of buildings to reduce impacts on the streetscape and improve the visual aesthetic quality of the development.
- Building setbacks are reduced, allowing for businesses to locate closer to the street. This allows for greater building visibility and more convenient pedestrian access.
- Shared parking facilities result in a lower overall land consumption than what is normally found with traditional linear commercial development.
- Landscape improvements typically consume less space.
- Businesses and offices which compatible or complimentary uses located within the same development improve the consumer draw to that location and have positive economic ripple effects.

Figure 12, Nodal Commercial Development





In 1985, California joined a growing national movement to improve the quality of life in America's towns, cities and neighborhoods by restoring the economic health of Main Streets historic, traditionally designed central business districts. Developed by the National Trust for Historic Preservation's National Main Street Center, the Main Street Approach organizes a district's comprehensive revitalization efforts into a four-point framework: organization, promotion, design, and economic restructuring. This framework ensures the district's place as the heart of a community.

A certified local Main Street program must meet stringent criteria set forth by California Main Street as well as complete an application and pass an on-site assessment conducted by the state program. California Main Street does not provide funding; the program provides training; information, research, and referral services, and technical assistance.

The program is focused on enhancing the economic, social, cultural, and environmental well-being of historic and traditional commercial districts located in California's diverse cities, towns, and neighborhoods, California Main Street has helped communities build strong broad-based organizations to implement and manage the revitalization process.

DOWNTOWN COMMERCIAL DEVELOPMENT

Lakeport has been able to maintain its small town charm and attraction to visitors in part by maintaining the vitality of its downtown. The downtown commercial area's landscaping, history, retail opportunities, pedestrian accessibility, and proximity to Clear Lake are all positive attributes that create the cultural and economic core of the City for both residents and visitors.

The Downtown Master Plan, adopted in 1989, established urban design guidelines specifically for downtown Lakeport; the area defined by Martin St. to the south, Seventh St. to the north, Forbes St. to the west, and Clear Lake to the east. The purpose of the Plan is to revitalize the downtown and strengthen its role within the community. Key goals of the Downtown Master Plan include:

- To increase property values through construction of new commercial and multifamily residential development and renovation of existing structures.
- To provide facilities and amenities for the downtown which encourage pedestrian movement and special events.
- To preserve and enhance historic buildings and sites.

- To retain Lakeport’s small town character while accommodating growth and economic development.
- To improve retail sales volumes of downtown businesses.

MIXED-USE DEVELOPMENT

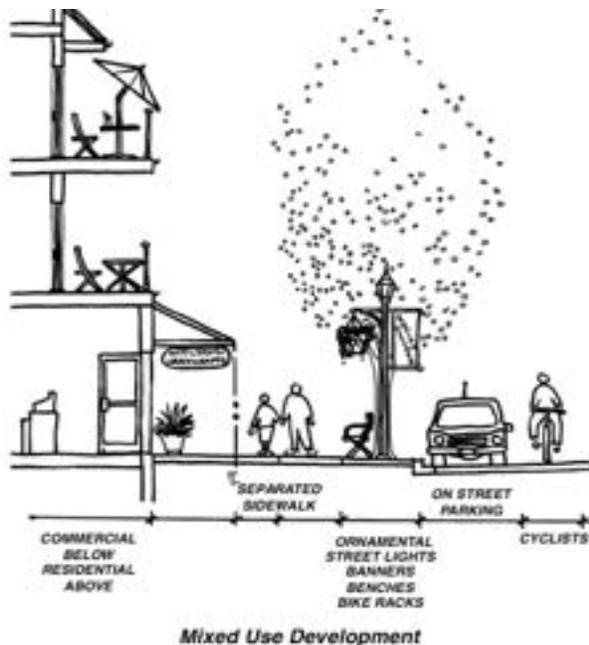
In addition to downtown and pure commercial developments, the City may seek to include mixed-use developments in some areas. Mixed-use areas will include those developments consisting of more than one type of land use. Typical types include combinations of multi-family residential and office, multi-family residential and commercial retail, or commercial institutional.

Mixing land uses (commercial, residential, recreational, educational, and others) in neighborhoods or places that are accessible by bike and foot can create vibrant and diverse communities. Mixed land uses are critical to achieving great places to live, work, play, shop, and meet friends. Mixed land uses also convey substantial fiscal and economic benefits. Commercial uses in close proximity to residential areas often have higher property values and therefore help increase local tax revenues. Mixed-use developments also reduce the amount of land consumed through shared parking arrangements, and vertical rather than horizontal building expansion.

Figure 13, Mixed Use Development



Figure 14, Mixed Use Street Section



Mixed-use development combines ground-floor retail with upper-story offices or residential. Buildings have varied, interesting facades with frequent doors, windows, and architectural styles appropriate to the regional character. Buildings are set at the street, with on-street parking, or close to the street (as shown in Figure 14), with a modest amount of diagonal parking in front. This maintains a close relationship between the street, sidewalk, and buildings, and keeps the street and sidewalk as a pedestrian-friendly realm. In contrast, modern, suburban-style retail development surrounds low, monotonous buildings with large parking lots, discouraging walking.

Lighting

Exterior lighting for pedestrian areas, building facades, and landscape design features should be complementary in style, color, and lamping with public street and pedestrian lighting. It is not necessary to duplicate light fixtures used on city streets but fixtures proposed for building exteriors should work effectively with street lighting. The following policies for architectural lighting are intended to improve the lighting of public and private development throughout the city.

Lighting should serve functional, safety, and aesthetic purposes. Light can be used to identify important civic buildings, thus giving cohesion to the physical structure of the community; to convey a private image for commercial or residential development; and to increase the use of public places at night. The objectives of a lighting program for Lakeport are:

- Encourage an abundance of high-quality outdoor lighting to give important areas of the city vitality and sparkle at night.
- Have on-site lighting contribute to site security.
- Have on-site lighting complement and reinforce the architecture.
- Have on-site parking area lighting fixtures and illumination levels be consistent throughout the city.
- Prevent on-site lighting from casting glare onto adjacent parcels and streets.
- Encourage lighting design that is in conformance with energy saving guidelines.

OBJECTIVES, POLICIES, & PROGRAMS

OBJECTIVE CD 1: TO PRESERVE AND ENHANCE THE QUALITY AND CHARACTER OF EXISTING AND FUTURE RESIDENTIAL NEIGHBORHOODS IN LAKEPORT.

Policy CD 1.1: Higher Densities. New residential development should be built at higher densities in clustered development patterns that minimize infrastructure requirements and maximize open space.

Program CD 1.1-a: Integrate development into natural areas by clustering development and/or adjusting site plans to preserve wetlands, steep slopes, and notable stands of trees or other vegetation. Natural features should function as site amenities. Use incentives such as flexible lot size and configuration to encourage preservation and add amenity value.

Program CD 1.1-b: Through implementation of the City's Subdivision Ordinance, Zoning Ordinance, and design review process; encourage new residential developments to use Traditional Neighborhood Design.

Program CD 1.1-c: Encourage the use of the PD Combining District in the City's Zoning Ordinance.

Policy CD 1.2: Public Access. Site design should maximize public access to and create opportunities for use of shoreline areas in locations contiguous to the lake, stream, or wetland where such access would not jeopardize habitats and other environmental attributes of the water body.

Program CD 1.2-a: Development review of proposed projects shall identify opportunities for increasing public access to Clear Lake, wetlands, streams, and creeks in the Planning Area.

Program CD 1.2-b: Public access easements to Clear Lake, streams and wetlands (where appropriate) between properties, shall be required at ½ mile intervals where feasible.

Policy CD 1.3: Redevelopment. Promote re-investment in and upgrade of existing neighborhoods through redevelopment of small, underutilized parcels, modification and alteration of older housing stock, and improvements to streets and sidewalks to increase property values.

Program CD 1.3-a: Provide incentives such as permit streamlining for projects which improve existing residential neighborhoods.

Policy CD 1.4: Sidewalk Improvements. Sidewalks, walkways or walking paths should be provided along streets in established neighborhoods, where sidewalks have not been previously constructed. Sidewalk width should be ample to safely and comfortably accommodate pedestrian traffic and, where practical, match existing sidewalks.

Policy CD 1.5: Care of Vacant Property. Vacant property should be maintained (landscaped, pruned, mowed, and litter removed) or screened to prevent adverse visual, economic, and health/safety impacts on the surrounding area.

Policy CD 1.6: Visual Compatibility. Architecture of new structures in established areas should be visually compatible with other structures on the site and with adjacent development.

Policy CD 1.7: Architectural Character. Maintain and enhance the architectural character and rural heritage of existing neighborhood areas and the Lakeport community as a whole.

Program CD 1.7-a: Inventory and map significant historic buildings and areas within the Lakeport area.

Program CD 1.7-b: Through the design review process, protect designated architecturally and/or historically significant areas.

OBJECTIVE CD 2: TO PROMOTE COMMERCIAL DEVELOPMENT DESIGNS WHICH FOSTER ECONOMIC GROWTH, REDUCE LAND CONSUMPTION, AND COMPLIMENT ADJACENT LAND USES.

Policy CD 2.1: Pedestrian and Bicycle Access. Ensure safe and convenient pedestrian and bicycle access to commercial areas.

Program CD 2.1-a: Buildings should be sited so that entries and front facades face the public sidewalk; loading docks and vehicular entrances shall be located to the side or rear.

Program CD 2.1-b: Pedestrians and bicycles should be accommodated through the appropriate placement of walkways, bike racks, and rain-sheltered entrances to buildings.

Policy CD 2.2: Clustered Commercial Development. The City shall encourage clustered commercial development nodes and discourage “Strip” commercial development

Program CD 2.2-a: The City should provide flexibility in site design standards; such as allowing for shared parking facilities.

Policy CD 2.3: Development Near Major Intersections. Commercial development should be clustered near major intersections.

Policy CD 2.4: Neighborhood-Serving Commercial. Small-scale neighborhood serving commercial developments shall be encouraged.

Policy CD 2.5: Compatibility with Surrounding Land Uses. Ensure that commercial developments are compatible with surrounding land uses.

Program CD 2.5-a: When located adjacent or near to residential areas, buildings should respect the residential character by avoiding long, uninterrupted expanses of wall and roof planes, and by incorporating architectural features such as covered entries or porches, cupolas, towers, arbors or pergolas, etc. which add variety and interest to larger buildings.

Program CD 2.5-b: Where commercial development abuts residential or other non-commercial uses, appropriate visual and noise buffers shall be included in the site design, such as increased setbacks or landscaped screening.

Policy CD 2.6: Location of Parking. Parking areas are encouraged to be provided to the rear or side of buildings and include trees that reach a mature height of at least twenty feet whenever feasible.

Policy CD 2.7: Energy Efficiency. The siting and design of buildings shall promote energy-efficiency and solar access, and shall minimize impacts on other nearby uses.

OBJECTIVE CD 3: TO ENCOURAGE INFILL DEVELOPMENT WHERE APPROPRIATE.

Policy CD 3.1: Infill Development. The City should work to encourage appropriate infill development throughout the City of Lakeport.

Program CD 3.1-a: The City should consider permit streamlining, fee waivers, and other means to facilitate infill development and ease the application review process.

Policy CD 3.2: Compatibility of Infill Development. Infill development should match the scale, design, and character of the surrounding neighborhood and adjacent structures.

Policy CD 3.3: Funding of Infill Development. The City should explore using redevelopment funds and other forms of public/private financing arrangements to fund infill development projects.

OBJECTIVE CD 4: TO MAINTAIN AND CONTINUE TO PROMOTE A VIBRANT, HEALTHY, PEDESTRIAN ORIENTED DOWNTOWN COMMERCIAL DISTRICT AS THE HEART OF THE CITY.

Policy CD 4.1: Downtown Specific Plan. The City should prepare and adopt a Downtown Specific Plan.

Policy CD 4.2: Design Review. Implement programs such as facade improvement programs and design review, which maintain and enhance Downtown's historic character and commercial vitality.

Policy CD 4.3: Preservation of Existing Public Buildings. Retain existing public offices and facilities Downtown, including the Carnegie Library, the old Courthouse, and City Hall.

Policy CD 4.4: Downtown Development of Entertainment and Retail. Endeavor to locate new entertainment and retail facilities in the downtown area through redevelopment, public/private partnerships and other development tools.

Policy CD 4.5: Small Town Character. Retain the small town character of the downtown area by:

-
- Maintaining and enhancing the historic character and design of buildings, the pedestrian scale and orientation of the downtown area;
 - Endeavor to ensure that future development along the lakefront does not block views of the lake from public streets and recreation areas, nor reduce public access to the waterfront.

Policy CD 4.6: High Density. Continue the pattern of concentrating high density residential and commercial development in the downtown area.

Policy CD 4.7: Public Amenities. Enhance public areas and amenities in the downtown area to make them more inviting and to improve their function and role as the focal point of the community.

Policy CD 4.8: Lakefront Access. Improve and develop pedestrian paths and access between the downtown area and the lakefront.

Policy CD 4.9: Public Open Space. Continue to preserve and acquire additional public open space through dedications, the purchase of fee title or easements.

Policy CD 4.10: Public Art. Provide art in public places and parks.

Program CD 4.10-a: Work with the Lake County Arts Council and the arts community to establish an “art in public places” program.

Policy CD 4.11: Landscaping. Landscaping should be used to enhance the overall community appearance and should be reviewed as an integral part of all development applications. Plant materials should be used in a logical, orderly manner to define spaces and to relate to buildings and structures.

Program CD 4.11-a: Revise the Zoning Ordinance to include landscape standards.

Program CD 4.11-b: Establish a tree planting program with incentives to encourage private property owners to plant trees in front of their properties, according to the street tree concepts established in the Community Design Element.

Policy CD 4.12 Residential Uses. Residential land uses in the Central Business District should be secondary and complimentary to commercial and retail land uses.

Program CD 4.12-a: Revise the Zoning Ordinance to establish specific development criteria for the development of mixed-use and residential uses within the Central Business District. Residential development should be smaller in scale than adjacent commercial development and should not be a prominent feature along the Main Street pedestrian walkway.

OBJECTIVE CD 5: TO ENCOURAGE A MIXING OF LAND USES.

Policy CD 5.1: Overlay Designation. Amend the Zoning Ordinance to include an overlay designation which permits special applications of land use and building design standards to allow for mixed-use developments.

Policy CD 5.2: Specific Plans and Planned Unit Developments. Encourage the use of specific plans and planned unit developments which allow and plan for mixed use development.

Policy CD 5.3: Locations of Mixed-Use Developments. Encourage mixed-use development near the downtown area and near existing and future employment centers.

Policy CD 5.4: User-Friendly Access. Require pedestrian-friendly streetscapes, landscaping, public open spaces, and pathways throughout mixed-use areas to facilitate walking and bicycling.

OBJECTIVE CD 6: TO PROVIDE ADEQUATE PARKING FACILITIES THROUGHOUT THE CITY WHICH CONSUME THE MINIMUM AMOUNT OF LAND POSSIBLE AND DO NOT DETRACT FROM THE VISUAL QUALITY OF THE CITY.

Policy CD 6.1: Flexible Parking Standards. Establish flexible parking standards in the Zoning Ordinance to facilitate a more effective utilization of parking space. Consider flexible standards for mixed use developments comprising, for example: multifamily housing with office or retail uses; shared parking facilities for commercial uses; the establishment of a parking fund and parking-in-lieu fees; and requiring a portion of the parking site area devoted to landscaping.

Policy CD 6.2: Street Frontage. Locate parking facilities wherever possible to the rear of the development, so that the building facade is contiguous with the street frontage and parking areas are hidden from the street.

Policy CD 6.3: Joint Parking Facilities. Require joint parking facilities for commercial, retail, office and mixed uses wherever feasible.

Policy CD 6.4: Buffering Parking Areas. Buffer common parking areas from view from public streets.

Policy CD 6.5: Bicycle and Motorcycle Parking. Provide areas suitable for bicycle and motorcycle parking in all new parking facilities in excess of five spaces.

Policy CD 6.6: RV Parking. Provide parking facilities for recreational vehicles in commercial and residential areas which are properly landscaped and screened. Consider revising the Zoning Ordinance to prohibit parking of recreational vehicles in the front yard (that yard or area within the front one half of the lot) of residential areas.

Policy CD 6.7: Parking Supply. Provide an adequate supply of parking spaces in the downtown area.

Program CD 6.8-a: Prepare and periodically review a Parking Management Plan for the downtown area to analyze the current and future need for parking space and to develop programs which efficiently manage parking facilities. Include the following priorities in the Parking Management Plan:

- First priority - short term for short term users such as retail customers;
- Second priority - long-term off-street spaces on the periphery of the downtown area for all-day users such employees and business owners; and
- Third priority - recreational vehicles, including boats, personal watercrafts, etc.

Program CD 6.8-b: Revise the Zoning Ordinance to establish flexible parking standards in the downtown area to facilitate a more effective utilization of parking space. Consider such factors as: joint parking facilities; proximity to bicycle parking areas; and proximity to off street parking areas.

Program CD 6.8-b: Additional parking should not be required for retail businesses in the downtown area that remodel, renovate or expand their facilities unless additional land on site is available. Require the payment of a parking-in-lieu fee as appropriate.

Program CD 6.8-c: Require City and County employees to park in the long-term parking spaces.

Policy CD 6.8: Parking Lot Feasibility. Evaluate the feasibility of building a public parking lot or garage through the establishment of a Parking Assessment District in the downtown area.

OBJECTIVE CD 7: TO IMPROVE LANDSCAPING, SIGNAGE AND PUBLIC OPEN SPACES THROUGHOUT THE CITY.

Policy CD 7.1: Defined Points of Entry. Clearly define the points of entry to the City through use of distinctive signs, street lighting, and street trees.

Program CD 7.1-a: Establish at the entry points to the City, distinctive signs which are lighted and placed in a landscaped area.

Policy CD 7.2: Public Open Space. Revise the development review process to ensure that a meaningful amount of useable public open space is incorporated into commercial, retail, mixed use and office development. Require a Public Open Space Plan for commercial developments in excess of 3/4 acre. (Usable public open space is space which is accessible to the public and can be utilized for walking, sitting, etc. versus space that exists only to provide visual relief.)

Program CD 7.2-a: Revise the Zoning Ordinance to establish a specific standard for public open space for all non-residential development in excess of 3/4 of an acre.

Policy CD 7.3: Landscaping Appearance. Landscaping should be used to enhance the overall community appearance and should be reviewed as an integral part of all development applications. Plant materials should be used in a logical, orderly manner to define spaces and to relate to buildings and structures.

Program CD 7.3-a: Continue to enforce the Zoning Ordinance, which includes landscape standards. Require older commercial areas to provide landscaping and to maintain existing landscaping.

Policy CD 7.4: Tree Preservation. Facilitate the preservation of existing native trees, the planting of additional street trees, and the replanting of trees lost through disease, new construction or by other means. Achieve continuity of streets through the use of repetition of similar trees and shrubs. (Additional policies and programs relating to trees are consolidated in the Conservation, Open Space and Parks Elements)

Policy CD 7.5: Xeriscaping. Utilize drought resistant landscaping such as xeriscape. Limit the amount of turf or lawn area of the site and require use of water conserving irrigation systems.

Policy CD 7.6: Signage. Facilitate the installation of attractive and functional signs.

Program CD 7.6-a: Revise the sign ordinance to encourage good design in signage. The ordinance should consider the following items:

- *Visual Compatibility.* Each sign should consider visual compatibility with the surroundings. Each sign should be designed to complement the architectural and landscape styles of the main buildings or buildings with respect to visual elements such as construction materials, color, or other design details.
- *Scale of Signage.* The scale of signs, letters, and symbols should be appropriate to their use, whether to catch the eye of a passing motorist or strolling window shopper. Color should be used carefully. Limited use of

several colors with strong contrast between background and signing is recommended to make the signs easily readable.

- *Quality of Signage.* Signs should be constructed with quality materials and in a craftsman-like manner to ensure both an attractive appearance and a durable project.
- *Public Signage.* Public signing and graphics for traffic control and public information should be consistent throughout the city. Special colors and consolidation of signs on special frames could add a positive element to the streetscape.
- *Prohibited Signage.* Promotional banners, balloons or similar promotional devices should not be allowed, except when used on a temporary basis to celebrate a specific event approved by the city. Moving, flashing, or sound emitting signs should be prohibited. Exposed lamps or tubing, except neon, should be discouraged. All conduit, wiring, transformers, raceways, and all fastening devices for sign, face, side, and exposed structures should be concealed from public areas. An effort should be made to reduce copy down to the minimum necessary to convey the message.
- *Temporary Signage.* Temporary development, real estate, and leasing signs should be permitted only during the development phase for the purpose of identifying the business or company developing and leasing the parcel.

Policy CD 7.7: Lighting Fixtures. Utilize the following guidelines for the review of exterior lighting fixtures:

- Night lighting of buildings should be done in a selective fashion and should be indirect in character with no source of light visible.
- Keynote special features such as towers and decorative cornices. Emphasize repetitive elements such as columns.
- Use light to articulate architectural composition, such as spotlighting vertical elements of a vertical building and illuminating roof eaves.
- Use interior light sources as part of the total design. Architectural lighting should articulate and animate the particular building design.
- *Height.* Light standard heights should be related to the lighting need of the use: street lights up to 30 feet high; parking areas up to 18 feet high; walkways and malls up to 15 feet high; planting areas up to 3 feet high.
- *Function.* Lighting for pedestrian movement should illuminate changes in grade, path intersections, seating area, and any other areas along a path

which, left unlit, would cause the user to feel insecure. As a rule of thumb, one foot candle per square foot is adequate. Building-mounted light fixtures should be used judiciously. Their primary purpose should be to illuminate pedestrian spaces. Subtle accent lighting of unique architectural elements should be considered. The arbitrary lighting of building facades and roofs should be prohibited.

- *Hazards.* Light posts should be located in such a manner that they will not become safety hazards to pedestrians or vehicles. Lights should not blink, flash or change intensity. Shatterproof or vandal resistant coverings are recommended for low-level lighting where there is danger of breakage. Lighting should not intrude on adjacent property or cause glare into drivers' eyes. Any light source over 10 feet high should incorporate a cut-off shield to prevent light spill. Service area lighting should be contained within the service yard boundaries and enclosure walls. No light spillover should occur outside the service area. The light source should not be visible from the street.
- *Energy.* Lighting systems should be energy efficient.

Policy CD 7.8: Aesthetic Character. Install a variety of planters, benches, tree grates, bike racks, and trash receptacles to enhance the aesthetic character of the downtown area. Select street furniture that relates well to the historic character of the Downtown. Place street furniture in landscaped areas so as not to impede pedestrian movement.

Policy CD 7.9: Alternative Energy. The City shall encourage and make maximum use of energy from alternative sources, including, but not limited to solar power, wind power, hydropower, and water pumping.

VI. ECONOMIC DEVELOPMENT ELEMENT

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Purpose

The purpose of the Economic Development Element is to provide guidance for economic development within the City of Lakeport in order to attain an economically viable and self-sustaining community. In this sense, economic viability means providing a range of housing and employment opportunities that meet the needs of both residents and workers, attracting families and businesses to create demand for planned land uses and establishing and funding public service levels that preserve and enhance Lakeport's quality of life.

The Economic Development Element is an optional element of Lakeport's General Plan. Authority for the Economic Development Element is found in State Government Code § 65303, which allows cities and counties to add optional elements beyond State-mandated elements. The Economic Development Element is not a required element in the General Plan; however, once adopted an optional element carries the same legal weight as any of the other elements.

Economic Characteristics

The City of Lakeport supports approximately 45% of all jobs in Lake County. Additionally the majority of Lake County Government offices are located within the City of Lakeport. There are six business centers in the Lakeport area, including the historic downtown area which is designated as a California Main Street City. The City's permanent retail trade area population is approximately 30,000, and per capita sales figures are among the highest in the region, and generally higher than the State average. This can be attributed to at least three characteristics of the Lakeport area: a high level of spendable income by residents; the recognition of Lakeport as a local retailing center; and the impact of tourism.

Lakeport is known as a regional recreational destination, and this attribute should be maximized in any effort undertaken by the City to encourage and foster economic development. The clean air, natural beauty, and the multitude of recreational opportunities afforded by Clear Lake and the surrounding areas are great assets to the community and provide an economic advantage to visitor serving businesses.

The largest business sector (in terms of number of businesses) in Lakeport's economy is services (45 percent), followed by retail trade (19 percent), and then finance, insurance and real estate (9 percent). These three sectors account for 639 businesses or 73 percent of all businesses in Lakeport.

The classification of "services" includes some of the larger revenue-generating businesses such as the hospital and other health care providers, but also many of the small "mom and pop" businesses such as repair services, child care, building maintenance, and beauty shops. Total employment in the services sector is 2,342 persons.

Much like the services sector of the economy, the retail sector of the economy is characterized by small retail stores greatly outnumbering the large ones. One half of the 171 retail trade businesses fall into just seven categories: eating places, used merchandise, gifts and novelties, grocery, auto and home supply, miscellaneous retail, and miscellaneous food stores.

The majority of the sales revenue in the City is derived from a minority of businesses. The top 5.4 percent of businesses with revenue over \$1 million per year generate over 65 percent of the total revenue in the City of Lakeport. The top 10.9 percent of businesses with revenue over \$500,000 per year generate almost 76 percent of the revenues in the City. This group of larger businesses includes some large retailers, the school district, banks, a developer and some construction companies, a few grape growers, utilities, a pharmaceutical preparation company, a racing association and some others. One-half of the jobs in Lakeport are concentrated in just forty establishments.

Lakeport's commercial base is spread widely throughout the City in multiple shopping centers, at small commercial nodes, and in dozens of free-standing business locations such as: Shoreline Center, Bruno's Foods, K-Mart, Vista Point Center, Hamburger Hill, Nylander Neighborhood Center, and Willow Tree Plaza. This makes it difficult for Lakeport to create a "sense of place" and an identifiable center. It also creates a busy auto-dependent shopping environment.

The City has undertaken previous efforts to improve economic conditions within the City. In March 2003, the *City of Lakeport Business Retention and Recruitment Strategy* was completed. This report was funded by a Planning and Technical Assistance Grant from the California Department of Housing and Community Development. One key issue which was identified within the report was the concern expressed by local business owners with the local government of the City. Many survey respondents contacted during the study believe that city codes, standards, fees, and expectations from local small businesses are unrealistic and prohibitive. The business people who were interviewed raised specific concerns about the City relating to:

- Development and infrastructure costs imposed;
- Inconsistent code enforcement;
- Last minute changes to approved project plans;
- Limited or poor communication about City policies, expectations, and activities; and
- Limited outreach to the business community.

OBJECTIVES, POLICIES, & PROGRAMS

The following objectives, policies, and programs are intended to facilitate positive economic growth and development within Lakeport.

OBJECTIVE ED 1: TO ATTRACT EMERGING GROWTH INDUSTRIES IN ORDER TO INCREASE EMPLOYMENT OPPORTUNITIES FOR A WIDE RANGE OF SKILL LEVELS AND SALARIES TO MEET THE CURRENT AND FUTURE EMPLOYMENT NEEDS OF RESIDENTS.

Policy ED 1.1: Target High-Wage Industries. The City shall target emerging, high wage industries for attraction, including manufacturing, health care, professional, scientific and technical, finance and insurance, and information technology.

Program ED 1.1-a: Identify target industries in the manufacturing, retail, and office sectors.

Program ED 1.1-b: Implement specific recruitment programs tailored to specific target markets.

Policy ED 1.2: Diverse Local Economy. Attract and expand industrial, high technology, regional-serving office development that diversifies the local economy and produces higher-wage jobs.

Program ED 1.2-a: Consider a zoning incentive program (which may include flexible development standards, shared parking, and fast-track processing) to facilitate development or re-use of key sites by high-employment-generating uses and high value-added businesses.

Program ED 1.2-b: Focus available incentives and business assistance services on attracting and retaining firms in industries that typically provide high-quality employment, living wages and strong career advancement opportunities, and which generate strong tax revenues, or fill a critical market niche.

OBJECTIVE ED 2: TO PROVIDE SUPPORT FOR AND PROMOTION OF EXISTING BUSINESSES AND ATTRACT NEW BUSINESSES.

Policy ED 2.1: Business-Friendly Local Government. The City shall assist existing and new businesses by facilitating the permitting process, helping to improve access to capital and investors, and broadening local sales capture rates, including business-to-business transactions.

Program ED 2.1-a: Support and implement the 2003 Lakeport Business Retention and Recruitment Strategy.

Program ED 2.1-b: Develop small business assistance programs, including but not limited to below market interest rate loans and creating new or expanding existing business plans.

Program ED 2.1-c: Create a program to recognize employers that contribute to the quality of life in the community.

Policy ED 2.2: Business Promotion. Promote a thriving local retail, personal, and business services sector.

Program ED 2.2-a: Actively promote revitalization and strong sales in downtown Lakeport, and along Hwy 29 commercial corridors.

Program ED 2.2-b: Assist local merchants and business organizations interested in forming mutual benefit organizations such as merchants associations and business improvement districts.

Policy ED 2.3: Small Business Funding. Support micro loans, small business loan guarantees and other measures to support entrepreneurs and new business development.

Policy ED 2.4: Private Reinvestment Incentives. Provide incentives for private reinvestment in underutilized commercial areas where adequate infrastructure exists.

OBJECTIVE ED 3: TO FOSTER A SUPPORTIVE BUSINESS ENVIRONMENT BY PROVIDING CLEAR AND CONSISTENT DEVELOPMENT STANDARDS, PROCEDURES, AND INFORMATION ON AVAILABLE CITY SERVICES FOR BUSINESSES.

Policy ED 3.1: Business Development Information. The City shall be proactive in disseminating information to local businesses about City government processes that might affect them, such as development standards, licensing procedures, and the procurement of redevelopment funds.

Program ED 3.1-a: Publish and distribute a document that effectively outlines permitting and licensing procedures and fees.

Program ED 3.1-b: Develop and maintain a City website with links to the Zoning Ordinance, Design Guidelines, and Business Support Services to help existing and prospective business owners access information quickly. Also include information about applying for financial assistance and other business development programs the City is involved with.

Policy ED 3.2: Cost of Doing Business. The City shall work to retain a competitive “cost of doing business” in Lakeport relative to the Bay Area and Lake County region.

Program ED 3.2-a: Monitor “cost of doing business” in Lakeport relative to the Bay Area and Lake County region to keep apprised of Lakeport’s competitive advantage.

OBJECTIVE ED 4: TO SUPPORT INFILL DEVELOPMENT OF COMMERCIAL AND SERVICE COMMERCIAL PROPERTIES WITHIN THE CITY LIMITS.

Policy ED 4.1: Infill Areas. The City shall promote the development and redevelopment of City infill areas.

Policy ED 4.2: Balanced Commercial. A balanced mix of retail, restaurant, and other services should be encouraged in commercial areas throughout the city.

Policy ED 4.3: Building Rehabilitation. The City shall support and implement programs for facade improvement and building rehabilitation among others, to ensure that the city remains clean, attractive, safe and well maintained.

Policy ED 4.4: Leveraging City Infrastructure Projects. The City shall leverage city infrastructure projects with potential redevelopment projects or infill opportunities that may be applicable or planned for in the future.

Policy ED 4.4: Underutilized Structures. The City shall encourage the creative reuse of underutilized structures in key commercial areas.

OBJECTIVE ED 5: TO INCREASE THE CITY'S TAX BASE THROUGH ANNEXATION OF INDUSTRIAL AND COMMERCIAL LANDS SOUTH OF THE CITY LIMITS.

Policy ED 5.1: Sphere of Influence Annexations. The City shall pursue the annexation of County land currently being developed in Lakeport's Sphere of Influence.

Program ED 5.1-a: The City shall support efforts to attract private developers and equity investors to participate in the development of the area.

Program ED 5.1-b: Ensure that new commercial and industrial development in the area is adequately served by infrastructure and City services.

OBJECTIVE ED 6: TO MAINTAIN AND ENHANCE THE FINANCIAL VIABILITY OF THE CITY.

Policy ED 6.1: Role of Business. The City shall support businesses that contribute to the City's financial viability so long as the business does not impact the quality of life in the community or cause negative impacts on human health and the environment.

Policy ED 6.2: Fiscal Impacts of Development. The City shall review land use proposals for their impact on the City's financial resources.

Policy ED 6.3: Development's Share of Costs. New development shall pay its fair share of the costs of providing public facilities and services for capital and ongoing operation and maintenance activities.

Program ED 6.3-a: Maintain impact fees for new development to cover the costs of providing public facilities and services.

OBJECTIVE ED 7: TO SUPPORT CONTINUED GROWTH MANAGEMENT AND ENSURE AN ADEQUATE, BALANCED SUPPLY OF ALL LAND USES FOR FUTURE ECONOMIC DEVELOPMENT.

Policy ED 7.1: Land for Commercial and Industrial Uses. In order to support a stable economic base, provide sufficient tracts of land at a variety of sizes available for industrial and commercial uses.

Program ED 7.1-a: Monitor current and future land supply needs for industrial, office and retail growth.

OBJECTIVE ED 8: TO SELECT COMMERCIAL AND INDUSTRIAL LOCATIONS WHICH ARE CONVENIENT, WHILE COMPATIBLE WITH THE GROWTH AND FUTURE SERVICE NEEDS OF THE COMMUNITY.

Policy ED 8.1: Land Use Designations for Commercial. New commercial land use designations shall be of sufficient size and shape to meet existing and future market and service needs of the overall area in which they are located.

Policy ED 8.2: Discouragement of Strip Development. New commercial areas are encouraged to cluster in identified areas to prevent and discourage strip development. Where appropriate, locate commercial uses at focal points along major arterial streets and expressways.

Policy ED 8.3: Neighborhood Compatibility. The location, size, scale, and design of neighborhood commercial uses shall complement and meet the needs of the surrounding neighborhood. The neighborhood concept of providing pedestrian, bicycle and other non-motorized access shall be encouraged.

Policy ED 8.4: Customer Convenience. To minimize traffic generation impacts, new commercial development shall be located to meet the needs and convenience of the customer base and promote compatibility between land uses.

OBJECTIVE ED 9: TO CREATE A BALANCE BETWEEN JOBS AND HOUSING WITHIN THE CITY'S PLANNING AREA.

Policy ED 9.1: Coordination with Land-Use Planning. Coordinate economic development with land use planning.

Policy ED 9.2: Jobs-Housing Balance. Encourage mixed-use development that provides opportunities for a jobs and housing balance at the community, neighborhood, and project level.

OBJECTIVE ED 10: TO PROMOTE AND ENHANCE LAKEPORT AS A YEAR ROUND VISITOR/RECREATION DESTINATION AREA.

Policy ED 10.1: Recreational Assets. Continue to build on Lakeport’s natural assets to expand Lakeport’s appeal as a recreation destination area, focusing on downtown and lakefront revitalization as a priority.

Program ED 10.1-a: Work with the local Chamber of Commerce to promote Lakeport as a recreation destination through the expansion of the City’s website, informational brochures and other marketing techniques.

Policy ED 10.2: Visitor Services. Support new visitor-oriented restaurants, lodging, and services to meet visitor needs and capture expenditures locally.

Policy ED 10.3: Events and Festivals. Continue to support City-wide events and festivals, such as the Lake County Summerfest, the Fourth of July Celebration, bass fishing tournaments, and the sea plane fly-in.

Policy ED 10.4: Golf Course and Marina. Support the development of a golf course and marina within the Lakeport area.

OBJECTIVE ED 11: TO INCREASE LOCAL ECONOMIC COOPERATION AND INTERDEPENDENCE IN ORDER TO RE-CAPTURE A GREATER PORTION OF LOCAL REVENUES WITHIN THE LOCAL ECONOMY.

Policy ED 11.1: Local Business Networking. Encourage greater networking and cooperation between local businesses within Lakeport and Lake County.

OBJECTIVE ED 12: TO WORK WITH LAKE COUNTY AND THE CITY OF CLEARLAKE TO PROVIDE INCREASED OPPORTUNITY FOR LOCAL AND REGIONAL BUSINESSES, JOB GROWTH, AND TAX REVENUE.

Policy ED 12.1: Hotel/Conference Center. Encourage the development of a hotel/conference center targeting Bay Area companies and organizations for retreats and meetings.

Policy ED 12.2: Will-O-Point: Support the conversion of the Will-O-Point waterfront property from a mobile home park to a commercial/retail center.

Policy ED 12.3: Transient Occupancy Tax Revenues. Invest transient occupancy tax revenues into a lakefront walkway to link commercial centers along the waterfront.

Policy ED 12.4: Clear Lake Water Quality. In light of the fact that Clear Lake is the cornerstone of the local visitor and recreation markets, and that water quality in Clear Lake is so important; encourage and support the efforts of cooperative regional coalitions which oversee water quality issues in Clear Lake.

Policy ED 12.5: Communication. Encourage the installation of fiber optic cable or wireless communications in the Lakeport area.

VII. CONSERVATION ELEMENT

VII. CONSERVATION ELEMENT

Purpose

The Conservation Element provides direction regarding the conservation, development, and utilization of natural resources. Its requirements overlap those of the open space, land use, safety and transportation elements. The conservation element is distinguished by being primarily oriented toward natural resources. Population growth and development continually require the use of both renewable and nonrenewable resources. One role of the conservation element is to establish policies that reconcile conflicting demand on those resources.

There are nine mandatory issues which must be addressed by the Conservation Element: water and its hydraulic force; forests; soils; rivers and other waters; harbors; fisheries; wildlife; minerals and other natural resources.

Biological Resources

Lakeport is uniquely situated in an area that is rich in biological resources. There is an abundance of fish in Clear Lake, many species of plant and animals in nearby wetlands and hundreds of acres of oak savannah woodlands. Protecting these valuable resources is essential for maintaining a healthy environment, sustaining the region's tourist industry, and the quality of life of the community. The policies and implementation programs in this element are intended to protect biological resources from development and careless management practices.

The Lakeport region is composed of a variety of plant communities that support a diversity of wildlife species. Each plant community is dependent on special ecological factors within that particular plant community. Micro-habitats occur within each plant community and are generally the result of a unique physical and/or biological factor. Most of the rare, threatened and endangered plants in Lake County occur in micro-habitats such as vernal pools and/or serpentine soils. The habitat types in the vicinity of the City of Lakeport are presented and described below.

SHORELINE

The remaining undeveloped portions of the Clear Lake shoreline are composed of marsh and riparian habitat that supports a diverse and abundant variety of fish and wildlife. Wildlife that is common to shoreline areas includes a variety of ducks, herons, grebes, egrets, ospreys and fur-bearing mammals. Large populations of catfish, crappie, largemouth bass, carp and hitch are found in Clear Lake along the shores. A majority of the wetland habitat located along the Clear Lake shoreline has been lost to urban and agricultural development.

RIPARIAN AREA

Riparian areas occur along the banks or edges of rivers or creeks, and typically include tree species such as willows, maple, cottonwood, and alder, with an understory of shrubs and vines. Riparian areas provide cover and nesting habitat for a variety of birds. Riparian areas generally act as a movement corridor where many wildlife species migrate or disperse into other habitats to forage for food or to carry out a distinct part of its life cycle.

Much of the sediments being deposited in Clear Lake are filtered out by vegetation, marshes and creek-bank structures. Changing the course of streams and altering vegetation along their banks can result in changes to the natural hydrologic processes.

OAK WOODLANDS

Oak woodlands occur in inland valleys and foothills usually with a hard pan or rocky soil between 4 and 20 feet deep. Some of the dominant plants in an oak woodland include blue oak, coast live oak, interior live oak, and foothill pine, with manzanita, coffeeberry, redberry, currant, gooseberry, and toyon to a lesser extent. Annual goldfields, poppies, lupines, and other forbs are commonly found in the spring in this plant community.

Oak woodlands support many large mammals including blacktail deer, mountain lion, black bear, coyote, bobcat and grey fox. Small mammals include the grey squirrel, California ground squirrel, and a variety of mice. Birds include turkey vultures, eagles, hawks, owls, quail, mourning dove, mockingbird, scrub jay, western meadow lark, finches, and sparrows.

CHAPARRAL

Chaparral communities occur in the inland foothills on dry slopes and ridges with shallow soils and are often found on serpentine soils. Common plants found in chaparral communities include ceanothus, manzanita, hollyleaf cherry, chamise, scrub oak, birchleaf mountain-mahogany, and red shank. Chaparral communities provide habitat for various kinds of snakes and lizards, as well as many birds and mammals along the chaparral/oak woodland ecotone.

AGRICULTURAL LAND

Agricultural land that is actively tilled and intensively managed for long durations is generally low in plant and animal diversity due to the marginal habitat qualities that they provide. Small mammals that can commonly be found in agricultural land include pocket gophers, deer mouse, and California ground squirrel, among others. Small mammals are the main food source for raptors such as red-tailed hawk, red-shouldered hawk, American kestrel, and barn owl, and for large mammals such as coyote, raccoon, striped skunk, and opossum. Common birds found in agricultural land include western scrub jay, American crow, house finch, killdeer, and European starling among others.

The disturbed field margins of agricultural lands are located along the perimeter of fields. Plant diversity in this habitat type is higher compared to agricultural land, as this area is generally not

regularly managed. Plants that can commonly be found in disturbed field margins include mustards, filarees, clovers, wild oats, bromes, foxtail barley, Italian ryegrass, and fiddle-neck among others. Wildlife in disturbed field margins is generally similar to that of active agricultural areas.

URBAN

Urban areas consist of structures, roads, and parking areas. The plant diversity in this type of habitat is generally low and is composed of primarily of ornamental landscaping plants as well as plants commonly found along disturbed field margins. Wildlife in the area is very limited as food sources are scarce. Wildlife that is commonly found in these areas is similar to those found in agricultural and disturbed areas although they are less abundant and are generally passing through rather than occupying the area.

Water Resources

The City of Lakeport currently obtains its water from two primary sources: Groundwater sources and water from Clear Lake treated at the City's water treatment plant. The groundwater supply consists of four wells located in Scotts Valley. Two of the wells are on Scotts Creek adjacent to the City's old pumping plant and two wells are located on the Green Ranch. Seasonal fluctuation in the underground water table means that the wells are only viable for portions of the year. When water supply from the wells in Scotts Valley is limited, the City relies on treated surface water from Clear Lake.

The City constructed the Interim Water Supply Project in 1981 and 1982 to draw and treat water from Clear Lake for use in the community. This project included a raw water intake structure in Clear Lake, a 14-inch diameter raw water intake line, a raw water pump station, a 10-inch diameter pipeline which conveys water from the raw water pump station to a package water treatment plant. The treatment plant, located on Konocti Avenue, consists of a raw water holding basin, chemical feed systems, flocculation, tube sedimentation, gravity filtration, activated carbon contactors and disinfection. In 1999 the treatment facility was expanded, and can now treat up to 1,200 gallons per minute. The City has diversified water resources which ensure that the water supply is stable and reliable.

In order to ensure an adequate supply of clean potable water to accommodate existing and future needs, the City of Lakeport must strive to protect the quality of the groundwater as well as the quality of Clear Lake.

The continued protection and improvement of Clear Lake and its tributary streams will depend on the application of more stringent regulations to reduce erosion, siltation, and the inflow of sewage and other pollutants. In addition, it is necessary to maintain adequate fresh water inflow from its watershed. At present, Yolo County Flood Control and Water Conservation District controls water rights for Cache Creek and for Clear Lake above a specified water level.

The continued access to adequate water supplies depends on a combination of conservation, access to riparian and groundwater supplies and the purchase or exchange of surface water from

Yolo County Flood Control and Water Conservation District. To be effective, such measures need to be implemented in a coordinated fashion among local, state and federal agencies.

Agriculture

Agriculture has played a key role in Lakeport's history and economic development. The cultivation of grapes, fruit crops, nuts and livestock continues to represent an important part of the region's economy and way of life. Not only are agricultural uses important economically, but they provide open space areas, preserve view corridors, and maintain the rural atmosphere valued by Lakeport residents.

It is important that future urban development not decrease any further the amount of prime agricultural land, since it is a valuable and irreplaceable resource. Prime agricultural land is characterized by good to excellent soil conditions, available water and sufficient acreage to support a viable farming operation. The Lake County Agricultural Commissioner has determined that there are no prime agricultural lands within City limits. There is, however, prime agricultural land in the southern portion of the Sphere of Influence and outside of the Sphere of Influence, in the Scotts Valley area.

Policies and programs in this element relating to agriculture seek to preserve remaining prime agricultural land in the Planning Area. These areas have previously been designated Urban Reserve or Open Space, and are not priority areas for annexation. Additionally, there are several policies and implementation programs in this element to protect those wishing to continue farming by reducing the conflict between agricultural and urban land uses.

Mineral Resources

There are no mineral extraction or other mining operation at present within the Lakeport City limits and Sphere of Influence. Sand, gravel and borax deposits are extracted in the Scotts Valley and Big Valley Areas. These mining operations have a significant impact on ground water capacity, siltation of streams and highway traffic.

The current Lakeport General Plan prohibits any mining or mineral extraction activities within the City and calls for the City to work with the County of Lake to discourage such land uses within the City's Sphere of Influence.

Air Quality

The climate of the Lakeport Planning Area, according to the Sunset Western Garden Book, is identified as Zone 7, which is referred to as California's Digger Pine Belt. It is indicated that hot summers and mild, but pronounced winters give this area sharply defined seasons without severe winter cold or innervating humidity. The average maximum temperatures range from a low of approximately 54 degrees Fahrenheit in December to a high of about 92 degrees Fahrenheit in July. Rainfall is concentrated predominantly during the five months from November to March.

Lake County is unique in California since it is the only county in the state which is considered an attainment area or is unclassified for all of the federal and all of the state criteria air pollutants. Air quality is a key consideration in maintaining the environmental aesthetic qualities of Lakeport which contribute to the charm, economy, and quality of life of the city. The maintenance of good air quality requires a balance of regulating major and minor point sources of air pollution, with good land use planning and transportation management to minimize emissions from motor vehicles, stationary sources and impacts on the public, residents, business and industry.

The Lake County Air Quality Management District (LCAQMD) is responsible for regulating both point and area sources of air emissions including qualifying industrial and commercial businesses, all open burning operations including agricultural, prescribed and residential burning and grading activities on serpentine surfaces. The LCAQMD enforces its Rules and Regulations, which implement federal and state air quality requirements, through a permit system that functions independently of the County planning process. Because the County is an attainment area (or is unclassified) for all criteria pollutants, both federal and state, it is not required to prepare an Air Quality Management Plan. Instead, the District's focus is on the prevention of significant deterioration in air quality, and this goal is pursued mainly through the District's permitting process and the regulation of point sources of air emissions. The AQMD reviews all planning and environmental documents submitted for review and comment and actively participates in the planning process where District permits are determined necessary and/or where projects are otherwise subject to District regulation or are a significant potential source of air emissions.

Although the County is an attainment area, on several instances since 1990 pollutant concentrations have equaled (but not exceeded) the state standards for ozone and for particulate matter (PM10). Vehicles, unpaved roads, solid fuel combustion from agricultural, forest and range management, and residential burning are major contributors of PM-10 emissions. The Geysers Geothermal Power Plants and steam production wells are also sources of air pollutants within the Lake County Air Basin.

There are also a number of areas in Lake County that contain serpentine rock and soils. These areas have been mapped and identified to contain regulated amounts of asbestos. The Lakeport Planning Area has serpentine lands that have been or are likely to be developed. Unless adequately mitigated, the disturbance of serpentine will release asbestos to the air and water.

GLOBAL WARMING

In California, observational trends from the last half century show warmer winter and spring temperatures, decreased spring snow levels in lower- and mid-elevation mountains, up to one month earlier snowpack melting, and flowers blooming one- to two-weeks earlier than under historical conditions (Cayan et al. 2006b). Research suggests that human activities, such as the burning of fossil fuels and clearing of forests, contribute additional carbon dioxide (CO₂) and other heat trapping gas emissions into the atmosphere. Future global climate change could have widespread consequences that would affect many of California's important resources, including its water supply.

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 required that the California Air Resources Board (ARB) develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty truck and other vehicles determined by the ARB to be vehicles whose primary use is noncommercial personal transportation in the state.”

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra’s snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050.

The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary will also submit biannual reports to the governor and state legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California’s resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Act Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

Assembly Bill 32, the California Climate Solutions Act of 2006

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to

institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

Senate Bill 1368

SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the California Public Utilities Commission (PUC) to establish a greenhouse gas emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The California Energy Commission (CEC) must establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Senate Bill 97

SB 97 (Chapter 185, Statutes 2007) was signed by Governor Schwarzenegger on August 24, 2007. The legislation provides partial guidance on how greenhouse gases should be addressed in certain CEQA documents. SB 97 requires the Governors Office of Planning and Research (OPR) to prepare CEQA guidelines for the mitigation of GHG emissions, including but not limited to, effects associated with transportation or energy consumption. OPR must prepare these guidelines and transmit them to the Resources Agency by July 1, 2009. The Resources Agency must then certify and adopt the guidelines by January 1, 2010. OPR and the Resources Agency are required to periodically review the guidelines to incorporate new information or criteria adopted by ARB pursuant to the Global Warming Solutions Act, scheduled for 2012.

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect (Ahrens 2003). Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors (California Energy Commission 2006a). In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (California Energy Commission 2006a). A byproduct of fossil fuel combustion is CO₂. Methane, a highly potent GHG, results from offgassing associated with agricultural practices and landfills. Processes that absorb and accumulate CO₂, often called CO₂ "sinks," include uptake by vegetation and dissolution into the ocean.

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California is the 12th to 16th largest emitter of CO₂ in the world and produced 492 million gross metric tons of carbon dioxide equivalents in 2004 (California Energy Commission 2006a). Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, CH₄ is a much more potent GHG than CO₂. As described in the General Reporting Protocol of the California Climate Action Registry (2006), one ton of CH₄ has the same contribution to the greenhouse effect as approximately 21 tons of CO₂. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted. Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2004, accounting for 40.7% of total GHG emissions in the state (California Energy Commission 2006a). This category was followed by the electric power sector (including both in-state and out-of-state sources) (22.2%) and the industrial sector (20.5%) (California Energy Commission 2006a).

Feedback Mechanisms and Uncertainty

Many complex mechanisms interact within Earth's energy budget to establish the global average temperature. For example, a change in ocean temperature would be expected to lead to changes in the circulation of ocean currents, which, in turn would further alter ocean temperatures. There is uncertainty about how some factors could affect global climate change because they have the potential to both enhance and neutralize future climate warming.

Direct and Indirect Effects of Aerosols

Aerosols, including particulate matter, reflect sunlight back to space. As particulate matter attainment designations are met, and fewer emissions of particulate matter occur, the cooling effect of anthropogenic aerosols would be reduced, and the greenhouse effect would be further enhanced. Similarly, aerosols act as cloud condensation nuclei, aiding in cloud formation and increasing cloud lifetime. Clouds can efficiently reflect solar radiation back to space (see discussion of the cloud effect below). As particulate matter emissions are reduced, the indirect positive effect of aerosols on clouds would be reduced, potentially further amplifying the greenhouse effect.

The Cloud Effect

As global temperature rises, the ability of the air to hold moisture increases, facilitating cloud formation. If an increase in cloud cover occurs at low or middle altitudes, resulting in clouds with greater liquid water content such as stratus or cumulus clouds, more radiation would be reflected back to space, resulting in a negative feedback mechanism, wherein the side effect of more cloud cover resulting from global warming acts to balance further warming. If clouds form at higher altitudes in the form of cirrus clouds, however, these clouds actually allow more solar radiation to pass through than they reflect, and ultimately they act as a GHG themselves. This

results in a positive feedback mechanism in which the side effect of global warming acts to enhance the warming process. This feedback mechanism, known as the “cloud effect” contributes to uncertainties associated with projecting future global climate conditions.

Other Feedback Mechanisms

As global temperature continues to rise, CH₄ gas currently trapped in permafrost, would be released into the atmosphere when areas of permafrost thaw. Thawing of permafrost attributable to global warming would be expected to accelerate and enhance global warming trends. Additionally, as the surface area of polar and sea ice continues to diminish, the Earth’s albedo, or reflectivity, is also anticipated to decrease. More incoming solar radiation will likely be absorbed by the Earth rather than being reflected back to space, further enhancing the greenhouse effect. The scientific community is still studying these and other positive and negative feedback mechanisms to better understand their potential effects on global climate change.

OBJECTIVES, POLICIES, & PROGRAMS

Biological Resources

OBJECTIVE C 1: CONSERVE AND ENHANCE LAKEPORT'S UNIQUE NATURAL BEAUTY AND IRREPLACEABLE NATURAL RESOURCES.

Policy C 1.1: Biological Preservation. Preserve biological resources such as plant and animal species and special habitat areas.

Program C 1.1-a: Enforce the City’s Zoning Ordinance which contains specific development standards for shoreline development, and requires the submittal of a shoreline development plan for review and approval.

Program C 1.1-b: Require a revegetation plan prepared by a professional botanist, or similar professional, for projects which result in vegetation removal.

Program C 1.1-c: Revise the Zoning Ordinance to require revegetation plans to include native species; the fencing of sensitive areas and construction activities; a 3:1 replacement for any tree removed; and undergrowth revegetation. Heritage trees (trees that are at least 36 inches in diameter or any tree having significant historical or cultural importance to the community) shall be replaced at a 5:1 ratio.

Program C 1.1-d: Require subdivisions in rural areas greater than 10 acres with a slope topography of less than five percent to carry out a biological survey for vernal pools, riparian areas, serpentine outcroppings, and sensitive plant species (by a qualified biologist). Require mitigating measures to be prepared and implemented prior to project construction.

Program C 1.1-e: Revise the Zoning and Subdivision Ordinances to permit density transfers; encourage PD (Planned Development) Zoning for developments over two acres in size; and other requirements as appropriate to protect sensitive

resource areas (indicated in Figure 16 and other areas subsequently identified through the environmental review process).

Policy C 1.2: Vegetation Protection. Minimize removal of all vegetation in new developments to preserve wildlife habitat, scenic beauty and to prevent soil erosion. In particular, the removal of heritage trees, street trees, and mature trees should be minimized.

Program C 1.2-a: Enforce the City’s Zoning Ordinance (Chapter 17.21) which contains specific measures to protect heritage and street trees.

Program C 1.2-b: Enforce the Zoning Ordinance (Chapter 17.21), which requires a detailed site inventory of mature trees for all developments located on properties where there are existing native trees on the site.

Policy C 1.3: Native and Drought Resistant Trees. Encourage the planting of native and drought resistant trees in new developments and in City-owned parks, trails and recreational facilities.

Policy C 1.4: Hillside Protection. Development in areas with a 25% slope or greater shall be subject to the following criteria:

- Limit grading and retain the natural terrain to the extent possible.
- A minimum area of twenty-five percent of the lot area should remain in its natural state
- No development should be allowed within 100 vertical feet of the ridgeline unless there are no site development alternatives
- Development located in hillside areas shall avoid removal of oak trees that are six inches in diameter. In the event that removal of oak trees is necessary, three trees shall be planted for every significant tree removed. (See Policy C 1.1-c for additional requirements regarding Heritage trees.)
- Oak trees shall be further protected during construction through the use of orange fencing placed a minimum of 8 feet from the dripline of the trees.

Mineral Resources

OBJECTIVE C 2: TO PROTECT THE CITY FROM THE POTENTIAL IMPACTS OF MINING OPERATIONS.

Policy C 2.1: Mining Prohibition. Prohibit mining, quarrying and mineral extraction activities within City limits.

Program C 2.1-a: Revise the Zoning Ordinance to prohibit mining, quarrying and mineral extraction facilities within City limits.

Program C 2.1-b: Work with the County of Lake to discourage mining, quarrying and mineral extraction facilities within the Lakeport Sphere of Influence.

Program C 2.1-c: Request the County send referrals within the Lakeport Sphere of Influence for all proposed mining, quarrying or mineral extraction activities. Carefully review and respond to all EIR's for such activities to ensure that at a minimum, impacts regarding: noise; air quality; visual characteristics on surrounding properties; water quality and capacity; transportation facilities; and mitigations to restore the landscape to its pre-extraction condition.

Air Quality

OBJECTIVE C 3: TO MAINTAIN GOOD AIR QUALITY IN LAKEPORT AND CONTINUE TO HAVE ATTAINMENT STATUS.

Policy C 3.1: High Air Quality Standard. Maintain a high air quality standard in Lakeport to protect the public health.

Program C 3.1-a: Require review of all development proposals by the Lake County Air Quality Management District to establish mitigations needed to ensure compliance with air quality standards.

Program C 3.1-b: Include air quality as a factor in the City's environmental review procedures.

Program C 3.1-c: Include the Fire District in the review of proposed land uses which would handle, store or transport any potential air pollutant sources such as, but not limited to: lead; mercury; vinyl chloride; benzene; asbestos; beryllium; and all fuels.

Program C 3.1-d: Continue to require a dust emissions control plan for construction that includes regular watering during earthmoving operations or excavations, covering stockpiles or exposed earth and soil, spraying water or palliatives, pave or otherwise seal disturbances as soon as possible, and other measures to limit dust and reduce evaporative hydrocarbon emissions.

Policy C 3.2: Sensitive Receptors. Ensure that the air quality impacts of projects located in proximity to sensitive receptors, which can be identified in Figure 16 by land use, are adequately mitigated. Discourage land uses producing adverse air quality impacts from locating near sensitive receptors.¹

¹ Sensitive receptors are generally defined as people that are at the highest risk of respiratory problems from air emissions. People in this category generally include the elderly or young children, but can include people of any age. Sensitive receptors are oftentimes associated with schools, hospitals, convalescent homes, etc. Residential uses are also considered a use that is or may be occupied by a sensitive receptor.

Program C 3.2-a: Require air pollution point sources such as manufacturing or handling of air pollutants to locate at a sufficient distance from residential areas and sensitive receptors to significantly reduce air quality impacts of such land uses.

Program C 3.2-b: Include buffer zones within site plans for projects in residential areas and within sensitive receptor site plans to separate those uses from freeways, highways, arterials, point sources and hazardous materials locations.

Policy C 3.3: Naturally Occurring Asbestos. The City shall protect public health from naturally occurring asbestos by requiring mitigation measures to control dust and emissions during construction, grading, quarrying or surface mining operations.

Program C 3.3-a: Adopt a Naturally Occurring Asbestos Ordinance. The City should adopt an ordinance that regulates construction activities in areas that may contain serpentine soils.

Solid Waste

OBJECTIVE C 4: TO MAXIMIZE RECYCLING EFFORTS AND REDUCE WASTE STREAM TO THE LANDFILL.

Policy C 4.1: Reuse of Resources. Facilitate management of solid waste to maximize the reclamation and reuse of resources contained in waste materials in a manner which does not adversely impact the environment.

Program C 4.1-a: Continue the collection of waste paper produced by the City for recycling.

Program C 4.1-b: Purchase goods containing recycled materials for City use whenever possible.

Program C 4.1-c: Continue to implement a curbside recycling program for newspaper, glass and organic materials.

Program C 4.1-d: Revise the Zoning Ordinance to require all commercial/retail, office and multifamily developments to provide on-site drop-off areas for recycling. Coordinate with the City's refuse disposal contractor or other recycling services to ensure regular pick-up.

Policy C 4.2: Recycling Transfer Stations. Facilitate the establishment of a recycling transfer station to collect, store, and ship recyclable materials.

Program C 4.2-a: Revise the Zoning Ordinance to permit the establishment of a recycling transfer station in the Service Commercial Zoning District with a Conditional Use Permit.

Policy C 4.3: Solid Waste Hauling. Discourage the hauling of solid waste on collector and local streets through residential areas with the exception of garbage trucks serving local neighborhoods.

Energy Conservation

OBJECTIVE C 5: TO REDUCE DEMAND FOR ELECTRICITY AND INCREASE ENERGY EFFICIENCY.

Policy C 5.1: Energy Efficiency. Reduce energy waste and peak electricity demand through energy efficiency and conservation in homes and businesses.

Program C 5.1-a: Integrate energy efficiency, conservation, and other green building requirements into the development review process.

Program C 5.1-b: Offer incentives to encourage energy efficiency and green building practices such as:

- permit streamlining;
- fee waivers; and
- density bonuses for “green developments.”

Program C 5.1-c: Provide information, marketing, training, and education to support green building practices.

Policy C 5.2: City Use of Green Technologies. Integrate energy efficiency, conservation, and green building practices into all City functions.

Program C 5.2-a: Support minimum green building certification requirements for architects, contractors, and other building professionals. Provide information about training programs and list certified contractors in City information sources.

Program C 5.2-b: Monitor and support State and federal legislation that promotes energy efficiency and renewable energy sources.

Program C 5.2-c: Work with local commercial, industrial, and agricultural operations to identify opportunities for energy efficiency in the storage, transport, refrigeration, and other processing of commodities.

OBJECTIVE C 6: TO INCREASE RENEWABLE RESOURCE USE

Policy C 6.1: Renewable Energy Resources. Preserve opportunities for development of renewable energy resources.

Policy C 6.2: Renewable Technologies Incentives. Facilitate renewable technologies through streamlined planning and development rules, codes and processing, and other incentives.

Program C 6.2-a: Require the protection of passive or active solar design elements and systems from wintertime shading by neighboring structures and trees.

Program C 6.2-b: Where feasible, develop and employ renewable energy and clean generation technologies (such as solar) to power City facilities using tax-free low interest loans and other available financing options.

Program C 6.2-c: Evaluate and implement, as feasible, local government financing options such as low-interest loans, pooled project financing and joint ventures with other agencies with financing authority such as water and fire districts.

Agricultural Resources

OBJECTIVE C 7: TO PROTECT AND ENHANCE AGRICULTURAL RESOURCES.

Policy C 7.1: Annexation of Agricultural Lands. Discourage the annexation of prime agricultural lands for urban uses.

Prime agricultural land is generally defined as Class I and II based on the methodology of the Soil Conservation Service classification system (see Section 56064 of the California Government Code for a full definition).

Policy C 7.2: Wastewater for Irrigation. Explore the alternative use of wastewater for irrigation purposes beyond the existing spray irrigation activities. This can be accomplished by pursuing the Sphere of Influence amendment and annexation of the Specific Plan Area which includes the City's sewer treatment facility. In the event that treatment facility is converted to a tertiary treatment facility, there may be additional opportunities for wastewater irrigation for certain types of food crops in addition to potentially using the water to irrigate parks, playgrounds, and other similar uses subject to RWQCB permit. A small portion of the CLMSD property is designated as "prime agricultural land" and "farmland of local importance." The City will attempt to maintain the "prime agricultural land" by leasing it for agricultural purposes.

Policy C 7.3: Coordination with Lake County. Continue the coordination of land use planning between the County of Lake and Lakeport to preserve existing agricultural lands.

Water Quality

OBJECTIVE C 8: TO PROTECT AND ENHANCE WATER QUALITY IN WATERCOURSES, CLEAR LAKE AND IN GROUNDWATER.

Policy C 8.1: Stream and Creek Protection. Preserve and protect streams and creeks in their natural state to the maximum extent feasible. [Streams, creeks and other riparian corridors are considered to be in a natural state when they support their own environment of vegetation, wildlife and have not been concretized or channelized.]

Program C 8.1-a: Develop, in cooperation with the County and the State Department of Fish and Game, guidelines for the construction and maintenance of watercourses which assure that the native vegetation is not unnecessarily removed and that maintenance minimizes disruption of wildlife breeding activities. Incorporate these guidelines, where appropriate, into the Zoning Ordinance and Public Works Department maintenance procedures.

Program C 8.1-b: Revegetate watercourses with native plant species that are compatible with the watercourse maintenance program and which do not adversely impact flow.

Policy C 8.2 Clear Lake. Prohibit any filling of Clear Lake below 7.79 as indicated by the Rumsey Gauge.

Program C 8.2-a: Enforce the Zoning and Subdivision Ordinances to prohibit filling of Clear Lake below 7.79 as indicated on the Rumsey Gauge.

Program C 8.2-b: Review all development proposals submitted to the County within the Lakeport Planning Area and oppose any filling of Clear Lake.

Policy C 8.3: Soil Erosion. Soil erosion shall be controlled to prevent flooding and destruction of natural waterways, to maintain water quality and to reduce public costs of flood control and watercourse maintenance.

Program C 8.3-a: Grading Permits shall be issued for all new construction, where applicable. An approved erosion control plan and revegetation plan shall be included in the grading plan, wherever determined appropriate by the City, to include measures to mitigate erosion during and after construction.

Program C 8.3-b: Consider the adoption of a Hillside Protection Ordinance in the Zoning Ordinance that includes specific performance criteria for the protection of hillside areas.

Policy C 8.4: Water Quality. Continue to cooperate with the County, Lake County Watershed Protection District (LCWPD) and other agencies to develop and implement measures to improve the quantity and quality of water resources.

Program C 8.4-a: Formally request that the County send all notices to the City regarding proposed gravel extraction operations in Clear Lake watersheds.

Program C 8.4-b: Participate in County review of proposals submitted to extract gravel from Scotts Creek. Oppose any gravel extraction operations which would reduce the capacity of this aquifer.

Program C 8.4-c: Participate in a regional groundwater monitoring program to establish a region-wide water conservation program.

VIII. OPEN SPACE, PARKS AND
RECREATION ELEMENT

VIII. OPEN SPACE, PARKS AND RECREATION ELEMENT

Purpose

This section is intended to guide public decision making while providing for a comprehensive system of open space, parks, and recreational opportunities available for public use. This section of the General Plan considers the existing open space, parks, and recreational opportunities, then it presents some standards for meeting the needs of the community, and lastly it identifies some future needs. Objectives, policies, and implementation programs are then recommended to guide decisions based on the projected open space, parks, and recreational demands of the community.

There are four general considerations addressed by the objectives, policies, and implementation programs. These include the coordination of public resources to meet demand, the quality and quantity of recreational facilities, the availability of recreational facilities for public use, and the provision of open space sites.

Open space, parks, and recreation are a key component to a balanced and healthy community. Leisure time is used according to a persons needs and desires, as well as the quality and quantity of recreational opportunities available. The City of Lakeport maintains a system of open space, parks, and other recreational opportunities for its citizens. In addition to parks, recreational facilities are provided at the Highland Springs Reservoir, Lake County Fairgrounds, the County Park, Clear Lake State Park, and the Westshore swimming pool, which is located on Lakeport Unified School District (LUSD) property. Community use of school playing fields provides additional recreational facilities.

Open Space

Lakeport is fortunate to be surrounded by a generous amount of open space. Over 50 percent of all land in Lake County is publicly owned, and approximately two thirds of this area is available for public use. The majority of this land has limited recreational use, however, since it is inaccessible to the public. Lakeport residents typically use the Library Park area or nearby State and County Parks for open space related recreational activities.

Open space, which is unimproved land, serves several functions, some of which are listed below:

- It preserves natural resources such as riparian corridors, plant and animal habitats;
- It provides passive recreational opportunities in areas with scenic and/or interesting natural environments and limited active recreational opportunities such as jogging and equestrian trails;
- It provides a visual buffer between developed and non-developed areas;
- It preserves a distinctive community identity; and

- It limits development from occurring in areas with hazardous conditions, such as those with unstable soils and steep hillsides.

Parks

The policies and implementation programs contained in this section provide the framework that is needed for the City to proactively plan and develop park facilities based on anticipated demand for these facilities. Parkland acquisition is an ongoing priority. Funding sources for park land acquisition and development may come from a variety of sources including dedications, developer in-lieu fees pursuant to the Quimby Act, redevelopment tax-increment funds, the City’s general fund, grants, neighborhood assessments, and general obligation and revenue bonds. The City’s parkland standard is set at five acres of developed parkland per 1,000 residents.

As shown in [Table 14](#), the City has approximately 63.5 acres of parkland, not including recreational facilities at the schools (see [Figure 15](#)). Lakeport’s park and recreational facilities include parks and undeveloped parks.

**Table 14
Existing Parks – City of Lakeport**

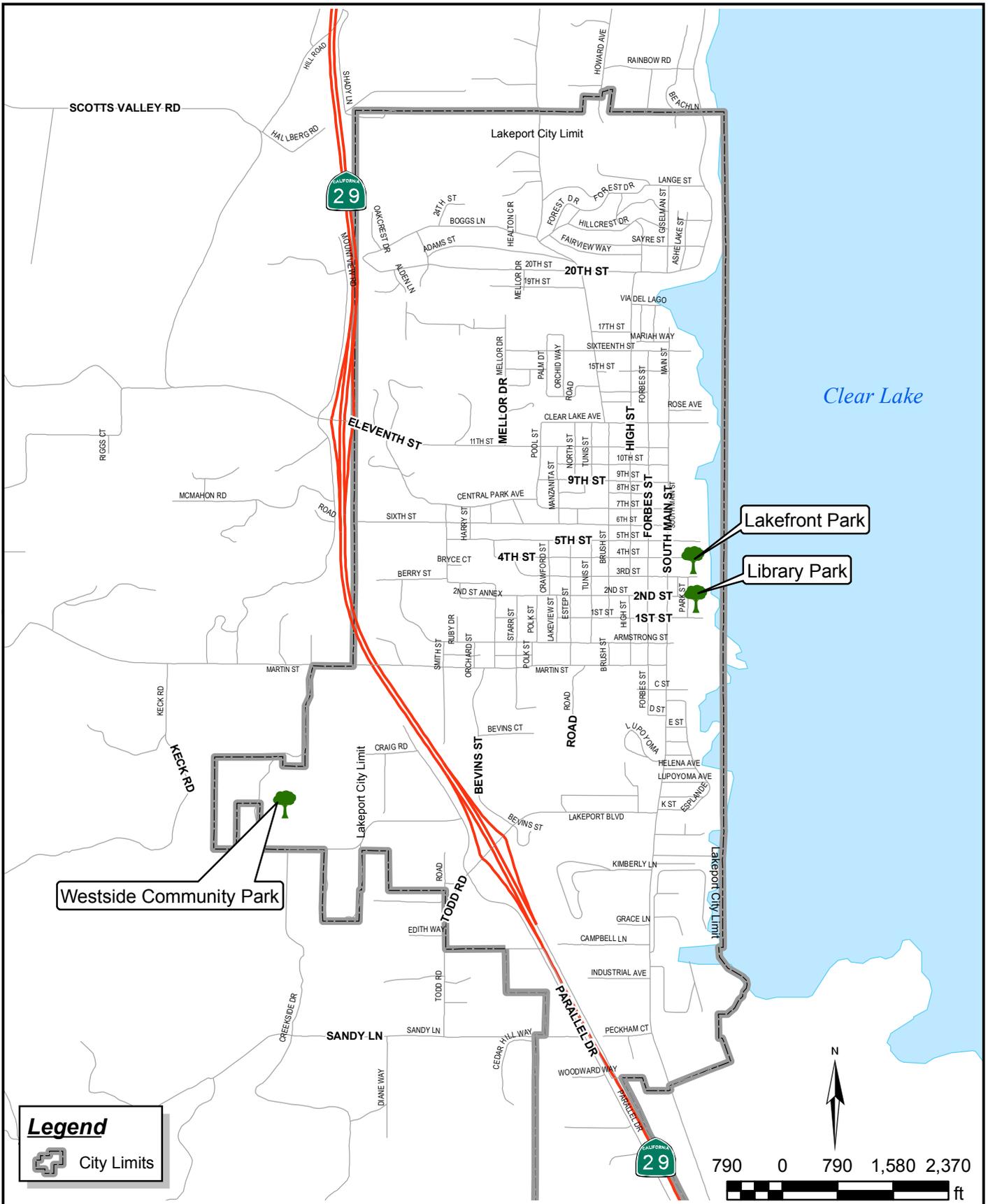
Park	Size (acres)	Current Use
Lakefront Park	5.0 ¹	Picnicking, boat ramp, parking lot
Library Park	3.5	Picnicking, play lot, gazebo, boat ramp, dock, and swimming
Westside Community Park	55	Athletic fields, playground (only 8 acres have been developed at this point, the remainder will develop as funds become available).
Total	63.5	
¹ Most of the 5 acres is used for parking		

Open space and recreation facilities at Lakeport’s schools are also considered part of the park inventory due to the cooperative agreement between the City and school district. Not including the school district’s park acreage, there are approximately 12 acres of City owned parkland per 1,000 residents. Only 16.5 acres of the City owned parkland had been developed as of 2004, giving Lakeport a ratio of 3.3 acres of developed parkland per 1,000 residents. This is below the adopted goal of 5 acres per 1,000 residents.

Recreation

LAKE RECREATION

Clear Lake is renowned for its many recreational opportunities. Boating (including fishing, personal watercraft, and water-skiing) is the principal recreation activity on the Lake. There are also beaches and swimming areas. Over the years there has been a general increase in and promotion of lake recreation.



Legend

City Limits

Source: City of Lakeport, 2009 / Quad Knopf, 2009



CITY OF LAKEPORT PARKS

Figure 15

Boating

Fishing season is open 365 days a year on Clear Lake and the lake is famous for its many fishing tournaments. The largest tournament activity involves bass fishing; there are numerous bass tournaments throughout the year with as many as 300 boats participating in any one tournament. Civic organizations such as the local Chamber of Commerce aggressively court fishing tournaments because of the significant revenue generated by them. The principal bass tournament locations are at City of Clearlake, Lakeport, and Konocti Harbor Resort and Konocti Vista Casino. There are also fishing derbies at a variety of locations for other fish such as catfish, carp, crappie, and blue gill. In addition to the fishing events, there are other boating related events including the Nor-Cal Boat and Ski races, personal watercraft poker runs, and a seaplane fly-in.

The Clear Lake Management Plan notes the need to explore measures to encourage use of more efficient powerboats and personal watercraft on Clear Lake.

OBJECTIVES, POLICIES & PROGRAMS

Parks & Recreation

OBJECTIVE PR 1: TO PROVIDE PARK AND RECREATIONAL FACILITIES, PROGRAMS AND ACCESS TO ALL MEMBERS OF THE COMMUNITY WHICH ALLOW THE OPPORTUNITY FOR PLAY, RELAXATION AND ENRICHMENT OF MIND AND BODY.

Policy PR 1.1: Parks Master Plan. Update the Parks Master Plan to identify funding sources, acquisition and development priorities, and facilities improvement guidelines.

Policy PR 1.2: Park and Recreation District. Consider the establishment of a Park and Recreation District to develop and maintain city parks, landscaped public open spaces and operate recreation programs.

Program PR 1.2-a: Prepare a report for consideration of the Parks and Recreation Commission, the Planning Commission and the City Council regarding the feasibility of establishing a Parks and Recreation District for Lakeport.

Policy PR 1.3: Public Participation. Actively solicit public participation in the selection, design and facilities planning for future park sites.

Policy PR 1.4: Trail System. Develop a system of pedestrian, bicycle and equestrian trails to connect park and recreational facilities to residential areas.

Program PR 1.4-a: Include in the annual Capital Improvement Program (CIP) the schedule and costs of expanding and improving the urban trails system.

Program PR 1.4-b: Develop and adopt specific design criteria for on- and off-street trails for inclusion in the Zoning Ordinance.

Policy PR 1.5: Park Land Acquisition. Acquire and develop land for public parks at a rate consistent with the growth of the City's population and the needs for additional parks as identified in the General Plan.

Policy PR 1.6: Parks Ratio Standard. Utilize the standard of five acres per 1,000 residents for acquisition of additional developed parks pursuant to the provisions of the Quimby Act [Gov't Code §66477].

Program PR 1.6-a: Establish a Park Acquisition Trust Fund to acquire and develop parkland pursuant to the Quimby Act.

Program PR 1.6-b: Reevaluate and update the population to parkland ratio every two years and amend the Park Dedication Ordinance as appropriate.

Program PR 1.6-c: Prepare, prior to acceptance of any parcels for park or open space, a thorough analysis of geotechnical or other related hazard potential. Identified hazards shall be fully repaired before acceptance of land by City.

Policy PR 1.7: Funding Sources. Consider the following funding sources for park acquisition, development/improvement and maintenance and the operation of recreation programs:

- Sale or trade of City-owned land for the acquisition of comparable facilities elsewhere within the Lakeport Planning Area;
- Redevelopment Tax Increment Revenues;
- Transient Occupancy Tax revenues;
- General Obligation and Revenue Bonds;
- Neighborhood Assessments;
- Grant and foundation funds;
- Recreation concession revenues;
- Donations;
- User fees; and
- Sale of Park and Recreation gift catalogue items.

Policy PR 1.8: Joint Use Parks. The City will work with LUSD to develop joint use of neighborhood parks on school sites using an integrated and comprehensive design which embodies the principle of 'school-in-the-park.' The City's neighborhood park/school sites should serve the entire community and provide a broad range of cultural, recreational and educational activities.

Program PR 1.8-a: Facilitate coordination among the City, the Lakeport Unified School District, Mendocino Community College District and the Recreation and Park District on an ongoing basis to assure continued and expanded use of school facilities for parks and recreational uses.

Policy PR 1.9: Facilities Sharing. Cooperate and work with the County Recreation Department to share facilities and programs.

Policy PR 1.10: Heritage Sites. Identify, recognize and protect sites, buildings, structures and districts with significant cultural, aesthetic and social characteristics which are a part of the City's heritage.

Program PR 1.10-a: Adopt a cultural resources management ordinance to identify, recognize, protect and preserve sites, buildings, structures, districts and objects that reflect significant elements of Lakeport's cultural, social, aesthetic, architectural or natural heritage.

Program PR 1.10-b: Prior to altering any structure with historical significance within the City of Lakeport, the General Plan shall be consulted and any alterations shall be in compliance with General Plan policies. For structures over 45 years old an architectural historian and a historic archaeologist should conduct archival and/or field research to determine the structure's historical value. Relocation of historic structures should only be done if there is no other alternative available.

Program PR 1.10-c: During review of future development projects, the City shall evaluate the need for the project to have a qualified archeologist conduct the following activities: (1) conduct a record search at the Archeological Information Center and other appropriate historical repositories, (2) conduct field surveys where appropriate, and (3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards. In the event there is a likelihood of resources present the appropriate tribe representatives shall be notified in order to determine whether the presence of an on-site monitor is required. If the project is located within 150 feet of a known or recorded archaeological site, the tribe will be notified prior to commencement of any work and a monitor will be present during the excavation portion of the project and will observe the work to ensure that archeological resources are not damaged.

In the event that archaeological resources are encountered during subsurface construction for land development projects, land alteration work in the general vicinity of the find shall be halted and a qualified archaeologist shall be consulted. Prompt evaluations could then be made regarding the finds and course of action acceptable to all concerned parties could then be adopted. Local Native American organizations and tribe representatives shall be consulted if human remains are encountered.

Policy PR 1.11: Specialized Facilities. Consider the development of recreation programs and specialized facilities for different age groups, such as senior citizens and youths.

Open Space

OBJECTIVE OS 2: PRESERVE AND ENSURE ACCESS TO OPEN SPACE AREAS THROUGHOUT THE PLANNING AREA THAT ARE HARMONIOUS WITH BOTH THE NATURAL ENVIRONMENT AND EXISTING DEVELOPED AREAS AND AVAILABLE TO ALL MEMBERS OF THE COMMUNITY.

Policy OS 2.1: Open Space Preservation. Leave and/or restore open space areas to their natural state wherever possible and limit uses to those with a minimal environmental impact.

Program OS 2.1-a: The City should require underground utilities in parks and adopt an ordinance to require solar wherever practical and cost efficient. Utilities should be located and designed to minimize an area's environmental and visual qualities.

Policy OS 2.2: Wildlife Corridors. Ensure that adequate open space is provided to permit effective wildlife corridors for animal movement.

Policy OS 2.3: Sensitive Habitat Areas. Facilitate public access to open space in a manner that ensures protection of sensitive habitat areas.

Policy OS 2.4: Right-of-Way for Trails. Use, wherever possible, existing public easements, right-of-ways, flood control facilities, and other public property for the development of trails. Where it is not possible to acquire right-of-way to connect trails systems, the City shall provide access links within the existing street right-of-way.

Policy OS 2.5: Clear Lake Shoreline. Ensure, wherever possible, maximum public access to the Clear Lake shoreline.

Program OS 2.5-a: Require public access easements across lakefront property between 'C' Street and Ninth Street as development occurs.

Policy OS 2.6: Open Space Uses. Seek balance in use of open space for agriculture, habitat preservation, and recreation.

Policy OS 2.7: Agricultural Protection. Protect agricultural activity and long-term commercially viable agricultural land.

Policy OS 2.8: Coordination with Biological Resources Policies. Coordinate open space programs with the other Plan policies to protect plant and wildlife habitat.

Program OS 2.8-a: Establish an active program of land/development rights acquisition in order to protect sensitive environmental areas and features.

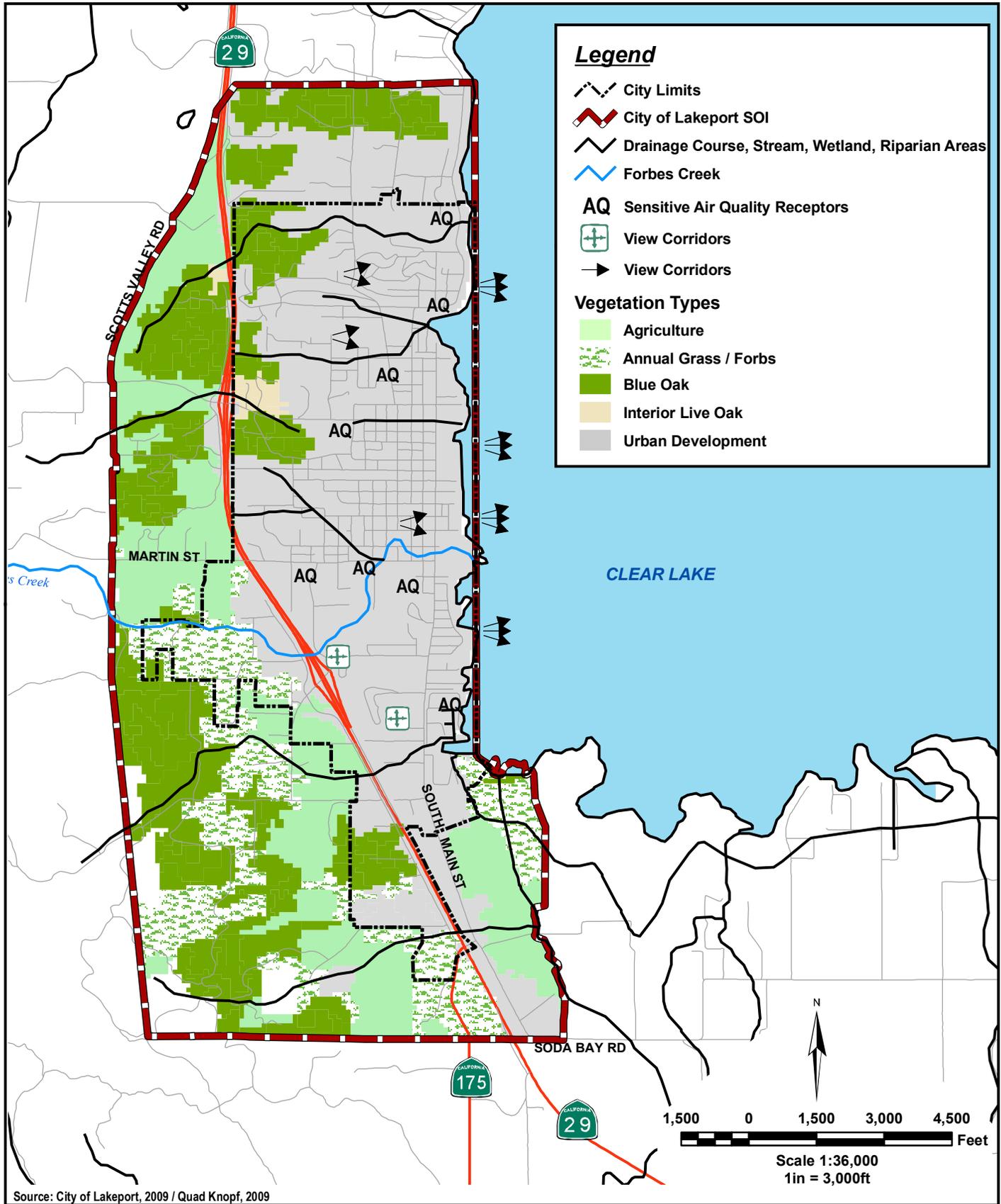
Program OS 2.8-b: Establish standards for inclusion and management of permanent open space in new developments.

Policy OS 2.9: Development Rights Transfers. Study the potential for inter-jurisdictional transfer of development rights.

Policy OS 2.10: Protection of Scenic Views. Protect and preserve valuable scenic view sheds and view corridors (see [Figure 16](#)).

Policy OS 2.11: Open Space Links. Preserve and expand links between open spaces and creek corridors.

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IX. NOISE ELEMENT

IX. NOISE ELEMENT

Purpose

The purpose of the Noise Element is to protect the health and welfare of the community by promoting development which is compatible with established noise standards. This section has been prepared in conformance with Government Code § 65302(f) and the guidelines adopted by the State Office of Noise Control, pursuant to Health and Safety Code § 46050.1. Existing and future noise problems in Lakeport and its Sphere of Influence have been identified. The Noise Element will provide policies and implementation programs designed to reduce the community's exposure to excessive noise levels. Accomplishing this task requires an evaluation of the noise from sources such as roads, highways, recreation areas, aviation and from stationary sources such as factories.

Noise Characteristics

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing.

Most of the sounds which we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a weighting that reflect the fact that human hearing is less sensitive at low frequencies and extreme high frequencies than in the mid-range frequency. This is called "A" weighting, and the decibel level so measured is called the A-weighted sound level (dBA). In practice, the level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{10} , L_{50} , and L_{90} , are commonly used. They are the A-weighted noise levels equaled or exceeded during 10%, 50%, and 90% of a stated time period. A single number descriptor called the Leq is now also widely used. The Leq is the average A-weighted noise level during a stated period of time.

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, the Ldn (day/night average sound level), was developed. The Ldn

divides the 24-hour day into the daytime of 7:00 AM to 10:00 PM and the nighttime of 10:00 PM to 7:00 AM. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The Community Noise Equivalent Level (CNEL) is another similar 24 hour average which includes both an evening and nighttime weighting.

Human Response to Noise

The effects of noise on people can be categorized as follows:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning; and
- physiological effects such as startling, hearing loss.

The levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Workers in industrial plants can experience noise in the last category. Unfortunately, there is as yet no completely satisfactory way to measure the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance, and habituation to noise over differing individual past experiences with noise. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by the hearers.

The following relationships will be helpful in understanding the significance of increases in the A-weighted noise level:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected.
- A 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

In any typical noise environment about 10 percent of the population will object to any noise not of their own making and 25 percent will not react or complain at all, regardless of the level of noise being generated. Consequently, noise control measures are most beneficial to the remaining 65 percent of the population who are neither ultra-sensitive nor insensitive to noise. Negative reaction to noise generally increases with the increase in difference between background (or ambient) noise and the noise generated from a particular source such as traffic operations. In most situations, noise control measures need to reduce noise by 5 to 10 dB(A) in order to effectively reduce complaints.

People generally have the ability to distinguish one sound from a background of sounds, such as a telephone ringing over music. However, certain noise levels can render a sound inaudible. For example, heavy trucks can interfere with a conversation. Face-to-face conversation usually can proceed where the noise level is up to 66 dB(A), group conversations up to 50 to 60 dB(A), and public meetings, up to 45 or 55 dB(A), without interruption.

Sleep interference is more difficult to quantify, although studies have shown that progressively deeper levels of sleep require louder noise levels to cause a disturbance. The California Office of Noise Control (ONC) recommends that individual events within sleeping areas should not exceed 50 dB(A) in residential areas exposed to noise levels of 60 Ldn, or greater. Interior noise standards of 45 Ldn will protect against sleep interference.

Environmental noise, in almost every case, produces effects which are subjective in nature or involve interference with human activity. However, brief sounds at levels exceeding 70 dB(A) can produce temporary physiological effects such as constriction of blood vessels, changes in breathing and dilation of the pupils. Steady noises of 90 dB(A) have been shown to increase muscle tension and adversely affect simple decision making. Long-term exposure to levels exceeding 70 dB(A) can cause hearing loss.

Existing Noise Sources in Lakeport

The primary noise generators in Lakeport are vehicular traffic (including automobiles, trucks, buses, and motorcycles), boaters on Clear Lake, and during events at the race track at the County Fairgrounds.

The level of vehicular noise varies with the volume of traffic on a given roadway, the percentage of trucks, buses and motorcycles, the speed of the traffic, and the distance from the roadway. The major traffic noise generators are Highway 29, Main Street, Lakeport Boulevard, 11th Street, and High Street. Along most streets, the presence of densely-packed buildings will reduce the noise exposure significantly for subsequent rows of buildings. A row of buildings will generally reduce the noise level by about 5 decibels, significantly reducing the influence of local traffic noise beyond the street itself.

While the noise generated by the roadway system is most pervasive in the City of Lakeport, noise generated at the Lake County Fairgrounds and by activity on Clear Lake is also occasionally significant. Automobile races are frequently held at the Lake County Fairgrounds in the evenings, when nearby residents are most sensitive to intrusive noises. Noise sources at the races include the stock cars, the public address system, the crowd noise, and spectator traffic.

Noise generated by power boats on the lake is another major noise source in Lakeport. Large powerboats equipped with inboard engines without mufflers generate noise levels as high as 110 dBA at a distance of 50 feet. Larger outboard engines also generate noise levels of 65 to 95 dBA at a distance of 50 feet. When many boats are starting up together, for example early in the morning during a bass tournament, significant noise levels can be generated. Noise generated from boaters on Clear Lake has the potential to affect residents living well beyond the lake shore.

Other noise sources which occasionally represent problems in the City include: barking dogs; the use of power tools; seaplanes; helicopters; and machinery. The noise generated by these sources is most effectively controlled through the enforcement of the local noise ordinance.

At present, no significant amount of noise is produced by Lampson Field, a general aviation airport located outside of the City's Sphere of Influence. The City will continue to work with the County Airport Land Use Commission (ALUC) to monitor airport noise and implement suitable mitigation measures if they become necessary.

Future Noise Levels

Future noise levels will be largely attributable to vehicular traffic. Portions of several of the principal streets and highways listed below are projected to experience a significant increase in noise over 60 dBA.

- 6th Street
- 11th Street
- 20th Street
- Hartley Street
- Hill Road
- Lakeport Boulevard
- Main Street
- Martin Street
- Scotts Valley Road
- Parallel Drive
- Highways 29 and 175

It is anticipated that residences adjacent to the above streets will be exposed to excessive noise levels, defined as those over 60 dBA. The appropriate response contained in this section is to implement a variety of noise-mitigating measures and, where possible, condition future residential development to limit noise exposure.

Noise and Land Use Compatibility Standards

The most effective means of controlling noise is to prevent the development of incompatible land uses, rather than implementing after-the-fact techniques such as sound walls, earth berms or additional residential sound proofing. The objective of the Noise and Land Use Compatibility Standards is to provide an acceptable community noise environment and to minimize noise-related complaints from residents.

The Standards listed in [Table 15](#) should be used to evaluate the compatibility between land uses and future noise levels in Lakeport.

**Table 15
Noise and Land Use Compatibility Standards**

Land Use	Maximum Exterior Noise Level
Residential Development	Up to 60db
Transient Lodging: Motel and Hotel	Up to 60db
School, Library, Church, Hospital and Nursing Home	Up to 60db
Auditorium, Concert Hall, Amphitheater, Sports Arena	Up to 70db
Sports Arena, Outdoor Spectator Sports	Up to 75db
Playgrounds, Neighborhood Parks, Open Space	Up to 70db
Golf Course, cemetery	Up to 70db
Office Building, Business, Commercial & Professional	Up to 65db
Industrial, Manufacturing, Utilities	Up to 70db

The following considerations should be taken into account when using the Noise and Land Use Compatibility Standards:

1. The standard for maximum outdoor noise levels in residential areas is a Ldn of 60 dB. This standard is applied where outdoor use is a major consideration, such as backyards in single family housing developments and recreation areas in multifamily developments. This standard should not be applied to outdoor areas such as small decks and balconies typically associated with multifamily residential developments, which can have a higher standard of 65 Ldn;
2. The maximum acceptable interior noise level in new residential development required by the State of California Noise Insulation Standards is an Ldn of 45. This standard continues to be applied to single family and all other residential development in Lakeport. In addition, the interior noise level for offices shall be Ldn 45 dB or less;
3. These standards are not intended to be applied reciprocally. In other words, if an area is currently below the desired noise standard, an increase in noise up to the maximum should not be permitted. The impact of a proposed project on an existing use should be evaluated in terms of the potential for adverse community response based on existing community noise levels, regardless of the compatibility standards; and
4. The Land Use and Noise Compatibility Standards should be reviewed in relation to the specific source of noise. These standards are based on measurement systems which average noise over a 24-hour period and do not take into account single-event noise sources. For example, aircraft noise normally consists of a higher single-noise event than vehicular traffic and has been linked to sleep interference and other significant problems, but occurs infrequently in Lakeport. Different noise sources yielding the same composite noise exposure do not necessarily create the same environment. Additional standards may be applied on a case-by-case basis where supported by acoustical analysis to mitigate the effects of single-event noise sources.

OBJECTIVES, POLICIES & PROGRAMS

OBJECTIVE N 1: TO ENSURE COMPATIBILITY OF NEW DEVELOPMENT WITH THE EXISTING AND FUTURE NOISE ENVIRONMENT.

Policy N 1.1: Maintain Noise and Land Use Compatibility Standards. Attempt to maintain the noise and land use compatibility standards indicated in Table 15.

Program N 1.1-a: Review all land use and development proposals for compliance with the Noise and Land Use Compatibility Standards.

Responsibility: Community Development Department

Program N 1.1-b: Require a standard of Ldn 45 dB for indoor noise for all new residential development, including hotels and motels.

Responsibility: Community Development Department

Program N 1.1-c: Use the standards in Table 15 to determine the need for noise studies and require new developments to provide noise attenuation features as a condition of approving new projects.

Responsibility: Community Development Department

Program N 1.1-d: Require an acoustical study for all new residential projects with a future Ldn noise exposure of 60 dB or greater. The study shall describe how the project will comply with the Noise and Land Use Compatibility Standards.

Responsibility: Community Development Department

Program N 1.1-e: Require post-construction testing and sign-off by an acoustical engineer for residential and office projects exposed to an Ldn in excess of 65 dB to ensure compliance with the Noise and Land Use Compatibility Standards.

Responsibility: Community Development and Building Departments

OBJECTIVE N 2: TO REDUCE NOISE TO ACCEPTABLE LEVELS WHERE IT NOW EXCEEDS THOSE STANDARDS.

Policy N 2.1: Outdoor Noise in Residential Areas. Reduce outdoor noise in existing residential areas where economically and aesthetically feasible.

Program N 2.1-a: Verify projected noise levels with noise monitors at locations adjacent to residential and other noise sensitive areas where traffic volumes increase by over 50% from baseline noise data.

Responsibility: Community Development and Public Works Departments

Program N 2.1-b: Consider and carefully evaluate the noise impacts of all street, highway and other transportation projects.

Responsibility: Community Development and Public Works Departments

Program N 2.1-c: Continue to seek State and Federal funding to construct noise barriers where impact of noise can be significantly reduced.

Responsibility: Community Development Department

Program N 2.1-d: Establish a standard for new commercial development adjacent to residential areas which does not permit an increase in noise levels in residential areas of more than 3 dB Ldn, or create noise impacts which would increase noise levels to more than 60 dB Ldn at the boundary of a residential area, whichever is the more restrictive standard.

Responsibility: Community Development Department

Policy N 2.2: Noise Reduction in Existing Residential Areas. Reduce noise levels in existing residential areas.

Program N 2.2-a: Restrict truck traffic to designated routes.

Responsibility: Community Development and Public Works Departments

Program N 2.2-b: Enforce California Vehicle Code § 23130, 23130.5, 27150, 27151 and 38275. These sections pertain to the allowable noise emission of vehicles operated on public streets.

Responsibility: Police Department

Program N 2.2-c: Facilitate City review of all activities that take place at the County Fairgrounds. This would allow the City to institute additional noise control measures, if it deems them necessary, and to assure that any new events brought to the fairgrounds not generate noise exceeding the Noise and Land Use Compatibility Standards contained in Table 15.

Responsibility: Community Development Department

Program N 2.2-d: The City should work in a cooperative manner with the County and State to explore options for mitigating noise impacts from the Fairgrounds.

Responsibility: City Council

Program N 2.2-e: Consult with the State and the County regarding activity on the lake. The City's concerns regarding early morning starts for events such as bass tournaments should be stated to the agency in charge of permits for the activities, so that adequate controls on hours of operation (muffler use, etc.) can be instituted to reduce noise.

Responsibility: Community Development Department

Policy N 2.3: Interagency Cooperation. Continue to encourage other agencies to reduce noise levels generated by airports, heliports, roadways and other facilities.

Program N 2.3-a: Continue to work with the County and the Airport Land Use Commission to reduce noise generated from Lampson Field.

Responsibility: Community Development Department and the County Public Works Department

Policy N 2.4: Discourage Sound Walls. As an alternative to the construction of sound walls to mitigate noise levels, encourage developers to utilize site design techniques, vegetative landscaping, berms, building setbacks, and alternative architectural layouts as a means of meeting noise reduction requirements. Where sound walls are deemed appropriate, design standards shall be applied to reduce visual and aesthetic impacts.

Program N 2.4-a: Amend the zoning ordinance to include standards for construction of sound walls and alternative forms of noise mitigation.

OBJECTIVE N 3: TO PREVENT LAND USES WHICH INCREASE THE EXISTING NOISE LEVEL ABOVE ESTABLISHED ACCEPTABLE STANDARDS.

Policy N 3.1: Remodel Projects. Noise standards shall be applied to residential remodel projects, where the remodeling is substantial.

Program N 3.1-a: Review all building permit applications for compliance with the applicable noise standards, and require as necessary, the appropriate noise mitigating features.

Responsibility: Community Development and Building Departments

Policy N 3.2: Noise Protection in Residential Areas. Protect existing noise environment in residential areas.

Program N 3.2-a: Require mitigation measures for projects that would cause the following criteria to be exceeded or would generate noise which could cause significant adverse community response:

-
- Cause the Ldn in existing residential areas to increase by 3 dB or more and exceed an Ldn of 55 dB.
 - Cause the Ldn in existing residential areas to increase by 3 dB or more if the Ldn currently exceeds 55 dB.

[Note: a 3 dB increase would result if traffic increased by 100% over existing levels. It is recognized that there are locations where the outdoor criteria of an Ldn of 55 dB cannot be reasonably and feasibly achieved. These situations will be evaluated on a case-by-case basis to determine the appropriate level of mitigation.]

Responsibility: Community Development and Building Departments

Program N 3.2-b: Continue to enforce the existing Lakeport Noise Ordinance.

Responsibility: Community Development and Police Departments

Program N 3.2-c: Stay abreast of changing noise issues in Lakeport and periodically review the existing Lakeport Noise Ordinance and update it as needed.

X. SAFETY ELEMENT

X. SAFETY ELEMENT

Purpose

The purpose of the safety element is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, earthquakes and other hazards. This element is required to include mapping of known seismic and other geologic hazards and also to address other locally relevant safety issues such as:

- hazardous materials spills;
- hazardous and toxic materials storage and disposal;
- wildland and urban fires;
- emergency response capacity;
- flooding, storm drainage; and
- potable water quality.

A second purpose of this element is to guide land use planning and policy decisions in order to achieve an acceptable level of public safety from known natural and man-made hazardous events.

Geologic and Seismic Hazards

SEISMIC HAZARDS

Earthquakes originate as movement or slippage occurring along an active fault. These movements generate shock waves that result in ground shaking. Structures of all types, if not designed or constructed to withstand ground shaking, may suffer severe damage or collapse. Likewise, some slopes will collapse due to the soil or geological characteristics resulting in hazard both in terms of collapse of structures located thereon, or collapse of structures within the path of resulting land slides.

The severity of damage to buildings from earthquakes is related to the intensity of groundshaking, soils and geologic characteristics, and the type of building construction used. High risk areas in Lakeport do not have any critical facilities such as high-occupancy buildings, hospitals, or schools. The land use pattern that has evolved in Lakeport has, in general, avoided high-risk areas.

Lakeport is located in a highly active earthquake area and the potential exists for a significant seismic event in the future. Immediately east of the city, between the city limits and Clear Lake, there is a potentially active rupture zone. Potentially active rupture zones are faults which have been active in the past 2,000 years. Little is known about this shoreline fault rupture zone, however, it represents a potentially significant hazard and must be taken into consideration when development occurs in the vicinity. Within the past 200 years, no major earthquakes have occurred along faults in Lake County.

To the west of the city lie the San Andreas fault and the Healdsburg fault, 30 and 15 miles away, respectively. Both of these faults have been responsible for moderate to major seismic events in the past. The maximum earthquake magnitudes observed to date are 8.5 for the San Andreas fault and 6.75 (Richter Scale¹) for the Healdsburg fault.

Figure 17 shows the 2001 Fault-Rupture Hazard Zones maps prepared by the California Geological Survey. Most of the ground shaking which has occurred in past years in the Lakeport area has come from faults in the Mayacamas and Mt. Konocti area. Additionally, fault zones run diagonally in a southeast to northwest direction through the Potato Hill, Lake Pillsbury and Sanhedrin areas. In the far southeastern corner of the County there is a fault zone in the Jericho Valley, an area that runs along the Lake/Napa County line.

Communities containing structures built with unreinforced masonry walls are particularly susceptible to damage from earthquakes. The Unreinforced Masonry Law passed by the State Legislature in 1986 [SB 547], requires all cities and counties in Seismic Zone 4 to identify potentially hazardous unreinforced masonry buildings. The City has complied with this legislation and identified several unreinforced masonry buildings. Implementation of an inspection and reinforcement program was carried out to help mitigate hazards associated with seismic effects on structures. A comprehensive structural rehabilitation program was not carried out city-wide.

In addition to unreinforced masonry buildings, other key community structures are also considered at-risk in the occurrence of a seismic event.

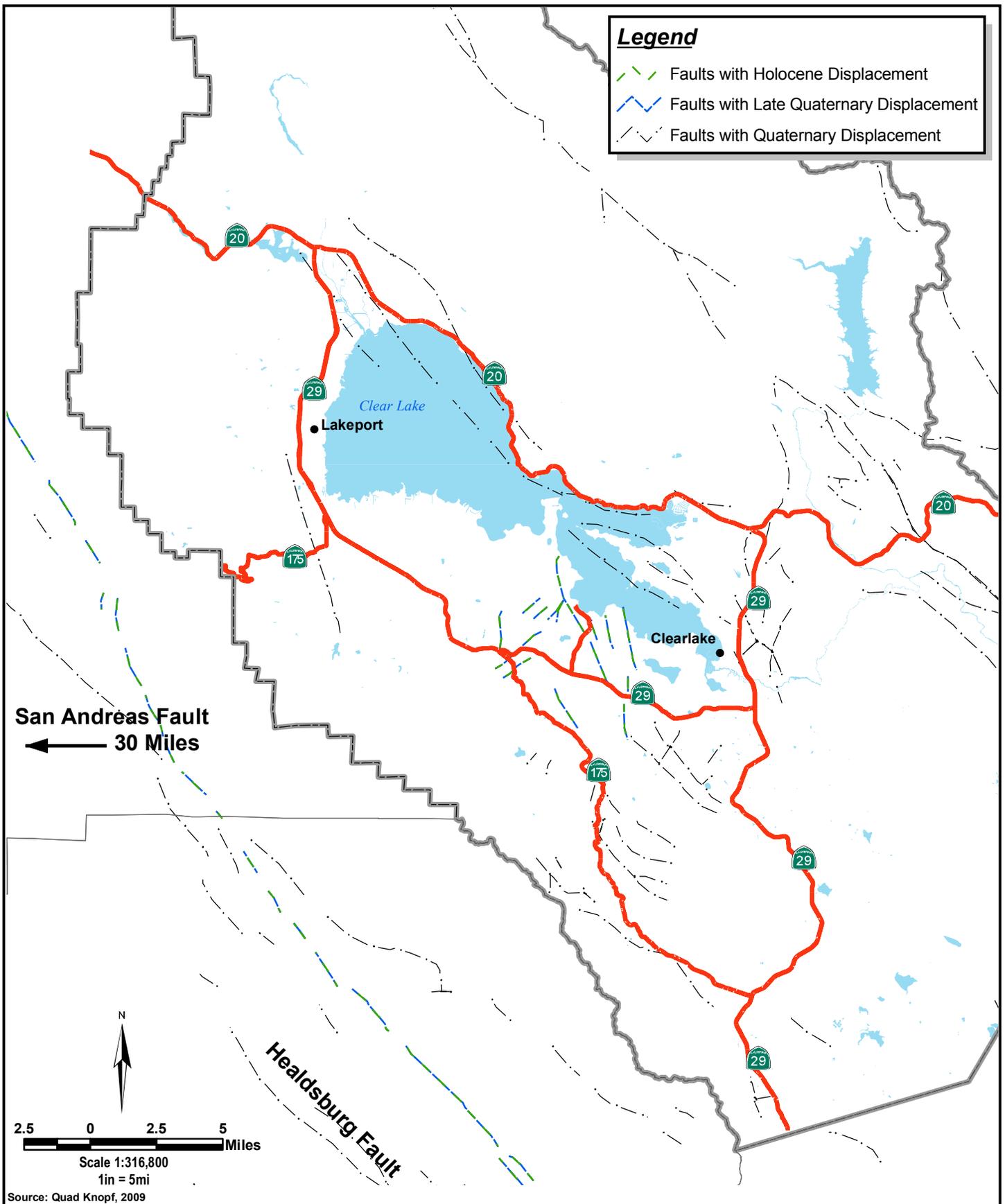
- All critical emergency buildings (city hall, county courthouse, police and fire stations);
- High priority buildings (theaters, schools, limited care facilities)
- The majority of high-use buildings (commercial and office buildings, large apartment buildings, and churches);

A major earthquake would be expected to cause considerable damage to transportation systems. Roads, bridges and highway overpasses all cross various earthquake faults as well as areas susceptible to ground failure.

LIQUEFACTION

Liquefaction is a phenomenon in which the strength and stiffness of the soil is reduced by earthquake shaking or other rapid loading. Liquefaction and related phenomena have been responsible for tremendous amounts of damage in earthquakes around the world.

¹ Seismic waves are the vibrations from earthquakes that travel through the Earth; they are recorded on instruments called seismographs. Seismographs record a zigzag trace that shows the varying amplitude of ground oscillations beneath the instrument. Sensitive seismographs, which greatly magnify these ground motions, can detect strong earthquakes from sources anywhere in the world. The time, locations, and magnitude of an earthquake can be determined from the data recorded by seismograph stations. The Richter magnitude scale was developed in 1935 by Charles F. Richter of the California Institute of Technology as a mathematical device to compare the size of earthquakes.



Liquefaction occurs in saturated soils, that is, soils in which the space between individual particles is completely filled with water. This water exerts a pressure on the soil particles that influences how tightly the particles themselves are pressed together. Prior to an earthquake, the water pressure is relatively low. However, earthquake shaking can cause the water pressure to increase to the point where the soil particles can readily move with respect to each other. When liquefaction occurs, the strength of the soil decreases and, the ability of a soil deposit to support foundations for buildings and bridges is reduced. Liquefied soil also exerts higher pressure on retaining walls, which can cause them to tilt or slide. This movement can cause settlement of the retained soil and destruction of structures on the ground surface. Increased water pressure can also trigger landslides and cause the collapse of dams. Because liquefaction only occurs in saturated soil, its effects are most commonly observed in low-lying areas near bodies of water such as rivers, lakes, bays, and oceans. Soils in and around Lakeport, especially near the lake shore, are susceptible to liquefaction during a seismic event.

SEICHES OR DAM FAILURES

A significant seismic event near Lakeport could potentially cause large waves to form on Clear Lake called a seiche. Seiching is the formation of standing waves in a water body due to wave formation and subsequent reflections from the ends. These waves may be incited by earthquake motions (similar to the motions caused by shaking a glass of water), impulsive winds over the surface, or due to wave motions entering the basin. The various modes of seiching correspond to the natural frequency response of the water body.

A seiche inundation zone has been identified, which is an area between the normal shoreline of Clear Lake and ten feet above flood stage, which is approximately at the 1,431 ft. contour elevation (see [Figure 18](#)). The risks associated with seiche are considered to be relatively low compared to the risks from earthquake and liquefaction within the Lakeport area.

The City of Lakeport Municipal Sewer District (CLMSD) maintains an earthen dam in the south west part of the Planning Area, near the intersection of Highways 29 and 175, for the retention of treated wastewater. The dam will store a total of 660 acre feet of water and has been approved by the State. The possibility of catastrophic collapse of this dam is remote. Should this occur, however, the spill-out would result in a relatively minor inundation that would probably be contained by existing drainage courses, with a low probability of loss of life or property damage. Nonetheless, the City should require the CLMSD to prepare inundation maps, a warning system and drainage plans in case of a seismic event when new construction or expansion to this facility occurs.

LANDSLIDES

Landslides are a significant geologic constraint to development in the Lakeport Planning Area. The landslide potential of an area is a function of the area's hydrology, geology, and seismic characteristics. Clay soils, which underlie many hillsides in Lakeport are particularly susceptible to sliding. Although landslides generally occur in areas with steep slopes, they may occur on slopes with a grade of 20% or less in geologically unstable areas. Since zones of moderate to high landslide potential exist in Lakeport, soils tests carried out by a registered soils engineer or geologist are essential wherever landslide potential is indicated or suspected. Foundations for

structures built in areas with steep slopes in excess of 20% must be carefully engineered to avoid increasing landslide risk.

Flooding

Flooding has historically been one of Lakeport's major safety concerns. Clear Lake and its tributary drainages have a long history of flooding. In the past twenty years, federal disasters due to flooding were declared six times in the City of Lakeport during 1983, 1986, 1995 (twice), 1997, and 1998. Flooding in Lakeport historically results from two distinct types of events: shoreline flooding due to high lake levels and wind velocity, and stream bank flooding caused by high intensity cloudburst storms over one or more of the drainage areas. Conditions in the winter tend to be conducive to both types of flood conditions at the same time.

Stream bank flooding affects most drainage within the city. Cloudburst storms lasting as long as three hours can occur in the watersheds of Lakeport practically anytime during the fall, winter, and spring and may occur as an extremely severe sequence in a general rainstorm. Cloudbursts are high-intensity storms that can produce floods characterized by high peak flows, short duration, and relatively small volume of runoff. In small drainage basins, such as those existing in the Planning Area, cloudbursts can produce peak flows substantially larger than those of general rainstorm runoff.

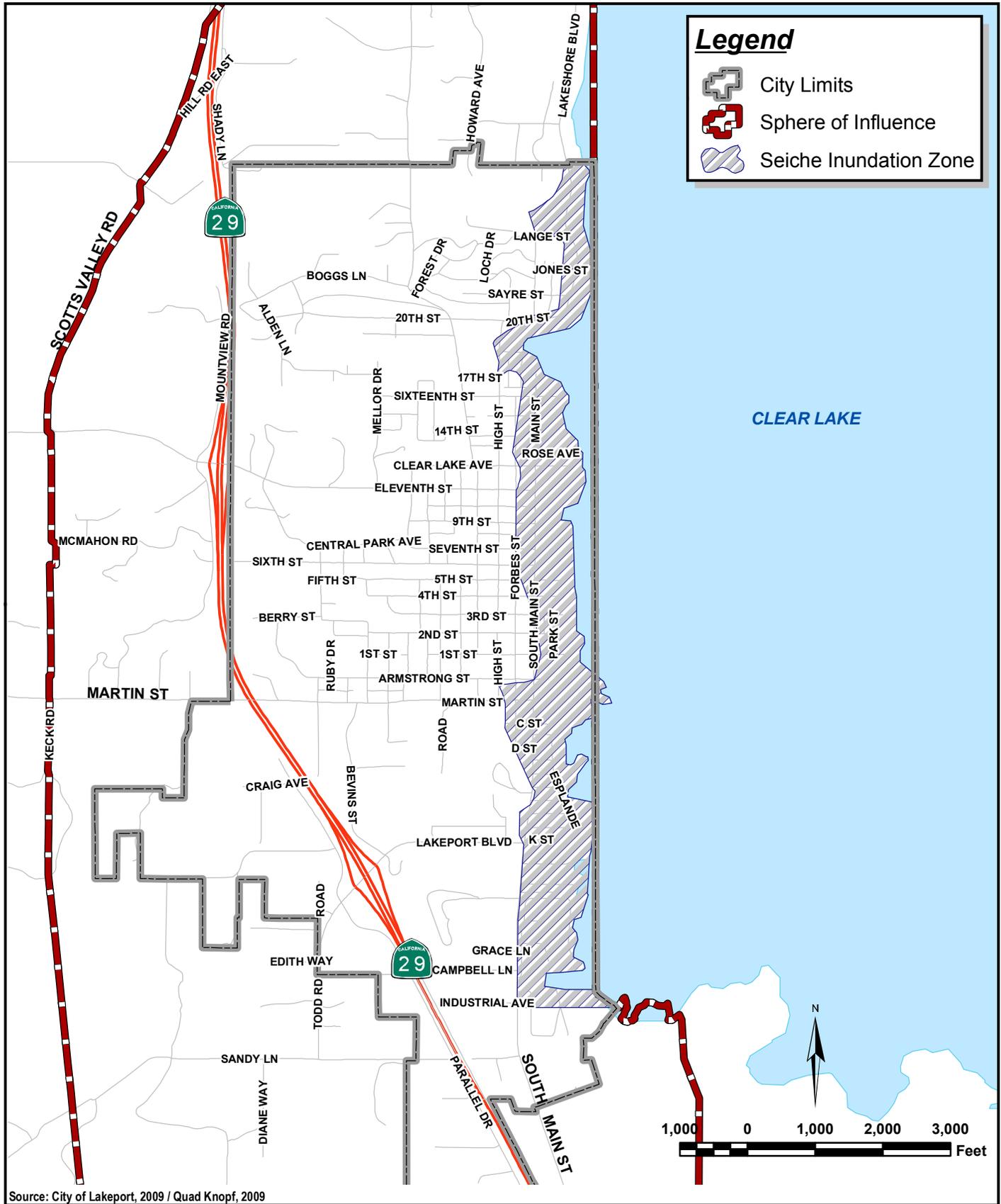
Lakeport is traversed by several streams and drainage areas which flow into Clear Lake. The development that has occurred during the past twenty years has accentuated existing drainage problems and has increased the potential for flooding. Continued construction of new buildings increases the area of impermeable surface and thus the amount of storm water that flows through the city's storm drain system.

Water Supply Quality

The health of the entire community is dependent on a supply of potable water that is consistently free from organic wastes, chemical contamination and other impurities. Lakeport obtains its potable water from Clear Lake and from four wells located in the Planning Area. Potential sources of contamination of the City's drinking water from agricultural runoff, chemical spills, and groundwater contamination must be prevented. Ongoing monitoring of the quality of potable water supplies for both coliform as well as trace quantities of chemical pollutants must be carried out on a regular basis. The policies and implementation programs in this element focus on both prevention of potable water contamination and water quality monitoring.

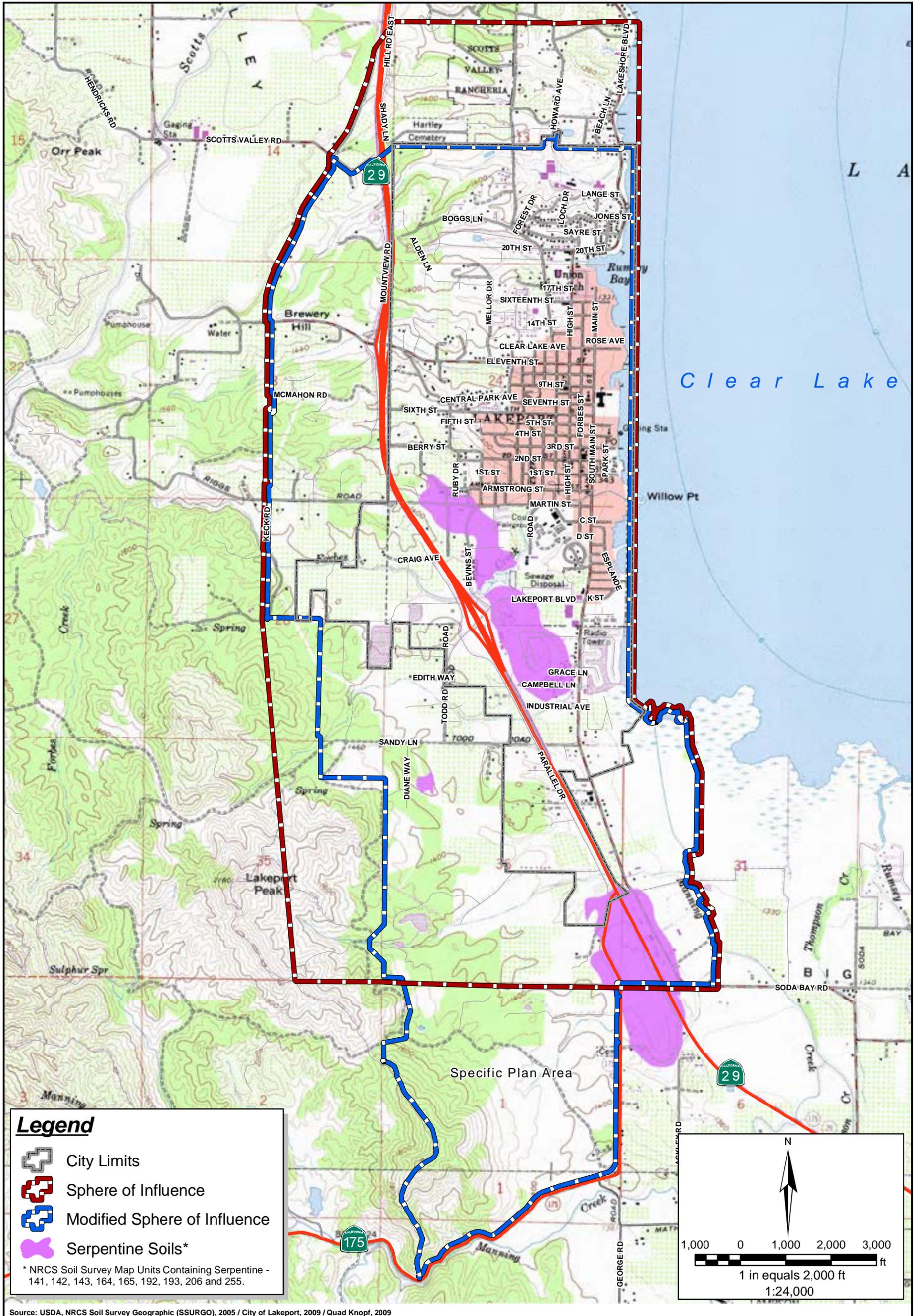
Asbestos Risk

The primary risk of exposure to asbestos in Lakeport comes from the disruption of naturally occurring serpentine soil throughout the area (see [Figure 19](#)). The word asbestos refers to several types of fibrous minerals. In its natural state, asbestos occurs throughout much of the world, and is found in two-thirds of the rocks in the earth's crust. Asbestos fibers are released into the air by construction and farming activities which agitate the soil, and are also released naturally by erosion.



SEICHE INUNDATION ZONE

Figure 18



Asbestos is also used as an insulating material in public buildings and can pose a potential health hazard. The Lakeport Unified School District has determined that public schools within the City's Planning Area are in compliance with the 1986 Federal and State Building Codes for asbestos insulation.

Emergency Preparedness

The City has an adopted Emergency Operations Plan. The purpose of this plan is to ensure that the City will be prepared and respond effectively in the event of emergencies to save lives and restore and protect property; repair and restore essential public services; provide for the protection and distribution of medical, food, water and other vital supplies; and coordinate operations with Civil Defense emergency organizations and other jurisdictions to maintain continuity of government.

The County of Lake has prepared a comprehensive countywide emergency plan which will provide the basis for an integrated and multi-jurisdictional response to large scale emergency situations associated with natural and man-made disasters and Civil Defense operations.

Wildland and Urban Fire Hazards

The combination of vegetation, topography, climate and population density create a significant potential for hazards from wildfires within the Lakeport Planning Area. There are many vacant and undeveloped areas within the City and its Sphere of Influence, particularly on the west side of Highway 29 and the northern portions of the City, including mobile home parks. Rugged topography and highly flammable vegetation make residential development potentially unsafe unless adequate fire safety measures are taken.

Urban fire hazards occur principally in older structures with common walls and attics and where rear access is not possible. There are a number of older buildings in the downtown area which have a high fire potential for these reasons.

The area within the City is served by the Lakeport Fire Protection District/County Fire Protection District. Any location within City limits can be reached within three to five minutes. Locations within the Sphere of Influence can be reached in five to seven minutes. This rapid response time can be attributed to the combination of full-time staff and emergency personnel in the Lakeport Fire Protection District and a large number of volunteers.

Police Protection

The Lakeport Police Department continues to maintain adequate staffing levels and equipment to provide protection of persons and property in Lakeport. This is accomplished through annual reviews of the police budget, which takes into account increases in demand for services resulting from additional mandates and a changing service area. Traffic-related activity, however, has increased substantially in recent years relative to other police activities. The volume of traffic which passes through Lakeport is increasing, irrespective of locally-generated land use and traffic changes occurring within the City's Planning Area. Traffic enforcement requires an

increasing police presence on city streets. Similarly, as unincorporated areas develop, and/or become annexed to the City, increasing demands will be placed on available personnel and equipment.

Transportation and Storage of Hazardous Materials

There exist potential public safety hazards in the Lakeport Planning Area associated with hazardous materials transported by truck, the storage of hazardous materials, asbestos insulation in public buildings and potential contamination of drinking water by hazardous materials.

The transportation and storage of hazardous materials is clearly a regional problem. A large quantity of hazardous products are transported on highways where the potential for release of this material into the environment represents a potentially significant public health risk. The policies and programs dealing with hazardous materials in this element incorporate and build on other relevant portions of the Safety Element of the Lake County General Plan.

Radioactive materials are distinguished from other hazardous materials and specific federal and state regulations have been developed for these substances. The use and storage of radioactive materials in Lakeport is limited to medical facilities, since no other primary users of radioactive materials, such as research laboratories, nuclear power plants or military facilities, are located within the Planning Area. The principal potential danger to Lakeport residents from these materials is related to the possibility of a truck accident whereby containers holding radioactive materials would rupture.

Aviation Hazards

Lampson Field Airport potentially affects land uses in Lakeport in the form of noise and safety impacts, although it is located outside of the Planning Area. The County owns and operates this general aviation airport and has prepared a Master Plan that reflects anticipated growth in general aviation activity for the next 20 years. The Master Plan attempts to prohibit and/or reduce obstacles to air navigation, exposure of persons on the ground to accident and crash hazards, and noise impacts through building height restrictions, land use limitations and building standards to reduce interior noise.

The County's Airport Land Use Commission (ALUC) regulates land use in an area surrounding Lampson Field which includes a portion of Lakeport's Planning Area. The City must submit projects within the County's ALUC referral area for their review and determination of consistency with the policies of the Airport Master Plan. In addition, the City's General Plan must be consistent with the policies established by the Airport Master Plan for the referral area.

OBJECTIVES, POLICIES & PROGRAMS

OBJECTIVE S 1: TO PROTECT THE COMMUNITY FROM INJURY, LOSS OF LIFE AND PROPERTY DAMAGE RESULTING FROM NATURAL CATASTROPHES AND ANY HAZARDOUS CONDITIONS RELATING TO SEISMIC, GEOLOGIC, AND FLOODING HAZARDS.

Policy S 1.1: Seismic Hazards. Reduce the risk of loss of life, personal injury and damage to property resulting from seismic hazards.

Program S 1.1-a: Require geotechnical reports by a state registered geologist for development proposals on sites in seismically and geologically hazardous areas and for all critical structures. These reports should include, but not be limited to: evaluation of and recommendations to mitigate the effects of fault displacement; ground shaking; landslides; expansive soils; and subsidence and settlement.

Responsibility: Community Development and Public Works Departments

Program S 1.1-b: Comply with the provisions of the State *Alquist-Priolo Act* and seismic safety criteria established by the City of Lakeport.

Responsibility: Community Development and Public Works Departments

Program S 1.1-c: Require, as conditions of approval, measures to mitigate potential seismic and geologic safety hazards for structures as recommended by the geotechnical report.

Responsibility: Community Development and Public Works Departments

Program S 1.1-d: Require professional inspection of foundation and excavation, earthwork and other geotechnical aspects of site development during construction on those sites specified in soils, geologic, and geotechnical studies as being prone to moderate levels of seismic hazard.

Responsibility: Building Department

Program S 1.1-e: Monitor and review existing critical, high priority buildings to ensure structural compliance with seismic safety standards.

Responsibility: Building and Public Works Departments

Policy S 1.2: Building Limitations in High Risk Zones. Discourage construction of high density residential, other critical, high occupancy or essential services buildings in high risk zones such as Active Fault Displacement Study Areas, wildland fire areas, flood areas, and landslide areas.

Program S 1.2-a: Review and revise General Plan designations and/or the Zoning Ordinance as necessary to relocate high density zoning to areas outside high risk zones.

Responsibility: Community Development, Building and Public Works Departments

Program S 1.2-b: Prohibit building of structures within 50 feet of a suspected fault line or fault trace unless determined to be appropriate after completion of a geologic engineering study approved by the City.

Responsibility: Community Development, Building and Public Works Departments

Policy S 1.3: Slope Instability. Minimize the risk of personal injury and property damage resulting from slope instability.

Program S 1.3-a: Enforce and strengthen development standards, grading requirements and erosion control measures for hillside areas.

Responsibility: Community Development, Building and Public Works Departments

Program S 1.3-b: Designate properties in areas with severe sliding and soils conditions for low intensity uses such as open space, low density residential, and agriculture.

Responsibility: Community Development Department

Program S 1.3-c: Evaluate slopes over 20 percent and/or unstable land for safety hazards prior to issuance of any discretionary approvals and develop appropriate mitigation measures.

Responsibility: Community Development and Public Works Departments

Policy S 1.4: Updated FIRM Maps. Utilize the U.S. Army Corps of Engineers Flood Insurance Rate Maps (FIRM) to: reduce risk of flooding; identify 100 Year Flood Zones; implement the Flood Damage Prevention Ordinance; and calculate flow rates within identified stream channels.

Program S 1.4-a: Continue to implement the Flood Damage Prevention Ordinance to reduce the risk of flooding.

Responsibility: Community Development and Building Departments

Policy S 1.5: Cooperate with the County of Lake. Continue to work with the County of Lake to ensure that additional storm drainage runoff resulting from development occurring in unincorporated areas upstream from drainage channels in the Lakeport Planning Area is adequately mitigated through improvements on site and/or downstream.

Program S 1.5-a: Request that the County refer all development proposals located in the drainage basins identified in the Storm Drainage Master Plan be referred to the City of Lakeport.

Responsibility: Community Development Department

Program S 1.5-b: Develop, in collaboration with the County, specific plans, a Hazard Mitigation Plan, funding mechanisms and an implementation schedule for creek clearing to remove vegetation and debris and the construction of flood control facilities in the Scotts Creek and Forbes Creek stream channels and other drainage basins.

Responsibility: Community Development Department.

Policy S 1.6: Clear Lake Shoreline Flooding. Work with the County to develop strategies for reducing flooding along the shoreline of Clear Lake.

Program S 1.6-a: Consider participation in action to remove flow limitations on Cache Creek and/or develop alternative flood mitigation policies.

Responsibility: Community Development and Public Works Departments and City Council

Program S 1.6-b: Implement the *City of Lakeport Floodplain Mitigation Plan* (2003).

Responsibility: Community Development and Public Works Departments.

Program S 1.6-c: Organize City-led stream clean up projects in coordination with community groups, volunteer organizations and citizens.

Responsibility: Community Development and Public Works Departments.

Policy S 1.7: Funding Sources. Continue to pursue all available sources of funding such as, but not limited to, low interest loans, FEMA funds, FMHA funds, and Redevelopment Agency tax increment funds to finance improvements to storm drainage facilities.

Policy S 1.8: Flood Hazards. Minimize the risk of personal injury and property damage due to flooding.

Program S 1.8-a: Prohibit all development in the 100 year flood zone unless mitigation measures meeting Federal Flood Insurance Administration criteria are provided. Continue to enforce the Flood Damage Prevention Ordinance.

Responsibility: Community Development Department

Program S 1.8-b: Work with the Lake County Watershed Protection District in the project review process to ensure that adequate measures are implemented to prevent flooding, to establish and maintain effective storm drainage systems and collect the required mitigation fees.

Responsibility: Community Development and Public Works Departments

Program S 1.8-c: Continue to participate in the National Flood Insurance program.

Responsibility: Community Development and Public Works Departments

Program S 1.8-d: Require new development to prepare hydraulic storm drainage studies defining the net increase in storm water run-off resulting from construction and require on-site detention/retention structures or improvements that ensure post-project flows are less than or equal to pre-project flows.

Responsibility: Community Development and Public Works Departments

Program S 1.8-e: Update, as necessary, the Flood Damage Prevention Ordinance and the Storm Drainage Master Plan.

Responsibility: Community Development and Public Works Departments

Policy S 1.9: Storm Drainage System. Maintain unobstructed water flow in the storm drainage system.

Program S 1.9-a: Enforce measures to minimize soil erosion and volume and velocity of surface runoff both during and after construction through application of the erosion control guidelines.

Responsibility: Building and Public Works Departments

Program S 1.9-b: Continue the annual inspection of the drainage systems and informing residents and property owners of illegal structures and debris that must be removed.

Responsibility: Public Works Department

Program S 1.9-c: Continue to develop, update and implement a City Capital Improvement Program for drainage and work with the Lake County Watershed Protection District to eliminate the most important drainage problems in the Lakeport Planning Area and to ensure that drainage channels can handle 100-year flood events.

Responsibility: Community Development and Public Works Departments

Program S 1.9-d: Require, where necessary, construction of siltation retention ponds which are incorporated into the design of development projects.

Responsibility: Community Development and Public Works Departments

Program S 1.9-e: Require that construction within the Seiche Inundation Zone as identified in Figure 18 be designed to reduce wave impacts as determined by the City.

Responsibility: Community Development and Public Works Departments

Policy S 1.10: Asbestos. New development of property found or expected to contain asbestos-contaminated soil in the Lakeport Planning Area must mitigate the potential impact. This mitigation may include capping, excavation, disposal and backfill, landscaping, or a combination of all three. Reference Policy C 3.3 and Program C 3.3-a for additional requirements.

OBJECTIVE S 2: TO REDUCE THE IMPACT OF POLLUTION AS WELL AS HAZARDOUS MATERIALS AND HAZARDOUS WASTE ON THE WELL-BEING AND HEALTH OF THE COMMUNITY.

Policy S 2.1: Water Quality Protection. Protect the water quality of Clear Lake and the Scotts Valley aquifer from degradation.

Program S 2.1-a: Require all development projects to address water quality impacts through the CEQA review process and through strict enforcement of the City's Erosion Control Ordinance to prevent siltation of water courses. Condition development projects to ensure protection of groundwater and watercourses by using Best Management Practices (BMPs). BMPs may include the following:

- Provide vegetative swale or buffer areas, which could be incorporated into landscaped areas to slow down runoff velocities and allow sediments and other pollutants to settle.
- Provide in-line storage of stormwater to reduce peak discharge, allow settling of pollutants, and reduce potential for downstream erosion.
- Perform street and parking lot cleaning to remove potential debris and pollutants that could be picked up and conveyed by stormwater.
- Design parking lots to direct stormwater to storm drains inlets and away from garbage disposal areas.

Responsibility: Community Development and Public Works Departments

Program S 2.1-b: Work with the County to review all development proposals within the City's Planning Area for their impact on water quality. Attempt to ensure that projects eliminate water borne contaminants from entering the Clear Lake Basin or the Scotts Valley aquifer.

Responsibility: Community Development and Public Works Departments

Program S 2.1-c: Discourage construction during wet months to prevent siltation.

Responsibility: Community Development and Public Works Departments

Policy S 2.2: Agricultural Contamination of Potable Water Supplies. Reduce agricultural contamination of potable water supplies in the Clear Lake Basin and the Scotts Valley aquifer by working with the County Community Development Department, County Environmental Health Department and Agricultural Commissioner to identify the impacts of farming operations and the use of herbicides, pesticides and fertilizers on the City's domestic water supply.

Program S 2.2-a: Monitor twice per year, during the dry and wet seasons, Lakeport's potable water supply for trace chemicals and other potential contaminants. Utilize updated industry-wide standards for evaluating potable water quality. Alert the County Environmental Health Department, City Council and the public if water quality hazards are identified. Develop and implement mitigating measures to protect the public health.

Responsibility: Public Works Departments

Program S 2.2-b: Require adherence to all waste discharge requirements and report any violations to the State Water Resources Control Board for enforcement.

Responsibility: Public Works Departments

Policy S 2.3: Hazards of Transportation, Storage and Disposal of Hazardous Wastes. Provide measures to protect the public health from the hazards associated with the transportation, storage and disposal of hazardous wastes [TSD Facilities].

Program S 2.3-a: Continue to facilitate land use and transportation decisions and other programs in accordance with the County's Hazardous Waste Management Plan.

Responsibility: Community Development Department

Program S 2.3-b: Support and improve the convenience of, and attempt to obtain permanent funding for a household hazardous waste disposal program.

Responsibility: Community Development and Public Works Departments

Program S 2.3-c: Consider adoption of a Hazardous Materials and Waste Ordinance that defines hazardous waste; hazardous materials; facilitates implementation of State and County hazardous materials and hazardous waste regulations and management programs; and require, as a condition of City approvals, that the Fire Protection District be notified of all hazardous substances that are transported, stored, treated or released accidentally into the environment.

Responsibility: Community Development and Public Works Departments

Policy S 2.4: CEQA Review of Proposed TSD Facilities. Facilitate thorough environmental review for Hazardous Waste Transportation, Storage and Disposal (TSD) Facilities proposed in the Lakeport Planning Area and throughout the County, since the potentially significant, widespread and long-term impacts on public health and safety of these facilities do not respect jurisdictional boundaries.

Program S 2.4-a: Request that the Environmental Review of proposed hazardous waste TSD facilities shall, at a minimum, contain the following analysis and information:

- a) A worst case generic description, estimating the number, type, scale, scope, location and operating characteristics of proposed TSD facility(ies) based on the projected volumes and types of hazardous waste. Data from existing facilities regarding the probability of accidents, spills, and explosions should be documented and include:
- b) An assessment of risk resulting from the accidental release, fire, and explosion of hazardous waste. This assessment should take into account all phases of operation including transport, storage, and treatment. The assessment of risk should include the probability of occurrence and magnitude of impact;
- c) Quantitative estimates of air emissions, by applying emissions rates of existing facilities to the future volumes of hazardous waste, and identifying emissions for incinerator facilities under worst case circumstances;
- d) An assessment of non-incineration alternatives for hazardous waste treatment such as chemical dechlorination for the detoxification of PCB's, dioxins, solvents and pesticides; photolysis; and biological treatment; and
- e) Review of the operating characteristics of proposed TSD facilities, taking into account maintenance and operating procedures, emissions monitoring and safety devices to assure the ongoing enforceability of the mitigating measures that are required.

Responsibility: Community Development and Public Works Departments

Program S 2.4-b: Continue to implement the City's Household Waste and Source Reduction Element and Hazardous Waste Element.

Responsibility: Community Development and Public Works Departments

Policy S 2.5: Secondary Containment Facilities. Ensure that industries and businesses which store or process hazardous materials provide secondary containment facilities and a buffer zone between the installation and property boundaries sufficient to protect the public health and safety.

Program S 2.5-a: Revise the Zoning Ordinance to require secondary containment facilities and a buffer zone adequate to protect public health and safety on properties with hazardous materials storage and/or processing activities.

Responsibility: Community Development Department

Policy S 2.6: Transportation and Storage of Hazardous Materials. Minimize the risks to public health and safety due to the transportation and storage of hazardous materials.

Program S 2.6-a: Strictly regulate the storage of hazardous materials under California Administrative Code Title 19 requirements.

Responsibility: Community Development Department and Fire Protection District

Policy S 2.7: Truck Routes for Hazardous Material Transport. Develop, in cooperation with the County, regulations prohibiting through-transport by truck of hazardous materials on the local street systems and requiring that this activity be limited to State highways.

Program S 2.7-a: Consider establishing consistent regulations in cooperation with Lake County limiting truck traffic of hazardous materials to State highways.

Responsibility: Community Development and Public Works Departments, City Council

Program 2.7-b: Consider establishing and enforcing a Local Hazardous Material Route Plan and install signage and publicize routes for hazardous materials transport in the Lakeport Planning Area. Adopt an ordinance designating specific routes within the Planning Area for transport of hazardous materials.

Responsibility: Community Development and Police Departments

Policy S 2.8: Lampson Field Airport. Minimize the risk to lives and property due to hazards associated with the operation of Lampson Field Airport.

Program S 2.8-a: Deny any development which creates any air navigation hazards due to electrical interference, smoke, glare, intrusion into established height referral area in the County Airport Land Use Commission [ALUC] General Referral Area.

Responsibility: Community Development Department

Program S 2.8-b: Refer all General Plan Amendments, Rezone applications, Specific Plan Amendments within the Lampson Field Airport Referral Area to the ALUC.

Responsibility: Community Development Department

Policy S 2.9: County Airport Planning. Continue to monitor and actively participate in the County's planning efforts for Lampson Field Airport to ensure that the health and safety of Lakeport residents are protected.

Program S 2.9-a: Closely monitor on an ongoing basis environmental and planning documents, proposed lease agreements with air taxi operators and other related information pertaining to Lampson Field and recommend actions to facilitate the health and safety of residents of Lakeport.

Responsibility: Community Development Department

Program S 2.9-b: Request that the County of Lake continue to inform the City of proposed plans and changes in operations for the Clear Lake seaplane landing area.

Responsibility: Community Development Department

OBJECTIVE S 3: TO MAINTAIN AN EFFECTIVE EMERGENCY RESPONSE SYSTEM.

Policy S 3.1: Emergency Preparedness Plan. Cooperate with Lake County in implementing the County's Emergency Preparedness Plan.

Policy S 3.2: Updated Emergency Operations Plan. Update the City's Emergency Operations Plan, as needed.

Program S 3.2-a: Revise, as appropriate, the City's Emergency Operations Plan to comply with the County's plan and changing conditions within the Lakeport Planning Area.

Responsibility: Community Development and Public Works Departments

Policy S 3.3: Emergency Facilities. Identify essential emergency facilities and ensure that they will function in the event of a disaster.

Program S 3.3-a: Identify specific facilities and lifelines critical to effective emergency/disaster response and evaluate their abilities to survive and operate efficiently immediately after a disaster. Designate alternative facilities for post-disaster assistance in the event that the primary facilities have become unusable.

Responsibility: Police and Public Works Departments and the Lakeport Fire Protection District.

Policy S 3.4: Public Information. Inform the public of what actions to take in the event of an emergency or disaster.

Program S 3.4-a: Designate an existing administrative employee as the City's Public Information Officer to respond to the public in the case of a natural disaster.

Responsibility: Community Development and Police Departments

Policy S 3.5: Emergency Evacuation Routes. Designate the following as emergency evacuation routes to provide a means to evacuate the community and to provide a route to or through the community from other areas:

- Highway 29 • Lakeport Boulevard • Main St.
- 11th Street • High Street
- Hartley Street • Lakeshore Boulevard
- Martin Street • Clear Lake Avenue

Program S 3.5-a: Inform the Lakeport Police Department and the County Sheriffs Department of the emergency evacuation routes as well as of any changes in these routes, within the Lakeport Planning Area.

Responsibility: Community Development Department

Program S 3.5-b: Maintain designated evacuation routes in a passable condition at all times.

Responsibility: Public Works and Police Departments

Policy S 3.6: Fire Hazard Severity Scale. Reduce the Risk of Damage and Destruction from Wildland Fires.

Program S 3.6-a: Adopt and utilize the Fire Hazard Severity Scale for the classification of fire hazard in wildland areas.²

² This scale was developed by the U.S. Forest Service and the State Department of Forestry which has proved to be useful for identifying areas with a high risk of wildfire due to flammable vegetation, rugged terrain and other factors.

Policy S 3.7: Development Projects Fire Risks. Review all development proposals for fire risk and require mitigation measures to reduce the probability of fire.

Program S 3.7-a: The Lakeport County Fire Protection District shall review all development proposals and recommend measures to reduce fire risk.

Responsibility: Community Development Department and Fire Protection District

Program S 3.7-b: Proposed developments not located within a five-minute response time of a fire station should be discouraged, unless acceptable mitigation measures are provided.

Responsibility: Community Development Department and Fire Protection District

Program S 3.7-c: Enforce the Fire Safety Ordinance requiring sprinkling of certain structures.

Responsibility: Community Development and Building Departments

Policy S 3.8: Weed Abatement. Promote the use of defensible space in order to reduce the risk of structure fires.

Program S 3.8-a: Work with the Fire District to implement a more effective and environmentally sound weed abatement program and utilize the CDF defensible space standards and recommendations.

Program S 3.8-b: Consider the following methods of weed abatement: use of mechanical rather than chemical removal of weeds; reseeding with native bunchgrass varieties in sloping disturbed soils; and limiting weed abatement activities in areas with known endangered plant and animal species.

Responsibility: Public Works Department and Fire Protection District

Program S 3.8-c: Prepare a brochure describing techniques to achieve effective defensible space and make the brochure readily available to the public.

Responsibility: Fire Protection District

Policy S 3.9: California Building Code. Continue to enforce the California Building Code (CBC) for all new construction and renovation and when occupancy or use changes occur.

Policy S 3.10: Use Redevelopment Funds. Consider use of Redevelopment tax-increment funds to assist property owners in the Lakeport Redevelopment area to complete renovations that increase fire safety.

Policy S 3.11: Fire Hydrant Water Flows. Ensure that there exists sufficient water flow in fire hydrants throughout Lakeport. The standard adopted by the City is a minimum of 1,000 gallons per minute of free flow from two adjacent hydrants flowing simultaneously with 20 pounds per square inch residual pressure.

Program S 3.11-a: Require that all new developments be provided with sufficient fire flow facilities at the time of permit issuance.

Responsibility: Community Development and Building Department and Fire Protection District

Policy S 3.12: Funding for Fire Protection. Recommend that Lakeport adequately fund and staff the Lakeport Fire Protection District.

Program S 3.12-a: Maintain the fee for the Fire Protection Fund. Periodically review and revise the fee structure for the Fire Protection Fund.

Responsibility: Fire Protection District

Policy S 3.13: Demand for Police Services. Review development proposals for their demand for police services and implement mitigating measures to maintain the current high standard of police services.

Program S 3.13-a: Consider the impacts on level of police services of large development proposals in the environmental review and planning process. Mitigating measures shall be implemented that may include the levying of police impact fees, if warranted.

Responsibility: Community Development and Police Departments

XI. HOUSING ELEMENT

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The City of Lakeport is currently in the process of updating their Housing Element. Adoption and Certification is anticipated in September 2009 and upon adoption the Housing Element will be included in the General Plan. Copies of the current Housing Element, adopted in July 2004 are available at the City.

APPENDICES

APPENDIX A

APPENDIX A

GLOSSARY

The terms in this glossary are excerpted and modified from the State General Plan Guidelines, which are adapted from the California General Plan Glossary, 1997, published by the California Planning Roundtable, Naphtali H. Knox, AICP, and Charles E. Knox, Editors.

Abbreviations

ADT:	Average daily trips made by vehicles or persons in a 24-hour period
BMP:	Best Management Practice(s)
CDBG:	Community Development Block Grant
CEQA:	California Environmental Quality Act
CFD:	Mello-Roos Community Facilities District
CHFA:	California Housing Finance Agency
CIP:	Capital Improvements Program
CMP:	Congestion Management Plan
COG:	Council of Governments
CRA:	Community Redevelopment Agency
EIR:	Environmental Impact Report (State)
EIS:	Environmental Impact Statement (Federal)
FAR:	Floor Area Ratio
FEMA:	Federal Emergency Management Agency
FHWA:	Federal Highway Administration
FIRM:	Flood Insurance Rate Map
HCD:	Housing and Community Development Department of the State of California
HUD:	U.S. Department of Housing and Urban Development
JPA:	Joint Powers Authority
LAFCO:	Local Agency Formation Commission
LOS:	Level of Service
NEPA:	National Environmental Policy Act
PUD:	Planned Unit Development
UBC:	Uniform Building Code
UHC:	Uniform Housing Code
TDM:	Transportation Demand Management
TSM:	Transportation Systems Management
VMT:	Vehicle Miles Traveled

Acoustics: The science of sound.

Acre: a unit of land measure equal to 43,560 square feet.

Acres, Gross: The entire acreage of a site. Gross acreage extends to the property line and to the edge of the right-of-way of existing or dedicated streets.

Acresage, Net: The portion of a site exclusive of existing or planned public or private road rights-of-way.

Adaptive Reuse: The conversion of obsolescent or historic buildings from their original or most recent use to a new use. For example, the conversion of former hospital or school buildings to residential use, or the conversion of an historic single-family home to office use.

Affordability Covenant: A property title agreement that places resale or rental restrictions on a housing unit.

Affordable Housing: Under State and federal statutes, housing which typically costs no more than 30 percent of gross household income. Housing costs include rent or mortgage payments, utilities, taxes, insurance, homeowner association fees, and other related costs. However, specific housing assistance programs may establish slightly different guidelines regarding income levels, proportion of costs to income, or types of costs included to target specific populations in need. For example, the City of Rocklin's First-Time Homebuyer Program does not include utilities in the cost calculations and the cost-to-income ratio is more flexible.

Agriculture: Use of land for the production of food and fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

Ambient: Surrounding on all sides; used to describe measurements of existing conditions with respect to traffic, noise, air and other environments.

Ambient Noise: The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Annexation: The incorporation of land area into the jurisdiction of an existing city with a resulting change in the boundaries of that city.

Aquifer: An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Architectural Control; Architectural Review: Regulations and procedures requiring the exterior design of structures to be suitable, harmonious, and in keeping with the general appearance, historic character, and/or style of surrounding areas. A process used to exercise control over the design of buildings and their settings. (See "Design Review.")

Assessment District: See "Benefit Assessment District."

Assisted Housing: Housing that has been subsidized by federal, state, or local housing programs.

At-Risk Housing: Multi-family rental housing that is at risk of losing its status as housing affordable for low and moderate income tenants due to the expiration of federal, state or local agreements.

Attainment: Compliance with State and federal ambient air quality standards within an air basin. (See “Non-attainment.”)

Attenuation: The reduction of an acoustic signal.

A-Weighting: A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Base Flood: In any given year, a 100-year flood that has a one percent likelihood of occurring, and is recognized as a standard for acceptable risk.

Benefit Assessment District: An area within a public agency’s boundaries that receives a special benefit from the construction of one or more public facilities. A Benefit Assessment District has no independent life; it is strictly a financing mechanism for providing public infrastructure as allowed under various statutes. Bonds may be issued to finance the improvements, subject to repayment by assessments charged against the benefiting properties. Creation of a Benefit Assessment District enables property owners in a specific area to cause the construction of public facilities or to maintain them (for example, a downtown, or the grounds and landscaping of a specific area) by contributing their fair share of the construction and/or installation and operating costs.

Bicycle Lane (Class II facility): A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles.

Bicycle Path (Class I facility): A paved route not on a street or roadway and expressly reserved for bicycles traversing an otherwise unpaved area. Bicycle paths may parallel roads but typically are separated from them by landscaping.

Bicycle Route (Class III facility): A facility shared with motorists and identified only by signs, a bicycle route has no pavement markings or lane stripes.

Bikeways: A term that encompasses bicycle lanes, bicycle paths, and bicycle routes.

Biotic Community: a group of living organisms characterized by a distinctive combination of both animal and plant species in a particular habitat.

Blight: A condition of a site, structure, or area that may cause nearby buildings and/or areas to decline in attractiveness and/or utility. The Community Redevelopment Law (Health and Safety Code, Sections 33031 and 33032) contains a definition of blight used to determine eligibility of proposed redevelopment project areas.

Blueline Stream: A watercourse shown as a blue line on a U.S. Geological Service topographic quadrangle map.

Bond: An interest bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

Buffer Zone: An area of land separating two distinct land uses that acts to soften or mitigate the effects of one land use on the other.

Buildout; Build-out: Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designations. (See “Carrying Capacity (3).”)

California Department of Housing and Community Development - HCD: The State Department responsible for administering State-sponsored housing programs and for reviewing housing elements to determine compliance with State housing law.

California Environmental Quality Act (CEQA): A State law requiring State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an Environmental Impact Report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project.

Caltrans: California Department of Transportation.

Capital Improvements Program (CIP): A program established by a city or county government and reviewed by its planning commission, which schedules permanent improvements, usually for a minimum of five years in the future, to fit the projected fiscal capability of the local jurisdiction. The program generally is reviewed annually, for conformance to and consistency with the general plan.

Census: The official United States decennial enumeration of the population conducted by the federal government.

Channelization: (1) The straightening and/or deepening of a watercourse for purposes of storm-runoff control or ease of navigation. Channelization often includes lining of stream banks with a retaining material such as concrete. (2) At the intersection of roadways, the directional separation of traffic lanes through the use of curbs or raised islands that limit the paths that vehicles may take through the intersection.

CNEL: Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Community Care Facility: Elderly housing licensed by the State Health and Welfare Agency, Department of Social Services, typically for residents who are frail and need supervision. Services normally include three meals daily, housekeeping, security and emergency response, a

full activities program, supervision in the dispensing of medicine, personal services such as assistance in grooming and bathing, but no nursing care. Sometimes referred to as residential care or personal care.

Community Development Block Grant (CDBG): A grant program administered by the U.S. Department of Housing and Urban Development (HUD). This grant allots money to cities and counties for housing rehabilitation and community development activities, including public facilities and economic development.

Community Facilities District: Under the Mello-Roos Community Facilities Act of 1982 (§53311, et. seq.), a legislative body may create within its jurisdiction a special tax district that can finance tax-exempt bonds for the planning, design, acquisition, construction, and/or operation of public facilities, as well as public services for district residents. Special taxes levied solely within the district are used to repay the bonds.

Community Redevelopment Agency (CRA): A local agency created under California Redevelopment Law (Health & Safety Code §33000, et. seq.), or a local legislative body that has been elected to exercise the powers granted to such an agency, for the purpose of planning, developing, replanning, redesigning, clearing, reconstructing, and/or rehabilitating all or part of a specified area with residential, commercial, industrial, and/or public (including recreational) structures and facilities. The redevelopment agency's plans must be compatible with adopted community general plans.

Community Service Districts (CSD): A geographic subarea of a city or county used for planning and delivery of parks, recreation, and other human services based on an assessment of the service needs of the population in that subarea. The CSD is a taxation district with independent administration.

Condominium: A building or group of buildings in which units are owned individually, but the structure, common areas and facilities are owned by all owners on a proportional, undivided basis.

Congestion Management Plan (CMP): A mechanism employing growth management techniques, including traffic level of service requirements, standards for public transit, trip reduction programs involving transportation systems management and jobs/housing balance strategies, and capital improvement programming, for the purpose of controlling and/or reducing the cumulative regional traffic impacts of development.

Consistency; Consistent With: Free from significant variation or contradiction. The various diagrams, text, goals, policies, and programs in the general plan must be consistent with each other, not contradictory or preferential. The term "consistent with" is used interchangeably with "conformity with." The courts have held that the phrase "consistent with" means "agreement with; harmonious with." Webster defines "conformity with" as meaning harmony, agreement when used with "with." The term "conformity" means in harmony therewith or agreeable to (Sec 58 Ops.Cal.Atty.Gen. 21, 25 [1975]). California State law also requires that a general plan be internally consistent and also required consistency between a general plan and implementation

measures such as the zoning ordinance. As a general rule, an action program or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment.

Critical Facility: Facilities housing or serving many people, that are necessary in the event of an earthquake or flood, such as hospitals, fire, police, and emergency service facilities, utility “lifeline” facilities, such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

Cul-de-sac: A short street or alley with only a single means of ingress and egress at one end and with a large turnaround at its other end.

Cumulative Impact: As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

Decibel or dB: Fundamental unit of sound, defined as one-tenth of the logarithm of the ratio of the sound pressure squared over the reference pressure squared.

Dedication: The turning over by an owner or developer of private land for public use, to a governmental agency having jurisdiction over the public function for which it will be used. Such dedication shall not have any impact of the city’s or county’s general fund. Dedication for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

Dedication: In lieu of: Cash payments that may be required of an owner or developer as a substitute for a dedication of land, usually calculated in dollars per lot, and referred to as in lieu fees or in lieu contributions.

Defensible space: (1) In fire-fighting and prevention, a 30-foot area of non-combustible surfaces separating urban and wildland areas. (2) In urban areas, open-spaces, entry points, and pathways configured to provide maximum opportunities to rightful users and/or residents to defend themselves against intruders and criminal activity.

Density: The number of dwelling units per unit of land. Density usually is expressed “per acre,” e.g., a development with 100 units located on 20 acres has density of 5.0 units per acre.

Density Bonus: The allowance of additional residential units beyond the maximum for which the parcel is otherwise permitted usually in exchange for the provision or preservation of affordable housing units at the same site or at another location.

Design Review; Design Control: The comprehensive evaluation of a development and its impact on neighboring properties and the community as a whole, from the standpoint of site and landscape design, architecture, materials, colors, lighting, and signs, in accordance with a set of adopted criteria and standards. “*Design Control*” requires that certain specific things be done and that other things not be done. Design Control language is not often found within a zoning ordinance. “*Design Review*” usually refers to a system set up outside of the zoning ordinance,

whereby projects are reviewed against certain standards and criteria by a specially established design review board or committee. (See “Architectural Control.”)

Detachment: Withdrawal of territory from a special district or city; the reverse of annexation.

Detention Dam/Basin/Pond: Dams may be classified according to the broad function they serve, such as storage, diversion, or detention. Detention dams are constructed to retard flood runoff and minimize the effect of sudden floods. Detention dams fall into two main types. In one type, the water is temporarily stored, and released through an outlet structure at a rate that will not exceed the carrying capacity of the channel downstream. Often, the basins are planted with grass and used for open-space or recreation in periods of dry weather. The other type, most often called a Retention Pond, allows for water to be held as long as possible and may or may not allow for the controlled release of water. In some cases, the water is allowed to seep into the permeable banks or gravel strata in the foundation. This later type is sometimes called a Water-Spreading Dam or Dike because its main purpose is to recharge the underground water supply. Detention dams are also constructed to trap sediment. These are often called Debris Dams.

Developable Acres, Net: The portion of a site that can be used for density calculations. Some communities calculate density based on gross acreage. Public or private road rights-of-way are not included in the net developable acreage of a site.

Developable Land: Land that is suitable as a location for structures and that can be developed free of hazards to, and without disruptions of, or significant impact on, natural resource areas.

Development Agreement: A legislatively-approved contract between a jurisdiction and a person having legal or equitable interest in real property within the jurisdiction (California Government Code §65865 et. seq.) that “freezes” certain rules, regulations, and policies applicable to development of a property for a specified period of time, usually in exchange for certain concessions by the owner.

Development Impact Fees: A fee or charge imposed on landowners or developers, the amount of which is designed to pay for the cost of providing, to new development areas, impact-generated infrastructure and other facilities and services, or to address environmental and related impacts.

Dwelling, Multi-family: A dwelling unit within a building containing three or more dwelling units for the use of individual households; an apartment or condominium building is an example of this dwelling unit type.

Dwelling, Single-family Detached: A dwelling, not attached to any other dwelling, which is designed for and occupied by not more than one family and surrounded by open space or yards.

Dwelling Unit: One or more rooms, designed, occupied or intended for occupancy as separate living quarters, with cooking, sleeping and sanitary facilities provided within the unit for the exclusive use of a household.

Easement: Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

Easement, Conservation: A conservation easement is a restriction placed on a piece of property to protect the resources (natural or man-made) associated with the parcel. The easement is either voluntarily sold or donated by the landowner, and constitutes a legally binding agreement that prohibits certain types of development (residential or non-residential) from taking place on the land.

Easement, Scenic: A tool that allows a public agency to use an owner's land for scenic enhancement, such as roadside landscaping or vista preservation.

Elderly Household: As defined by HUD, elderly households are one- or two- member (family or non-family) households in which the head or spouse is age 62 or older. Some "senior housing" programs/projects however, serve persons age 55 or older, such as the Del Web or Springview projects.

Element: A division or chapter of the General Plan.

Emergency Shelter: An emergency shelter is a facility that provides shelter to homeless families and/or homeless individuals on a limited short-term basis.

Emergency Shelter Grants (ESG): A grant program administered by the U.S. Department of Housing and Urban Development (HUD) provided on a formula basis to large entitlement jurisdictions.

Eminent Domain: The right of a public entity to acquire private property for public use by condemnation and the payment of just compensation.

Emission Standard: The maximum amount of pollutant legally permitted to be discharged from a single source, either mobile or stationary.

Endangered Species: A species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes as designated by the State or Federal government.

Entitlement City: A city, which based on its population, is entitled to receive funding directly from HUD. Examples of entitlement programs include CDBG, HOME and ESG.

Environment: CEQA defines environment as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance."

Environmental Impact Report (EIR): A report required pursuant to the California Environmental Quality Act which assesses all the environmental characteristics of an area, determines what

effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts. (See “California Environmental Quality Act.”)

Environmental Impact Statement (EIS): Under the National Environmental Policy Act, a statement on the effect of development proposals and other major actions that significantly affect the environment.

Erosion: (1) The loosening and transportation of rock and soil debris by wind, rain, or running water. (2) The gradual wearing away of the upper layers of earth.

Exaction: A contribution or payment required as an authorized precondition for receiving a development permit; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision and other land use regulations.

Expansive Soils: Soils that swell when they absorb water and shrink as they dry.

Fair Market Rent (FMR): Fair Market Rents (FMRs) are freely set rental rates defined by HUD as the median gross rents charged for available standard units in a county or Standard Metropolitan Statistical Area (SMSA). Fair Market Rents are used for the Section 8 Rental Program and many other HUD programs and are published annually by HUD.

Family: (1) Two or more persons related by birth, marriage, or adoption [U.S. Bureau of the Census]. (2) An individual or a group of persons living together who constitute a bona fide single-family housekeeping unit in a dwelling unit, not including a fraternity, sorority, club, or other group of persons occupying a hotel, lodging house or institution of any kind [California].

Family Income: According to the Census, a family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. Family income includes all income earned by family members and includes wages, salary, commissions, bonuses, or tips; self-employment income from own nonfarm or farm businesses, including proprietorships and partnerships; interest, dividends, net rental income, royalty income, or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); any public assistance or welfare payments from the state or local welfare office; retirement, survivor, or disability pensions; and any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support, or alimony.

Fault: A fracture in the earth's crust forming a boundary between rock masses that have shifted.

Feasible: Capable of being accomplished in a successful manner within a reasonable time taking into account economic, environmental, social, and technological factors.

Fire Hazard Zone: An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

First-Time Home Buyer: Defined by HUD as an individual or family who has not owned a home during the three-year period preceding the HUD-assisted purchase of a home. Jurisdictions may adopt local definitions for first-time home buyer programs which differ from federally funded programs.

Fiscal Impact Analysis: A projection of the direct public costs and revenues resulting from population or employment change to the local jurisdiction(s) in which the change is taking place. Enables local governments to evaluate relative fiscal merits of general plans, specific plans, or projects.

Flood, 100-Year: The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or one percent, chance of occurring in any given year.

Flood Insurance Rate Map (FIRM): For each community, the official map on which the Federal Insurance Administration has delineated areas of special flood hazard and the risk premium zones applicable to that community.

Floodplain: The relatively level land area on either side of the banks of a stream regularly subject to flooding. That part of the floodplain subject to a one percent chance of flooding in any given year is designated as an “area of special flood hazard” by the Federal Insurance Administration.

Floodplain Fringe: All land between the floodway and the upper elevation of the 100-year flood.

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the “base flood” without cumulatively increasing the water surface elevation more than one foot. No development is allowed in floodways.

Floor Area, Gross: The sum of the horizontal areas of the several floors of a building measured from the exterior face of exterior walls, or from the centerline of a wall separating two buildings, but not including any space where the floor-to-ceiling height is less than six feet.

Floor Area Ratio (FAR): The gross floor area of all buildings including garages on a lot divided by the lot area; usually expressed as a numerical value (e.g., a building having 10,000 square feet of gross floor area located on a lot of 5,000 square feet in area has a floor area ratio of 2.0).

Frequency: The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

General Plan: The General Plan is a legal document, adopted by the legislative body of a City or County, setting forth policies regarding long-term development. California law requires the preparation of seven elements or chapters in the General Plan: Land Use, Housing, Circulation,

Conservation, Open Space, Noise, and Safety. Additional elements are permitted, such as Economic Development, Urban Design and similar local concerns.

Ground Failure: Ground movement or rupture caused by strong shaking during an earthquake. Includes landslide, lateral spreading, liquefaction, and subsidence.

Ground Shaking: Ground movement resulting from the transmission of seismic waves during an earthquake.

Groundwater: Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Recharge: The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks that provide underground storage ("aquifers").

Group Quarters: A facility which houses groups of unrelated persons not living in households (U.S. Census definition). Examples of group quarters include institutions, dormitories, shelters, military quarters, assisted living facilities and other quarters, including single-room occupancy (SRO) housing, where 10 or more unrelated individuals are housed.

Habitat: The physical location or type of environment in which an organism or biological population lives or occurs.

Hazardous Material: Any substance that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The term includes, but is not limited to, hazardous substances and hazardous wastes.

HCD: The State of California Department of Housing and Community Development.

High-Occupancy Structure: All pre-1935 buildings with over 25 occupants, and all pre-1976 buildings with over 100 occupants.

Historic Preservation: The preservation of historically significant structures and neighborhoods until such time as, and in order to facilitate, restoration and rehabilitation of the building(s) to a former condition.

Holding Capacity: Used in determining the potential of an area to absorb development: (1) The level of land use, human activity, or development for a specific area that can be accommodated permanently without an irreversible change in the quality of air, water, land, or plant and animal habitats. (2) The upper limits of development beyond which the quality of human life, health, welfare, safety, or community character within an area will be impaired. (3) The maximum level of development allowable under current zoning. (See "Buildout.")

Home Mortgage Disclosure Act (HMDA): The Home Mortgage Disclosure Act requires larger lending institutions making home mortgage loans to publicly disclose the location and disposition of home purchase, refinance and improvement loans. Institutions subject to HMDA must also disclose the gender, race, and income of loan applicants.

Home Ownership Made Easy (HOME) Program: The HOME Investment Partnership Act, Title II of the National Affordable Housing Act of 1990. HOME is a Federal program administered by HUD which provides formula grants to States and localities to fund activities that build, buy, and/or rehabilitate affordable housing for rent or home ownership or provide direct rental assistance to low-income people.

Homeless: *Unsheltered homeless* are families and individuals whose primary nighttime residence is a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings (e.g., the street, sidewalks, cars, vacant and abandoned buildings). *Sheltered homeless* are families and persons whose primary nighttime residence is a supervised publicly or privately operated shelter (e.g., emergency, transitional, battered women, and homeless youth shelters; and commercial hotels or motels used to house the homeless).

Household: The US Census Bureau defines a household as all persons living in a housing unit whether or not they are related. A single person living in an apartment as well as a family living in a house is considered a household. Household does not include individuals living in dormitories, prisons, convalescent homes, or other group quarters.

Household Income: The total income of all the persons living in a household and includes all income earned by household members and includes wages, salary, commissions, bonuses, or tips; self-employment income from own nonfarm or farm businesses, including proprietorships and partnerships; interest, dividends, net rental income, royalty income, or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); any public assistance or welfare payments from the state or local welfare office; retirement, survivor, or disability pensions; and any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support, or alimony. A household is usually described as very low income, low income, moderate income, and upper income based upon household size, and income, relative to the regional median income.

Households, Number of: The count of all year-round housing units occupied by one or more persons. The concept of *household* is important because the formation of new households generates the demand for housing. Each new household formed creates the need for one additional housing unit or requires that one existing housing unit be shared by two households. Thus, household formation can continue to take place even without an increase in population, thereby increasing the demand for housing.

Housing and Community Development Department (HCD): The State agency that has principal responsibility for assessing, planning for, and assisting communities to meet the needs of low- and moderate-income households.

Housing and Urban Development, U.S. Department of (HUD): A cabinet-level department of the federal government that administers housing and community development programs.

Housing Problems: Defined by HUD as a household which: (1) occupies a unit with physical defects (lacks complete kitchen or bathroom); (2) meets the definition of overcrowded; or (3) spends more than 30% of income on housing cost.

Housing Unit: A house, an apartment, a mobile home or trailer, a group of rooms, or a single room that is occupied as a separate living quarters, or, if vacant, is intended for occupancy as a separate living quarters. Separate living quarters are those in which the occupants live separately from any other individual in the building and which have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible.

HUD: See U. S. Department of Housing and Urban Development.

Impact Fee: A fee or charge imposed on developers to pay for a jurisdiction's costs of providing services to new development.

Impervious Surface: Surface through which water cannot penetrate, such as roof, road, sidewalk and paved parking lots. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.

Impulsive Noise: Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.

Income Category: Four categories are used to classify a household according to income based on the median income for the county. Under state housing statutes, these categories are defined as follows: Very Low (0-50% of County median); Low (50-80% of County median); Moderate (80-120% of County median); and Upper (over 120% of County median).

Industrial: The manufacture, production, and processing of consumer goods. Industrial is often divided into "heavy industrial" uses, such as construction yards, quarrying, and factories; and "light industrial" uses, such as research and development and less intensive warehousing and manufacturing.

Infill Development: Development of vacant land (usually individual lots or left-over properties) within areas that are already largely developed.

Infrastructure: Public services and facilities, such as sewage-disposal systems, water-supply systems, other utility systems, and roads.

In Lieu Fee: (See "Dedication, In lieu of.")

Institutional Uses: (1) Publicly or privately owned and operated activities such as hospitals, convalescent hospitals, intermediate care facilities, nursing homes, museums, and schools and

colleges; (2) churches and other religious organizations; and (3) other non-profit activities of a welfare, educational, or philanthropic nature that cannot be considered residential, commercial, or industrial. (See “Public and Quasi-public Facilities.”)

Intensity, Building: For residential uses, the actual number or the allowable range of dwelling units per net or gross acre. For non-residential uses, the actual or the maximum permitted floor area ratios (FARs).

Inter-agency: Indicates cooperation between or among two or more discrete agencies in regard to a specific program.

Intermittent Stream: A stream that normally flows for at least thirty (30) days after the last major rain of the season and is dry a large part of the year.

Issues: Important unsettled community matters or problems that are identified in a community’s general plan and dealt with by the plan’s objectives, policies, plan proposals, and implementation programs.

Jobs/Housing Balance; Jobs/Housing Ratio: The availability of affordable housing for employees. The jobs/housing ratio divides the number of jobs in an area by the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute; less than 1.0 indicates a net out-commute.

Joint Powers Authority (JPA): A legal arrangement that enables two or more units of government to share authority in order to plan and carry out a specific program or set of programs that serves both units.

Land Banking: The purchase of land by a local government for use or resale at a later date. “Banked lands” have been used for development of low- and moderate-income housing, expansion of parks, and development of industrial and commercial centers. Federal rail-banking law allows railroads to bank unused rail corridors for future rail use while allowing interim use as trails.

Landmark: (1) A building, site, object, structure, or significant tree, having historical, architectural, social, or cultural significance and marked for preservation by the local, state, or federal government. (2) A visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

Landslide: Downslope movement of soil and/or rock, which typically occurs during an earthquake or following heavy rainfall.

Land Use Classification: A system for classifying and designating the appropriate use of properties.

Large Household: A household with 5 or more members.

Ldn: Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

Leq: Equivalent or energy-averaged sound level.

Life-cycle Costing: A method of evaluating a capital investment that takes into account the sum total of all costs associated with the investment over the lifetime of the project.

Light (duty) Rail Transit (LRT): “Street cars” or “trolley cars” that typically operate entirely or substantially in mixed traffic and in non-exclusive, at-grade rights-of-way. Passengers typically board vehicles from the street level (as opposed to a platform that is level with the train) and the driver may collect fares. Vehicles are each electrically self-propelled and usually operate in one or two-car trains.

Linkage: With respect to jobs/housing balance, a program designed to offset the impact of employment on housing need within a community, whereby project approval is conditioned on the provision of housing units or the payment of an equivalent *in-lieu* fee. The linkage program must establish the cause-and-effect relationship between a new commercial or industrial development and the increased demand for housing.

Liquefaction: The transformation of loose, wet soil from a solid to a liquid state, often as a result of ground shaking during an earthquake.

Live-work Quarters: Buildings or spaces within buildings that are used jointly for commercial and residential purposes where the residential use of the space is secondary or accessory to the primary use as a place of work.

Lmax: The highest root-mean-square (RMS) sound level measured over a given period of time.

Local Agency Formation Commission (LAFCO): A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county’s LAFCO is empowered to approve, disapprove, or conditionally approve such proposals. The LAFCO members generally include two county supervisors, two city council members, and one member representing the general public. Some LAFCOs include two representatives of special districts.

Loudness: A subjective term for the sensation of the magnitude of sound

Manufactured Housing: Housing that is constructed of manufactured components, assembled partly at the site rather than totally at the site. Also referred to as modular housing.

Market Rate Housing: Housing which is available on the open market without any subsidy. The price for housing is determined by the market forces of supply and demand and varies by location.

Masking: The amount (or the process) by which the threshold of audibility for one sound is raised by the presence of another (masking) sound.

Mean Sea Level: The average altitude of the sea surface for all tidal stages.

Median Income: The annual income for each household size within a region which is defined annually by HUD. Half of the households in the region have incomes above the median and half have incomes below the median.

Median Strip: The dividing area, either paved or landscaped, between opposing lanes of traffic on a roadway.

Mello-Roos Bonds: Locally issued bonds that are repaid by a special tax imposed on property owners within a “community facilities district” established by a governmental entity. The bond proceeds can be used for public improvements and for a limited number of services. Named after the program’s legislative authors.

Mercalli Intensity Scale: A subjective measure of the observed effects (human reactions, structural damage, geologic effects) of an earthquake. Expressed in Roman numerals from I to XII.

Microclimate: The climate of a small, distinct area, such as a city street or a building’s courtyard; can be favorably altered through functional landscaping, architecture, or other design features.

Mineral Resource: Land on which known deposits of commercially viable mineral or aggregate deposits exist. This designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance, and is intended to help maintain the quarrying operations and protect them from encroachment of incompatible land uses.

Mixed-use: Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A “single site” may include contiguous properties.

Mobile Home: A structure, transportable in one or more sections, which is at least 8 feet in width and 32 feet in length, is built on a permanent chassis and designed to be used as a dwelling unit when connected to the required utilities, either with or without a permanent foundation.

Mortgage Revenue Bond (MRB): A state, county or city program providing financing for the development of housing through the sale of tax-exempt bonds.

Multiplier Effect: The recirculation of money through the economy multiplies its impact on jobs and income. For example, money paid as salaries to industrial and office workers is spent on housing, food, clothes and other locally-available goods and services. This spending creates jobs in housing construction, retail stores (e.g., grocery and drug stores) and professional offices. The

wage paid to workers in those industries is again re-spent, creating still more jobs. Overall, one job in basic industry is estimated to create approximately one more job in non-basic industry.

Municipal Services: Services traditionally provided by local government, including water and sewer, roads, parks, schools, and police and fire protection.

National Ambient Air Quality Standards: The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

National Environmental Policy Act (NEPA): An act passed in 1974 establishing federal legislation for national environmental policy, a council on environmental quality, and the requirements for environmental impact statements.

National Flood Insurance Program: A federal program that authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

National Historic Preservation Act: A 1966 federal law that established a National Register of Historic Places and the Advisory Council on Historic Preservation, and that authorized grants-in-aid for preserving historic properties.

National Register of Historic Places: The official list, established by the National Historic Preservation Act, of sites, districts, buildings structures, and objects significant in the nation's history or whose artistic or architectural value is unique.

Natural State: The condition existing prior to development.

Neighborhood: A planning area commonly identified as such in a community's planning documents, and by the individuals residing and working within the neighborhood. Documentation may include a map prepared for planning purposes, on which the names and boundaries of the neighborhood are shown.

Neighborhood Unit: According to one widely-accepted concept of planning, the neighborhood unit should be the basic building block of the city. It is based on the elementary school, with other community facilities located at its center and arterial streets at its perimeter. The distance from the school to the perimeter should be a comfortable walking distance for a school-age child; there would be no through traffic uses. Limited industrial or commercial would occur on the perimeter where arterials intersect. This was a model for American suburban development after World War II.

Noise: Unwanted sound

Non-attainment: The condition of not achieving a desired or required level of performance. Frequently used in reference to air quality. (See "Attainment.")

Non-conforming Use: "Nonconforming use" means a use which, though lawful when commenced, is now unlawful due to change in the regulations concerning the use.

Notice (of Hearing): A legal document announcing the opportunity for the public to present their views to an official representative or board of a public agency concerning an official action pending before the agency.

Open-Space Land: Any parcel or area of land or water that is essentially unimproved and devoted to an open-space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

Ordinance: A law or regulation set forth and adopted by a governmental authority, usually a city or county.

Outdoor Advertising Structure: Any device used or intended to direct attention to a business, profession, commodity, service, or entertainment conducted, sold, or offered elsewhere than upon the lot where such device is located.

Outdoor Recreation Use: A privately or publicly owned or operated use providing facilities for outdoor recreation activities.

Overcrowding: As defined by the U.S. Census, a household with greater than 1.01 persons per room, excluding bathrooms, kitchens, hallways, and porches. Severe overcrowding is defined as households with greater than 1.51 persons per room.

Overlay: A land use designation on the General Plan Land Use Map, or a zoning designation on a zoning map, that modifies the basic underlying designation in some specific manner.

Overpayment: The extent to which gross housing costs, including utility costs, exceed 30 percent of gross household income. Severe overpayment, or cost burden, exists if gross housing costs exceed 50 percent of gross income. Depending on the specific housing programs, the cost calculations may differ.

Parcel: The basic unit of land entitlement. A designated area of land established by plat, subdivision, or otherwise legally defined and permitted to be used, or built upon.

Park Land; Parkland: Land that is publicly owned or controlled for the purpose of providing parks, recreation, or open-space for public use.

Parking, Shared: A public or private parking area used jointly by two or more uses.

Parking Area, Public: An open area, excluding a street or other public way, used for the parking of automobiles and available to the public, whether for free or for compensation.

Parks: Open-space lands whose primary purpose is recreation.

Peak Noise: The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the “Maximum” level, which is the highest RMS level.

Performance Standards: Zoning regulations that permit uses based on a particular set of standards of operation rather than on a particular type of use. Performance standards provide specific criteria limiting noise, air pollution, emissions, odors, vibration, dust, dirt, glare, heat, fire hazards, wastes, traffic impacts, and visual impact of a use.

Physical Defects: A housing unit lacking complete kitchen or bathroom facilities (U.S. Census definition). Jurisdictions may expand the Census definition in defining units with physical defects.

Planned Community: A large-scale development whose essential features are a definable boundary; a consistent, but not necessarily uniform, character; overall control during the development process by a single development entity; private ownership of recreation amenities; and enforcement of covenants, conditions, and restrictions by a master community association.

Planned Unit Development (PUD): A description of a proposed unified development, consisting at a minimum of a map and adopted ordinance setting forth the regulations governing, and the location and phasing of all proposed uses and improvements to be included in the development.

Planning Commission: A body, usually having five or seven members, created by a city or county in compliance with California law (§65100) which requires the assignment of the planning functions of the city or county to a planning department, planning commission, hearing officers, and/or the legislative body itself, as deemed appropriate by the legislative body.

Pollution, Non-Point: Sources for pollution that are less definable and usually cover broad areas of land, such as agricultural land with fertilizers that are carried from the land by runoff, or automobiles.

Pollution, Point: In reference to water quality, a discrete source from which pollution is generated before it enters receiving waters, such as a sewer outfall, a smokestack, or an industrial waste pipe.

Poverty: The income cutoffs used by the Census Bureau to determine the poverty status of families and unrelated individuals included a set of 48 thresholds. The poverty thresholds are revised annually to allow for changes in the cost of living as reflected in the Consumer Price Index. Poverty thresholds are applied on a national basis and are not adjusted for regional, state, or local variations in the cost of living.

Prime Agricultural Land: (1) Land used actively in the production of food, fiber, or livestock. (2) All land which qualifies for rating as Class I or Class II in the Natural Resources Conservation Service land use compatibility classifications. (3) Land which qualifies for rating 80 through 100 in the Storie Index Rating.

Prime Farmland: Land which has the best combination of physical and chemical characteristics for the production of crops. Prime Farmland must have been used for the production of irrigated crops within the last three years. Prime Farmland does not include publicly-owned lands for which there is an adopted policy preventing agricultural use.

Private Road/Private Street: Privately owned (and usually privately maintained) motor vehicle access that is not dedicated as a public street. Typically the owner posts a sign indicating that the street is private property and limits traffic in some fashion. For density calculation purposes, some jurisdictions exclude private roads when establishing the total acreage of the site; however, aisles within and driveways serving private parking lots are not considered private roads.

Project-Based Rental Assistance: Rental assistance provided for a project, not for a specific tenant. A tenant receiving project-based rental assistance gives up the right to that assistance upon moving from the project.

Public and Quasi-public Facilities: Institutional, academic, governmental and community service uses, either owned publicly or operated by non-profit organizations, including private hospitals and cemeteries.

Public Housing: A project-based low-rent housing program operated by independent local public housing authorities. A low-income family applies to the local public housing authority in the area in which they want to live.

Public Services: See “Municipal Services.”

Reclamation: The reuse of resources, usually those present in solid wastes or sewage.

Reconstruction: As used in historic preservation, the process of reproducing by new construction the exact form and detail of a vanished structure, or part thereof, as it appeared during a specific period of time. Reconstruction is often undertaken when the property to be reconstructed is essential for understanding and interpreting the value of an historic district and sufficient documentation exists to insure an exact reproduction of the original.

Recreation, Active: A type of recreation or activity that requires the use of organized play areas including but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts and various forms of children’s play equipment.

Recreation, Passive: Type of recreation or activity that does not require the use of organized play areas.

Redevelop: To demolish existing buildings; or to increase the overall floor area existing on a property; or both; irrespective of whether a change occurs in land use.

Redevelopment Agency: California Community Redevelopment Law provides authority to establish a Redevelopment Agency with the scope and financing mechanisms necessary to remedy blight and provide stimulus to eliminate deteriorated conditions. The law provides for the

planning, development, redesign, clearance, reconstruction, or rehabilitation, or any combination of these, and the provision of public and private improvements as may be appropriate or necessary in the interest of the general welfare by the Agency. Redevelopment law requires an Agency to set aside a minimum of 20% of all tax increment dollars generated from each redevelopment project area for the purpose of increasing and improving the community's supply of housing for low and moderate income households.

Rehabilitation: The upgrading of a building previously in a dilapidated or substandard condition for human habitation or use.

Regional: Pertaining to activities or economies at a scale greater than that of a single jurisdiction, and affecting a broad geographic area.

Regional Housing Needs Plan (RHNP): The Regional Housing Needs Assessment (RHNP) is based on State of California projections of population growth and housing unit demand and assigns a share of the region's future housing need to each jurisdiction within the Sacramento Area Council of Governments (SACOG) region. These housing need numbers serve as the basis for the update of the Housing Element in each California city and county.

Retrofit: To add materials and/or devices to an existing building or system to improve its operation, safety, or efficiency. Buildings have been retrofitted to use solar energy and to strengthen their ability to withstand earthquakes, for example.

Rezoning: An amendment to the map and/or text of a zoning ordinance to effect a change in the nature, density, or intensity of uses allowed in a zoning district and/or on a designated parcel or land area.

Richter Scale: A measure of the size or energy release of an earthquake at its source. The scale is logarithmic; the wave amplitude of each number on the scale is 10 times greater than that of the previous whole number.

Ridgeline: A line connecting the highest points along a ridge and separating drainage basins or small-scale drainage systems from one another.

Right-of-way: A strip of land occupied or intended to be occupied, usually under an easement, by certain transportation and public use facilities, such as roads, railroads, and utility lines.

Riparian Lands: Riparian lands are comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

Sanitary Landfill: The controlled placement of refuse within a limited area, followed by compaction and covering with a suitable thickness of earth and other containment material.

Section 8 Rental Voucher/Certificate Program: A tenant-based rental assistance program that subsidizes a family's rent in a privately owned house or apartment. The program is administered

by local public housing authorities. Assistance payments are based on 30 percent of household annual income. Households with incomes of 50 percent or below the area median income are eligible to participate in the program.

Seiche: An earthquake-generated wave in an enclosed body of water such as a lake, reservoir, or bay.

Seismic: Caused by or subject to earthquakes or earth vibrations.

Septic System: A sewage-treatment system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absence of oxygen. Septic systems are often used for individual-home waste disposal where an urban sewer system is not available. (See "Sanitary Sewer.")

Service Needs: The particular services required by special populations, typically including needs such as transportation, personal care, housekeeping, counseling, meals, case management, personal emergency response, and other services preventing premature institutionalization and assisting individuals to continue living independently.

Settlement: (1) The drop in elevation of a ground surface caused by settling or compacting. (2) The gradual downward movement of an engineered structure due to compaction. *Differential* settlement is uneven settlement, where one part of a structure settles more or at a different rate than another part.

Sanitary Sewer: A system of underground pipes designed for the collection and transportation of wastewater from residential, commercial and industrial uses to a wastewater treatment plant.

Siltation: (1) The accumulating deposition of eroded material. (2) The gradual filling in of streams and other bodies of water with sand, silt, and clay.

Simple Tone: Any sound which can be judged as audible as a single pitch or set of single pitches.

Small Household: Pursuant to HUD definition, a small household consists of two to four non-elderly persons.

Smart Growth Principles: Smart growth principles recognize connections between development and quality of life. The features that distinguish smart growth in a community vary from place to place, but generally invest time, attention, and resources in restoring community and vitality to center cities and older suburbs. Smart growth is town-centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial and retail uses while at the same time preserving open space and other environmental amenities.

Solid Waste: Any unwanted or discarded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood, but does not include sewage and hazardous materials. Organic wastes and paper products comprise about 75 percent of typical urban solid waste.

Special Needs Groups: Those segments of the population which have a more difficult time finding decent affordable housing due to special circumstances. Under California Housing Element statutes, these special needs groups consist of the elderly, handicapped, large families, female-headed households, farmworkers and the homeless. A jurisdiction may also choose to consider additional special needs groups in the Housing Element, such as students, military households, other groups present in their community.

Specific Plan: A tool authorized by Government Code §65450 et seq. for the systematic implementation of the general plan for a defined portion of a community's planning area. A specific plan must specify in detail the land uses, public and private facilities needed to support the land uses, phasing of development, standards for the conservation, development, and use of natural resources, and a program of implementation measures, including financing measures.

Sphere of Influence: The probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission of the County.

Standards: (1) A rule or measure establishing a level of quality or quantity that must be complied with or satisfied. Government Code §65302 requires that general plans spell out the objectives, principles, "standards," and proposals of the general plan. Examples of standards might include the number of acres of park land per 1,000 population that the community will attempt to acquire and improve, or the "traffic Level of Service" (LOS) that the plan hopes to attain. (2) Requirements in a zoning ordinance that govern building and development as distinguished from use restrictions – for example, site-design regulations such as lot area, height limit, frontage, landscaping, and floor area ratio.

State Responsibility Areas: Areas of the state in which the financial responsibility for preventing and suppressing fires has been determined by the State Board of Forestry (pursuant to Public Resources Code §4125) to be primarily the responsibility of the State.

Structure: Anything constructed or erected that requires location on the ground (excluding swimming pools, fences, and walls used as fences).

Subdivision: The division of a lot, tract or parcel of land in accordance with the Subdivision Map Act (California Government Code Section 66410 et seq.).

Subdivision Map Act: Section 66410 et seq. of the California Government Code, this act vests in local legislative bodies the regulation and control of the design and improvement of subdivisions, including the requirement for tentative and final maps.

Subsidence: The sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. Subsidence may be caused by a variety of human and natural activity, including earthquakes. (See "Settlement.")

Subsidy: Housing subsidies refer to government assistance aimed at reducing housing sales or rent prices to more affordable levels. For example, a project that utilizes government funding in

whole or in part to reduce costs of construction, reduce construction loan interest rates, or rent reductions, etc.

Substandard Housing: Housing which does not meet the minimum standards contained in the State Housing Code (i.e. does not provide shelter, endangers the health, safety or well-being of occupants). Jurisdictions may adopt more stringent local definitions of substandard housing.

Substandard, Suitable for Rehabilitation: Substandard units which are structurally sound and for which the cost of rehabilitation is considered economically warranted.

Substandard, Needs Replacement: Substandard units which are structurally unsound and for which the cost of rehabilitation is considered infeasible, such as instances where the majority of a unit has been damaged by fire.

Supportive Housing: Housing with a supporting environment, such as group homes or Single Room Occupancy (SRO) housing and other housing that includes a supportive service component such as those defined below.

Supportive Services: Services provided to residents of supportive housing for the purpose of facilitating the independence of residents. Some examples are case management, medical or psychological counseling and supervision, child care, transportation, and job training.

Sustainability: Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

Sustainable Development: Development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. (*Source: Minnesota State Legislature.*)

Tax Increment: Additional tax revenues that result from increases in property values within a redevelopment area. State law permits the tax increment to be earmarked for redevelopment purposes but requires at least 20 percent to be used to increase and improve the community's supply of very low- and low-income housing.

Telecommuting: An arrangement in which a worker is at home or in a location other than the primary place of work, and communicates with the workplace and conducts work via wireless or telephone lines, using modems, fax machines, or other electronic devices in conjunction with computers.

Tenant-Based Rental Assistance: A form of rental assistance in which the assisted tenant may move from a dwelling unit with a right to continued assistance. The assistance is provided for the tenant, not for the project.

Threshold of Hearing: The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.

Threshold of Pain: Approximately 120 dB above the threshold of hearing.

Traffic Model: A mathematical representation of traffic movement within an area or region based on observed relationships between the kind and intensity of development in specific areas. Many traffic models operate on the theory that trips are produced by persons living in residential areas and are attracted by various non-residential land uses. (See “Trip.”)

Transit: The conveyance of persons or goods from one place to another by means of a local, public transportation system.

Transit, Public: A system of regularly-scheduled buses and/or trains available to the public on a fee-per-ride basis. Also called “Mass Transit.”

Transit-dependent: Refers to persons unable to operate automobiles or other motorized vehicles, or those who do not own motorized vehicles. Transit-dependent citizens must rely on transit, para-transit, or owners of private vehicles for transportation. Transit-dependent citizens include the young, the handicapped, the elderly, the poor, and those with prior violations in motor vehicle laws.

Transitional Housing: Transitional housing is temporary (often six months to two years) housing for a homeless individual or family who is transitioning to permanent housing. Transitional housing often includes a supportive services component (e.g. job skills training, rehabilitation counseling, etc.) to allow individuals to gain necessary life skills in support of independent living.

Transportation Demand Management (TDM): A strategy for reducing demand on the road system by reducing the number of vehicles using the roadways and/or increasing the number of persons per vehicle. TDM attempts to reduce the number of persons who drive alone on the roadway during the commute period and to increase the number in carpools, vanpools, buses and trains, walking, and biking. TDM can be an element of TSM (see below).

Transportation Systems Management: A comprehensive strategy developed to address the problems caused by additional development, increasing trips, and a shortfall in transportation capacity. Transportation Systems Management focuses on more efficiently utilizing existing highway and transit systems rather than expanding them. TSM measures are characterized by their low cost and quick implementation time frame, such as computerized traffic signals, metered freeway ramps, and one-way streets.

Trip: A one-way journey that proceeds from an origin to a destination via a single mode of transportation; the smallest unit of movement considered in transportation studies. Each trip has one “production end,” (or origin – often from home, but not always), and one “attraction end,” (destination). (See “Traffic Model.”)

Trip Generation: The dynamics that account for people making trips in automobiles or by means of public transportation. Trip generation is the basis for estimating the level of use for a transportation system and the impact of additional development or transportation facilities on an existing, local transportation system. Trip generations of households are correlated with destinations that attract household members for specific purposes.

Truck Route: A path of circulation required for all vehicles exceeding set weight or axle limits, a truck route follows major arterials through commercial or industrial areas and avoids sensitive areas.

Uniform Building Code (UBC): A national, standard building code that sets forth minimum standards for construction.

Uniform Housing Code (UHC): State housing regulations governing the condition of habitable structures with regard to health and safety standards, and which provide for the conservation and rehabilitation of housing in accordance with the Uniform Building Code.

Urban: Of, relating to, characteristic of, or constituting a city. Urban areas are generally characterized by moderate and higher density residential development (i.e., three or more dwelling units per acre), commercial development, and industrial development, and the availability of public services required for that development, specifically central water and sewer, an extensive road network, public transit, and other such services (e.g., safety and emergency response). Development not providing such services may be “non-urban” or “rural.” (See “Urban Land Use.”)

Urban Design: The attempt to give form, in terms of both beauty and function, to selected urban areas or to whole cities. Urban design is concerned with the location, mass, and design of various urban components and combines elements of urban planning, architecture, and landscape architecture.

Urban Land Use: Residential, commercial, or industrial land use in areas where urban services are available.

Urban Reserve: An area outside of an urban service area but within an urban growth boundary, in which future development and extension of municipal services are contemplated but not imminent.

Urban Services: Utilities (such as water, gas, electricity, and sewer) and public services (such as police, fire, schools, parks and recreation) provided to an urbanized or urbanizing area.

U.S. Department of Housing and Urban Development (HUD): The cabinet level department of the federal government responsible for housing, housing assistance, and urban development at the national level. Housing programs administered through HUD include Community Development Block Grant (CDBG), HOME and Section 8, among others.

Utility Corridors: Rights-of-way or easements for utility lines on either publicly or privately owned property. (See “Right-of-way” or “Easement.”)

Vehicle-Miles Traveled (VMT): A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

View Corridor: The line of sight – identified as to height, width, and distance – of an observer looking toward an object of significance to the community (e.g., ridgeline, river, historic building, *etc.*); the route that directs the viewer’s attention.

Viewshed: The area within view from a defined observation point.

Volume-to-Capacity Ratio: A measure of the operating capacity of a roadway or intersection, in terms of the number of vehicles passing through, divided by the number of vehicles that theoretically could pass through when the roadway or intersection is operating at its designed capacity. Abbreviated as “V/C.” At a V/C ratio of 1.0, the roadway or intersection is operating at capacity. If the ratio is less than 1.0, the traffic facility has additional capacity. Although ratios slightly greater than 1.0 are possible, it is more likely that the peak hour will elongate into a “peak period.” (See “Level of Service.”)

Water-efficient Landscaping: Landscaping designed to minimize water use and maximize energy efficiency.

Watercourse: Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have been channelized, but does not include manmade channels, ditches, and underground drainage and sewage systems.

Watershed: The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

Waterway: See “Watercourse.”

Wetlands: Transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. Under a “unified” methodology now used by all federal agencies, wetlands are defined as “those areas meeting certain criteria for hydrology, vegetation, and soils.”

Woodlands: Lands covered with woods or trees.

Zero Lot Line: A detached single family unit distinguished by the location of one exterior wall on a side property line.

Zone, Combining: A special purpose zone that is superimposed over the regular zoning map. Combining zones are used for a variety of purposes, such as airport compatibility, floodplain or

wetlands protection, historic designation, or special parking regulations. Also called “overlay zone.”

Zone, Interim: A zoning designation that temporarily reduces or freezes allowable development in an area until a permanent classification can be fixed; generally assigned during general plan preparation to provide a basis for permanent zoning.

Zone, Traffic: In a mathematical traffic model the area to be studied is divided into zones, with each zone treated as producing and attracting trips. The production of trips by a zone is based on the number of trips to or from work or shopping, or other trips produced per dwelling unit.

Zoning: A land use regulatory measure enacted by local government. Zoning district regulations governing lot size, building bulk, placement, and other development standards vary from district to district, but must be uniform within the same district. Each city and county adopts a zoning ordinance specifying these regulations.

APPENDIX B

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RECOMMENDED ROADWAY AND INTERSECTION IMPROVEMENTS

Recommended Roadway Improvements

On-Road	From	To	Project Rationale	Type of Project	Summary Description
Central Park Collector	Lakeport Blvd.	20th Street	Capacity	New Road	New collector utilizing Spurr St., Central Park, Smith St., Roscoe St. alignment and acquire additional ROW as land develops along this route.
11th St.	Main St.	Pool St.	Capacity Operation Safety	Widen	Consider widening 11th St. to 60 ft. to provide 2 lanes and center turn lane and geometric improvements at intersecting streets. Acquire ROW as land develops. ⁷
Lakeport Blvd.	Main St.	Parallel Dr.	Capacity	Widen	Widen and improve geometrics to accommodate heavy traffic volumes. Requires ROW acquisition to provide 70' min. width between Main St. and Parallel Dr., signalization and widening of HW 29 overcrossing.
Parallel Dr.	North of Craig Ave.	Martin St.	Capacity	New Collector	Develop a new arterial connecting the existing terminus of Parallel Dr. with Martin Street on the west side of HW 29.
High St.	Intersection	Lakeshore Blvd.	Safety	Channelization	Channelize curve and intersection to promote guidance through curve and provide left turn refuge.
High St.	Intersection	Clearlake Ave.	Safety	Realignment	Increase curb return radius on NE corner of intersection from existing 20' to approximately 100'.
Main St. Forbes St. and Martin St.	Martin St.	11th St.	Safety Capacity Operations	Widening Couplet	Requires geometric improvements at Martin St. Including SW/SE channelization and parking removal on Martin between Forbes and Main to allow 3 through lanes. Includes geometric improvements at intersection of Forbes/11th and Forbes and Martin. Consider repositioning stop signs on Forbes between Martin and 11th. Engineering study required to determine if one-way couplet with Forbes St. is an appropriate solution.

On-Road	From	To	Project Rationale	Type of Project	Summary Description
Main St.	Intersection	Lakeport Blvd.	Operations	Signalization	Signalize with emergency pre-empt. Widen street: Remove valley gutter. Geometric improvements.
Main St.	Intersection	3rd St.	Operations	Signalization	Signalize with emergency pre-empt.
Bevins St.	Intersection at Martin St.		Capacity	Reposition Stop signs	Reposition stop signs to increase through traffic on Bevins St.
11th St.	Undercrossing	HW 29	Capacity	Widen Undercrossng	Widen 11th St. Undercrossing to allow for 4 lanes of traffic or signalize on ramps.
New Arterial	Scotts Valley Rd.	HW 29/175 S. Parallel Dr.	Capacity	New Arterial	Develop new arterial west of HW 29. This is a long range year 2020 project.
Martin St.	Undercrossing	HW 29	Capacity	Widen	Widen to provide 4 traffic lanes.
Various	Grade Separation	HW 29	Capacity Safety	Grade Separation	Consider grade separation at the following locations, pending engineering study: 6th St, Todd Rd., South Main St., and HW 29/175 interchange.
New Roads	Refer to Figure 6: Recommended Roadway Improvements			New Roads	Increase capacity. Requires right-of-way acquisitions.
HW 29	Lakeport Planning Area		Capacity Operation	Widen	Work with CALTRANS to widen to 4 lane freeway between Lakeport and Kelseyville to 4 lane freeway/expressway.

7 An alternative to widening 11th Street is the development of an on-way couplet system utilizing the 11th Street and 10th Street right-of-way with a provision of a new connector from 10th Street to 11th Street as Pool Street.

Intersections Recommended For Improvements (Signalization or Modern Roundabout)

#	Intersection
1	State Route 29/Lakeport Boulevard off ramps
2	Todd Road/Parallel Drive
3	Lakeport Boulevard/Main Street
4	Martin Street/Main Street (or an alternative mid-downtown location)
5	Third Street/Main Street (or an alternative mid-downtown location)
6	Eleventh Street/Main Street
7	State Route 29/Eleventh Street off ramps
8	Lakeport Boulevard/Bevins Street
9	Forbes Street/Third Street
10	Eleventh Street/Central Park Avenue
11	Eleventh Street/Forbes Street
12	Eleventh Street/Willow Tree Center
13	Lakeport Boulevard/K-Mart Center
14	Parallel Drive/State Route 29
15	Parallel Drive/State Route 175

Chapter 17.28 PERFORMANCE STANDARDS

Sections:

17.28.010 Purpose and intent.

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Performance standards regulate the design and use of buildings or parcels of land, in order to minimize public hazards and to prevent the creation of nuisances and other conditions which are potentially harmful or detrimental to the users of the property or surrounding area. The purpose of the performance standards shall be to protect and improve the living and working environment, the appearance of the community, reduce or eliminate nuisance conditions, and to minimize the impacts of certain land uses on adjacent properties.

Performance standards shall apply to the use of land or buildings and to all new construction, renovation, and alteration of existing uses or structures in all zoning districts. No building or land shall be used or constructed if it creates a fire or explosion hazard; noise or vibrations; smoke, dust, odor, or other air pollution; electrical disturbance; glare; heat; or liquid or solid waste amount or degrees that adversely affect users of the property or surrounding areas.

In addition to the development standards contained in other sections of the zoning ordinance, the following performance standards shall be complied with. Whenever the performance and development standards are in conflict, the more stringent standards shall apply.

A. Noise. Certain noise levels are detrimental to the health and safety of individuals. Excessive noise is considered a public nuisance and is discouraged by the city. In no case shall noise or sound emissions, for any use occurring on any property, exceed the equivalent sound pressure levels and decibels (the A-weighted scale) for any fifteen-minute period in any one-hour period as stipulated in the following:

Maximum 15-minute within any one-hour equivalent sound pressure levels (A-weighted - dBA)

Time of Day	Receiving Property Zoning District		
	*Residential	Commercial	Industrial
7 a.m. - 10 p.m.	60	70	75
10 p.m. - 7 a.m.	45	55	60

*NOTE: The residential category includes all single-family and multifamily zoning districts.

These maximums are applicable at any point beyond the property lines of the property containing or generating the noise.

1. Noise of Short Duration. Some noise may be of a short duration or an impulsive character such as hammering, screeching, motor noise, barking dogs, power boats, home power tools, etc. The median octave band sound pressure levels, as indicated in the following table, shall not be exceeded beyond the property line of origin when the receiving property is zoned residential or is occupied by a dwelling, hospital, school, library, or nursing home.

Octave Band Center		
Frequency, Hz	7:00 a.m.--10:00 p.m.	10:00 a.m.--7:00 a.m.
31.5	68	65
63	65	62
125	61	56
250	55	50
500	52	46
1,000	49	43
2,000	46	40
4,000	43	37
8,000	40	34

2. New Development. In the review of new land use and development proposals, the city shall require the following:

- a. A standard of forty-five dB for indoor noise in all new residential development including hotels and motels.
- b. The preparation (if necessary) of noise studies and noise attenuation features as a condition of approval for new projects.
- c. Post-construction testing for residential and office projects that are proposed in areas that have an existing Ldn of sixty-five dB.

B. Light and Glare. To ensure that development within the community does not unnecessarily create light and glare nuisances, the following performance standards shall be observed:

- 1. Shielding and Downlighting. Lighting used in the community must be shielded, boxed, or directed at a downward angle so as to minimize the generation of light and glare and to assure that there is no spill over of light and glare that will impact drivers or pedestrians on the public streets, on site activities, and adjoining or nearby properties. No activity shall be permitted which causes excessive light and glare to be transmitted or reflected to surrounding properties at a level resulting in detrimental impacts to the community.
- 2. Candle Power. The candle power of all lights shall be the minimum needed to accomplish the purpose of the light.
- 3. Flashing Lights. Light sources shall generally not be permitted in landscaped, buffer, or setback areas except for those illuminating pedestrian walkways. Lighting used to illuminate parking areas of commercial uses shall be designed, located, and installed to be shielded and downlit and to reflect away from any nearby residential or open space zoning districts. Lighting for advertising signs shall not create glare or light which extends to surrounding properties.

C. Radioactivity or Electrical Disturbances. No activities shall be permitted which emit dangerous radioactivity at any point nor shall electrical disturbances which adversely affect the operation of any equipment, other than that of the creator of such disturbances, be allowed.

D. Odors, Smoke, Fumes, Dust, Particulate Matter. No emission shall be permitted at any point which would violate the current regulation for such emission as established by the Lake County Air Quality Management District. No emission of odorous gases or other odorous matter shall be permitted in such quantities as to be readily detectable when diluted in the ratio of one volume of odorous air to four volumes of clean air at the lot line. Any process which may involve the creation or emission of any odors shall be provided with a secondary safeguard system so that control will be maintained if the primary safeguard system should fail.

During grading, earthwork, and/or building construction activities, adequate dust suppression methods shall be utilized. Such methods include frequent watering and the use of dust palliatives. All soil materials that are being transported on or off the project site shall be covered, and all materials deposited within a public right-of-way shall be removed immediately.

E. Liquid or Solid Waste. No discharge shall be permitted at any point into any public sewer, private sewage system, stream, or into the ground, except in accord with standards approved by the state and county departments of health and local ordinances, of any materials of such nature or temperature as can contaminate any water supply, interfere with bacterial processes in sewage treatment, or otherwise cause the emission of dangerous or offensive elements. There shall be no accumulation outdoors of solid wastes unless stored in closed containers. Commercial-type dumpsters shall not be used for typical trash storage activities in single-family residential areas.

F. Fire and Explosion Hazards. All activities involving, and all storage of, flammable and/or explosive materials shall be provided with adequate safety devices against the hazard of fire and/or explosion and adequate fire fighting and fire suppression equipment and devices standard in the industry as required by the currently adopted California Building Standards Code as referenced in Section [15.04.010](#).

G. Heat. For the purpose of this title "heat" is defined as thermal energy of a radioactive, conductive, or convective nature. Heat emitted at any or all points shall not at any time cause a temperature increase on any adjacent property in excess of ten degrees Fahrenheit, whether such change be in the air or on the ground, in a natural stream or lake, or in any structure on such adjacent property.

H. Public Utility Facilities. Public utility distribution and transportation lines, towers and poles, and underground facilities for the distribution of gas, water, communication, and electrical facilities shall be allowed in all zoning districts except for the CBD district. All proposed routes for these transmission lines shall be submitted to the city planning commission for review and recommendation to the city council for their approval. Such approval shall be made prior to the acquisition of necessary right-of-way or easements. This provision does not apply to wireless communication facilities subject to the regulations outlined in Chapter [17.41](#).

I. Undergrounding of Utilities. All electric and communication facilities that are intended to serve new buildings or structures constructed in all zoning districts shall be placed underground on the premises to be served except for appurtenant facilities such as surface mounted transformers, pedestal mounted terminal boxes, meter cabinets, and concealed ducts. New or relocated off-site utilities serving new development areas such as shopping centers, subdivisions, industrial parks, multifamily residences, or similar projects shall be installed underground. Undergrounding of utilities may be waived by staff or the planning commission when there is a finding made that there are unique or unusual circumstances existing which preclude the underground installation.

J. Location Restrictions for RVs, Campers, and Trailers. Recreational vehicles, campers, or trailers shall only be used for human habitation or occupied for living or sleeping quarters when installed in an

approved development. Recreational vehicles, campers, and trailers may be occupied on individual residential lots within the city on a temporary basis by visiting friends, relatives, or in similar situations for not more than thirty days in a calendar year.

K. Fire Protection Fee-Building Height. Buildings in any district shall not be more than forty feet in height unless a use permit is secured. As a condition of the use permit, the planning commission shall require the payment of a special fire protection fee equivalent to one dollar for each square foot of gross floor area above thirty-five feet allowed by the use permit. Any building in any zoning district less than forty feet in height and containing more than two stories shall pay the special fire protection fee equivalent to one dollar for each square foot of gross floor area for all stories above two.

L. Special Height Restrictions. Chimneys, silos, flag poles, monuments, radio towers, water tanks, church steeples, and similar structures or mechanical appurtenances may exceed the thirty-five-foot height limit within the city upon approval of a use permit. This provision does not apply to wireless communication facilities subject to the regulations outlined in Chapter [17.41](#).

M. Projection of Eaves and Canopies. Architectural features on primary buildings such as cornices, eaves, or canopies may not extend closer than three feet to any side lot line. Eaves and canopies may extend a maximum of three feet into the required front or rear yard area. Architectural features in commercial zoning districts may extend beyond the property line assuming that requirements comply with the currently adopted California Building Standards Code as referenced in Section [15.04.010](#).

N. Projection of Porches, Landings, and Stairways. Open uncovered raised porches, landing places, or outside stairways may project to within four feet of any side lot line and to within six feet of any rear lot line.

O. Fences and Walls/Residential Areas. Fences and walls constructed in all residential zoning districts shall be subject to the following:

1. Fences or walls up to six feet in height are permitted along the interior side lot line(s) to the front setback line, along the interior rear lot line, along the front yard setback line, and along the side yard street setback line.
2. Fences or walls up to three feet in height are permitted along the front lot line--within the front yard setback area, and along the street side lot line--within the street side yard setback area. Fences or walls over three feet in height, but not exceeding six feet in height, may be allowed along the front or street side lot lines within the front or street side yard setback areas only if approved by the planning commission, and when the following criteria are complied with:
 - a. The fence shall not create a substantial hazard to the public by creating reduced visibility or other sight distance problems.
 - b. The fence shall be aesthetically pleasing and not create an inappropriate walled-in effect, visual barrier, or result in a public safety problem.
3. Fences or walls over six feet in height but under eight feet in height along interior side or rear lot lines may be approved by the planning commission when the following criteria are complied with:
 - a. The fence shall not create a substantial hazard to the public by creating reduced visibility or other sight distance problems.

b. The fence shall be aesthetically pleasing and does not create an inappropriate walled-in effect, visual barrier, or result in a public safety problem.

4. Retaining walls are permitted along all property lines for the purpose of retaining natural grade or engineered fill areas subject to the issuance and approval of a building permit in compliance with the currently adopted California Building Standards Code as referenced in Section [15.04.010](#). All retaining walls in excess of four feet in height measured from the footing shall be designed by a civil or structural engineer. Retaining walls of any height may be constructed adjacent or along all property lines without setback requirements.

5. Prior to the review of fence height request by the planning commission, and not less than ten calendar days prior to the proposed meeting of the planning commission, the community development department shall notify owners of contiguous properties immediately adjacent to the said project and/or additional properties as determined by the community development director. Notification shall be given by mail or delivery. The planning commission may impose conditions on the approval of a fence height request in order to achieve compliance with the fence criteria. The planning commission may deny a request when the criteria have not been satisfied.

P. Fences and Walls--Commercial. Fences and walls constructed in commercial zoning districts shall be subject to the following:

1. Fences or walls in commercial or office zoning districts shall be subject to the issuance of a zoning permit or architectural and design review.
2. Fences or walls may be permitted in the front or side yard setback areas adjacent to a street within commercial zoning districts subject to the issuance of a zoning permit.

Q. Decks. Decks that serve the upper stories of residential uses shall be allowed to extend into the rear yard air space a distance not to exceed fifty percent of the rear yard area measured from the rear of the main structure to the rear property line. Said decks shall not extend more than twenty feet from the rear of the main structure and shall maintain a minimum rear yard setback of ten feet. All decks shall maintain the following standards:

1. All decks shall have a rail for safety in accordance with the requirements of the currently adopted California Building Standards Code as referenced in Section [15.04.010](#).
2. No deck shall be enclosed to form a living or storage area when used as a portion of the rear yard setback.
3. At least one method of ingress and egress shall be directly provided from the living unit from which the deck is designed to serve.
4. Decks or patios serving the ground floor of a residential structure shall not exceed an elevation of eighteen inches from natural grade when constructed in the required side or rear yard setback area.

R. General Plan Roadway Improvement Lines and Building Setback Lines. For the purpose of obtaining adequate street right-of-way widths to ensure traffic safety, accommodate increased traffic volumes, and provide for an efficient flow of vehicles, general plan roadway improvement lines are established for the purpose of identifying the necessary road right-of-way width on certain streets. General plan roadway improvement lines shall be consistent with the intent of Map 11-3 Recommended Roadway Improvements

found in the Lakeport general plan. Additions or remodeling of structures occurring on parcels adjacent to general plan lines shall recognize these lines in the determination of setbacks. Development projects involving the conversion of an existing structure, or new construction on parcels adjacent to general plan lines, shall require an offer of dedication of land in accordance with the general plan as a condition of approval. Where a general plan recommended roadway line has been established for any street within the city, the required yards shall be measured from such line, and in no case shall there be an encroachment into or upon any official plan line.

S. Accessory Buildings. Where an accessory building is attached to a main building, it shall be made structurally a part of and have a common roof consistent with the main building. It shall comply in all respects with the requirements of this title and in accordance with the following:

1. An accessory building in a residential district shall be located on the rear one-half of the lot and at least ten feet from any dwelling or building existing on or under construction on the same lot or on an adjacent lot.
2. Accessory buildings shall not be located within five feet of any alley or, in the case of a corner lot project, beyond the front yard required or existing on an adjacent lot.
3. Residential garage entrances shall be a minimum of twenty feet from the front property line.
4. Accessory buildings shall be constructed with or subsequent to the construction of the main building.
5. Accessory buildings in any district shall not exceed fifteen feet in height.
6. A lawn, garden, or storage shed unserved by utilities (except electrical power), and containing less than one hundred fifty square feet, is exempt from these requirements, except for height and setback limitations. Such accessory buildings may be placed to within one foot of the side and rear property lines but shall not encroach into the street-side, setback, or front yard setback area.

T. Swimming Pools. Swimming pools in residential districts shall be constructed on the rear one-half of all lots or fifty feet from the front property line, whichever is less. Pools shall not be located closer than five feet to any rear lot line or side lot line. On the street side of a corner lot, no pool shall be located closer than ten feet to such street-side lot line. Filter and heating systems shall not be located any closer than five feet to any property line and shall be enclosed within sound and visual structures. Fenced enclosures, in accordance with the currently adopted California Building Standards Code as referenced in Section [15.04.010](#), shall be provided around swimming pools.

U. Setback Determinations. In R-1 and R-2 zoning districts where four or more lots in a block have been improved with buildings at the time of the passage of the ordinance codified in this title the minimum required setback may be the average of the improved lots.

V. Substandard Residential Lots. In any residential district, single-family dwellings may be erected on any parcel of land, the area of which is less than the building area required for that particular district under these provisions, only if the lot was part of a subdivision in existence at the time of the adoption of the first city of Lakeport zoning ordinance on January 6, 1969. The width of side yards on single-family dwellings constructed pursuant to this section may be reduced to ten percent of the average lot width, but in no case less than three feet.

W. Side Entrances to Structures / Setbacks. In any residential district where a dwelling unit is located on a lot where the main entrance is on the side of the building, the required side yard setback from the entrance shall not be less than ten feet.

X. Yard Deviations. In any residential district, additions may be made to existing structures within required side yards provided that such addition does not extend beyond the existing structure and is no closer than three feet to the side property line.

Y. Sight Distance. No foliage or structural features shall extend into the cross visibility area between three feet and seven feet above the surface of the public sidewalk or existing grade adjacent to the street.

Cross visibility is defined as the intersection of two public rights-of-way measured from the face of curb or edge of the paved roadway.

A triangle having two sides "X" feet long running along each public right-of-way, said length beginning at their intersection, and the third side formed by a line connecting the two ends.

Local streets:	X = 10'
Collector streets:	X = 15'
Arterial streets:	X = 20'

Z. Garage, Yard, Home, Patio, or Other Similar Sales.

1. Garage sales include, but are not limited to, yard sales, home sales, patio sales, or other similar use on any residentially zoned or residentially occupied property. Garage sales may be conducted in accordance with the provisions contained herein.

2. The provisions of this section shall not apply to any charitable or religious organization or occasional sales, when the proceeds from such sales are used solely for charitable or religious purposes, nor shall this chapter apply to sales conducted pursuant to the process or order of any court of competent jurisdiction.

3. No business license fee shall be required for any garage sale lawfully conducted in accordance with the provisions of this chapter.

4. No more than three garage sales shall be conducted on the same premises during any calendar year.

5. No sale shall be conducted for more than three consecutive days or for more than two consecutive weekends for two days each. Sales shall not be conducted before seven a.m. nor after six p.m. on the permitted days.

6. Personal property offered for sale shall not be displayed within or on the city public right-of-way.

7. Signs advertising a garage sale may be placed on the sale premises. No more than two signs advertising a garage sale may be posted, erected, or maintained on the premises on which the sale is to be held. Signs shall not be lighted. No sign posted, erected, or maintained shall exceed four square feet in area or be placed more than five days preceding the lawful commencement of the sale. Each posted sign shall be removed at or before the close of the last day of the garage sale.

AA. Off-street parking in setbacks:

1. Off-street parking in all residential zoning districts shall not be located in any required yard or setback area.
2. Required front, side, and rear yards shall not be used to supply any of the off-street parking spaces required by the terms of this chapter in any R-1, R-2, R-3, or R-5 zoning districts.

BB. Fabric Covered Carports and Accessory Sheds. All fabric covered carports, sheds, or similar facilities shall comply with city setback requirements in the zone in which they are located. Unless the facility is considered a structure under the currently adopted California Building Standards Code as referenced in Section [15.04.010](#), no building permit shall be required for their placement. Fabric covered facilities shall be properly maintained, cleaned, and repaired as necessary. There shall be no electricity or other utilities provided to fabric covered carports, sheds, or similar facilities.

CC. Secondary Accessory Residential Units.

1. Only one secondary accessory residential unit shall be permitted on any one parcel.
2. Secondary accessory residential units shall contain separate kitchen and bathroom facilities and shall have a separate entrance from the main dwelling.
3. The total floor area of the secondary accessory residential unit shall be not less than three hundred square feet and shall not exceed sixty percent of the square footage of the existing single-family house.
4. The primary and secondary accessory residential unit shall remain under single ownership.
5. The secondary accessory residential unit shall not be constructed unless there is an existing single-family dwelling located on the site.
6. The secondary accessory residential unit may be either attached to the existing dwelling or detached from the existing dwelling and must be located on the same lot.
7. The secondary accessory residential unit should be constructed or sited on the parcel to the rear or side of the existing single-family dwelling so that it is clearly secondary or incidental to the primary single-family residential unit.
8. The architectural style and construction materials used in the secondary accessory residential unit shall generally conform to those existing on the primary residential unit in terms of building height, roof style, roof materials, siding, windows, doors, siding and trim colors, and other architectural details.
9. Secondary accessory residential units shall be provided with one covered off-street parking space, which shall be in addition to the covered parking required for the existing single-family dwelling. New covered parking shall be provided for the secondary accessory residential unit if there is no covered parking for the existing dwelling.
10. The minimum lot size for a parcel that contains a primary and secondary accessory residential unit shall be seven thousand five hundred square feet.
 - a. A secondary accessory residential unit may be approved by the planning commission (use permit) and constructed on an existing parcel with less than seven thousand five hundred square feet if the unit meets the following criteria:

- i. The provision of exceptional architectural design, including a high level of architectural compatibility with the existing single-family dwelling; or
- ii. Off-street parking is provided in excess of the combined minimum requirements for both the primary and secondary accessory dwellings; or
- iii. New right-of-way improvements (including, but not limited to, curb, gutter, and sidewalk) are installed along the street frontage(s) of the subject property; or
- iv. The property owner enters into a written agreement with the city stipulating that the secondary accessory residential unit shall be rented to low income, very low income or extremely low income tenants with maximum income levels established for Lake County by the state of California. The rental affordability agreement shall be in effect for a minimum of five years and shall be binding on all owners or persons having or acquiring any right, title, or interest in the property subject to the agreement. Longer rental affordability agreements are encouraged.

11. Sewer expansion fees shall be collected in conjunction with the construction/development of all new secondary accessory residential units as required by city of Lakeport municipal sewer district (CLMSD south or CLMSD north). Water expansion fees shall be collected if a new water meter is installed for the new secondary accessory residential unit or if an existing water meter is upsized.

12. A separate address for the secondary accessory residential unit shall be assigned by the city of Lakeport.

DD. Residential Uses in a C-1 Light Retail, C-2 Major Retail, C-3 Service Commercial, CB Business, or Professional Office Zoning District.

1. The residential use shall be initiated concurrently or subsequent to the construction of a commercial or office building.
2. The residential use shall be aesthetically pleasing.
3. The residential use shall be provided with some useable private open space in the form of a yard, deck, balcony, or similar outdoor living area.
4. The residential use shall be provided with a pedestrian access separate from that provided for the commercial use. If it is impossible to provide a separate access, the internal access to the residential use shall be designed so as to minimize impact on the commercial activity.
5. The construction and operation of the residential use shall comply with the requirements of the building and fire codes.
6. Off-street parking shall be provided for the residential use as required by Chapter [17.23](#) in addition to the parking required for commercial or other on-site uses.
7. Single-family residential and mixed use--residential projects shall ensure that the viability of commercial and office operations is not adversely affected by residential development.
8. Residential uses that are not single-family homes shall provide:
 - a. Secure areas for residents' personal property. Outdoor storage areas for personal property brought on site by clients shall be screened from public view by minimum six-foot-tall visually

screening mature landscaping or a minimum six-foot-tall decorative masonry wall.

b. Laundry facilities adequate for the number of residents.

c. Toilets and showers at ratios of not less than one toilet for every eight beds per gender; one shower for every eight beds per gender; and a private shower and toilet facility for each area designated for families with children.

d. Telephone(s) for use by residents.

9. Residential uses include community care facilities, emergency shelters, and mixed use projects for the purposes of this section.

EE. Emergency Shelters in a C-3 Service Commercial District.

1. Purpose. The purpose of these regulations is to establish standards to ensure that the development of emergency shelters (shelters) does not adversely impact adjacent parcels or the surrounding neighborhood and that they are developed in a manner which protects the health, safety, and general welfare of the nearby residents and businesses. These performance standards shall apply to shelters. A use permit is required to establish a shelter that does not meet the location, development, and/or operational standards of this section or that would provide more beds than allowed by this section.

2. Location. A shelter may be established in any "C-3" service commercial district; provided, that the property boundaries are located more than three hundred feet from any other shelter (measured from property line to property line) unless it is separated therefrom by a state highway.

3. Maximum Number of Beds. A maximum of twenty-four beds may be provided.

4. Property Development Standards. The development shall conform to all property development standards of the C-3 zoning district (Chapter [17.11](#)), as well as Chapters [17.23](#) (Parking, Access and Loading), [17.27](#) (Architectural and Design Review), [17.28](#) (Performance Standards), and [17.52](#) (Signs).

5. Length of Stay. The maximum length of stay at the facility shall not exceed one hundred twenty days in a three-hundred-sixty-five-day period.

6. Hours of Operation. Shelters shall establish and maintain set hours for client intake/discharge. Hours of operation must be prominently posted on site. Clients shall be admitted to the facility between six p.m. and eight a.m. during Pacific Daylight Time and five p.m. and eight a.m. during Pacific Standard Time. All clients must vacate the facility by eight a.m. and have no guaranteed bed for the next night.

7. On-Site Parking. On-site parking shall be provided in the ratio of one space for every six adult beds or one-half space per bedroom designated for family units with children. One space shall be provided for each manager/staff member. Bike rack parking shall also be provided by the facility.

8. Lighting. Adequate exterior lighting shall be provided for security purposes. The lighting shall be stationary and shielded/downlit away from adjacent properties and public rights-of-way.

9. Required Facilities. Shelters shall provide the following facilities:

- a. Indoor client intake/waiting area of at least one hundred square feet. If an exterior waiting area is provided, it shall not be located adjacent to the public right-of-way and shall be visually separated from public view by minimum six-foot-tall visually screening mature landscaping or a minimum six-foot-tall decorative masonry wall. Provisions for shade/rain protection shall be provided.
- b. Interior and/or exterior common space for clients to congregate shall be provided on the property at a ratio of not less than fifteen square feet per client, with a minimum overall area of one hundred square feet. Common space does not include intake areas.

10. Optional Facilities/Services. Shelters may provide one or more of the following types of common facilities for the exclusive use of residents:

- a. Central cooking and dining room(s) subject to compliance with county health department requirements.
- b. Recreation room.
- c. Counseling center.
- d. Child-care facilities.
- e. Other support services intended to benefit homeless clients.

11. Shelter Management. The shelter provider or management shall demonstrate that they currently operate a shelter within the state of California or have done so within the past two years and shall comply with the following requirements:

- a. At least one facility manager shall be on site and awake at all times the facility is open. The manager's area shall be located near the entry to the facility. Additional support staff shall be provided, as necessary, to ensure that at least one staff member is provided in all segregated sleeping areas, as appropriate.
- b. An operational and management plan (plan) shall be submitted for review and approval by the community development director. The approved plan shall remain active throughout the life of the facility, and all operational requirements covered by the plan shall be complied with at all times. At a minimum, said plan shall contain provisions addressing the following issues:
 - i. Security and safety: addressing both on- and off-site needs, including provisions to ensure the security and separation of male and female sleeping areas, as well as any family areas within the facility.
 - ii. Loitering/noise control: providing specific measures regarding operational controls to minimize the congregation of clients in the vicinity of the facility during hours that clients are not allowed on site and/or when services are not provided.
 - iii. Management of outdoor areas: including a system for daily admittance and discharge procedures and monitoring of waiting areas with a goal to minimize disruption to nearby land uses.
 - iv. Staff training: with objectives to provide adequate knowledge and skills to assist clients in obtaining permanent shelter and income.

- v. Communication and outreach with objectives to maintain effective communication and response to operational issues which may arise in the neighborhood as may be identified by city staff or the general public.
- vi. Adequate and effective screening: with the objectives of determining admittance eligibility of clients and providing first service to Lakeport area residents.
- vii. Litter control: with the objective of providing for the regular daily removal of litter attributable to clients within the vicinity of the facility. (Ord. 924 §§39--44, 2020; Ord. 923 §§28, 30, 2019; Ord. 903 §5, 2016; Ord. 893 §3(12), 2014; Ord. 887 §1(H), 2013; Ord. 880 §2(3), 2010; Ord. 868 §1(C), 2007; Ord. 821 §1(part), 2003; Ord. 796 Att. A(part), 1999)

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Chapter 17.06 REGULATIONS FOR THE HIGH DENSITY RESIDENTIAL OR "R-3" DISTRICT

Sections:

- 17.06.010 Purpose.**
- 17.06.020 Performance standards.**
- 17.06.030 Uses permitted.**
- 17.06.040 Uses permitted subject to a zoning permit.**
- 17.06.050 Uses permitted subject to a use permit.**
- 17.06.060 Development standards.**

17.06.010 Purpose.

To establish areas for high density residential development allowing for living accommodations ranging from duplex units to apartment buildings and condominiums. The following regulations shall apply in all R-3 districts. (Ord. 796 Att. A (part), 1999)

17.06.020 Performance standards.

All uses permitted within this district shall be subject to the performance standards set forth in Chapter [17.28](#) and architectural and design review set forth in Chapter [17.27](#). (Ord. 796 Att. A(part), 1999)

17.06.030 Uses permitted.

- A. Duplexes, triplexes, fourplexes, apartment buildings, multifamily dwelling groups, and condominiums.
- B. Residential accessory uses and accessory structures.
- C. Private swimming pools, tennis courts, and similar recreational amenities.
- D. Small family nonresidential day care licensed for eight or fewer persons.
- E. Garage and yard sales.
- F. Public parks, playgrounds, and recreational facilities.
- G. Small scale offices serving the multifamily residential complex.
- H. Personal cannabis cultivation subject to the regulations as set forth in Chapter [17.38](#). (Ord. 914 §4, 2017; Ord. 893 §3(3), 2014; Ord. 821 §1(part), 2003; Ord. 796 Att. A(part), 1999)

17.06.040 Uses permitted subject to a zoning permit.

Those uses permitted in the R-2 district subject to a zoning permit and the following use:

- A. Residential care home, large.
- B. Wireless facility minor modification, collocation, small wireless facility subject to the regulations set forth in Chapter [17.41](#). (Ord. 923 §9, 2019; Ord. 893 §3(4), 2014; Ord. 796 Att. A(part), 1999)

17.06.050 Uses permitted subject to a use permit.

- A. Mobilehome parks.

- B. One single-family dwelling or manufactured home if it is to replace a previously existing dwelling.
- C. Those uses permitted in the R-2 district subject to a use permit.
- D. Bed and breakfast inns with food service and catering.
- E. Residential care facility.
- F. Wireless facility, wireless facility substantial modification subject to the regulations set forth in Chapter [17.41](#). (Ord. 923 §10, 2019; Ord. 893 §3(5), 2014; Ord. 821 §1(part), 2003; Ord. 796 Att. A(part), 1999)

17.06.060 Development standards.

- A. Maximum Permitted Density.
 - 1. Duplex, triplex, fourplex, apartment, multifamily dwelling groups, and condominiums: one thousand five hundred square feet per dwelling unit.
 - 2. Senior multifamily dwellings: nine hundred seventy square feet per unit.
- B. Minimum Lot Size.
 - 1. Six thousand square feet for an interior lot.
 - 2. Six thousand five hundred square feet for a corner lot.
- C. Minimum Lot Length. Eighty feet.
- D. Minimum Average Lot Width.
 - 1. Sixty feet for an interior lot.
 - 2. Sixty-five feet for a corner lot.
 - 3. Lots on a cul-de-sac bulb or corner bulb (knuckle) may be thirty-five feet wide and shall be at least sixty feet wide at the midpoint line.
- E. Maximum Length to Width Ratio. Three to one.
- F. Maximum Lot Coverage for Multifamily Dwelling Units.
 - 1. One story dwelling: sixty percent.
 - 2. Two story dwelling: fifty-five percent.
 - 3. Three story dwelling: fifty percent.
- G. Minimum Yards.
 - 1. Front yard: fifteen feet from lot line, twenty feet required to carport/garage.
 - 2. Rear yard: ten feet from the lot line for a duplex and fifteen feet from the lot line for other dwellings.
 - 3. Side yard: five feet from the lot line for a duplex and ten feet from the lot line for other dwellings.

4. Accessory structures: less than one hundred twenty square feet without utilities may be within one foot of the side or rear property line.

H. Maximum Height.

1. Principal structure: thirty-five feet.

Height limit may be increased subject to obtaining a use permit.

2. Accessory structure: fifteen feet.

I. Building Separation, Open Space, and Landscaping.

1. The placement of buildings shall conform to the following building separation standards:

a. When two or more buildings in the same project face each other or are arranged around an open court, they shall be separated from each other a minimum of twenty feet.

b. For a building which faces the rear or side of another building, there shall be a separation of twenty feet.

c. When the rear of the building faces the rear or side of another building, they shall be separated from each other a minimum of ten feet.

d. When the building's side faces the side of another building, they shall be separated from each other a minimum of ten feet.

i. No entries shall be permitted between buildings placed side by side, unless an additional ten feet of building separation is provided.

2. The building separation shall be increased five feet for each story in excess of one.

3. For residential developments of more than three dwelling units, a landscaped, unified, and usable open recreational and leisure area, totaling at least three hundred square feet for each dwelling unit, shall be required in addition to that landscaping generally required of all developments. The open areas shall be conveniently located and readily accessible to each dwelling unit. The following areas shall not be considered as contributing to required recreational and leisure areas:

a. Any required front or side yard.

b. Any area used for parking or vehicle circulation.

J. Parking. See Chapter [17.23](#).

K. Signs. As provided in the sign ordinance.

L. All dwelling units must be at least fifteen feet in width or diameter (excluding eaves) and shall contain the following minimum gross floor area, exclusive of parking areas, open porches and patios:

1. Studio: four hundred fifty square feet;

2. One-bedroom: six hundred fifty square feet;

3. Two-bedroom: eight hundred square feet;

4. For each additional bedroom in excess of two: one hundred square feet. (Ord. 856 §1(part), 2006; Ord. 828 §1(part), 2004; Ord. 796 Att. A (part), 1999)

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**GO**

Lakeport Water Sources

The City of Lakeport is fortunate to have two sustainable water sources.

Surface Water Treatment Facility

This treatment facility is staffed with highly trained and certified personnel and was upgraded in 2000 to a state-of-the-art treatment facility. This plant takes Clear Lake water and treats it to a very high standard that enables Lakeport's Water Division to surpass current water quality standards established by both the State Water Resources Control Board and the U.S. Environmental Protection Agency. The Water Treatment Facility is located at 590 Konocti Ave, Lakeport CA. 95453.

Ground Water Facilities- Wells

The City uses four wells that are located in two fields in the Scotts Valley area west of the City limit boundary. One well field is located in Scotts Creek and the other is located on the Green Ranch property which was recently acquired by the City as part of our long-term water sustainability strategy. Our wells are continuously monitored and treated to meet or exceed State and Federal requirements.

Water Consumer Confidence Report

The Consumer Confidence Report (CCR) is an annual water quality report prepared by our Water Division. The CCR includes information on water sources, the levels of detected contaminants, and compliance with drinking water regulations. CCRs are required by California Health & Safety Code Section 116470 and due to customers by July 1st of each year. More information about CCRs can be found on the State's website:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml



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TRANSLATE 

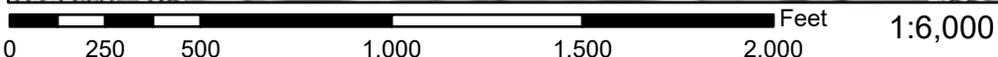
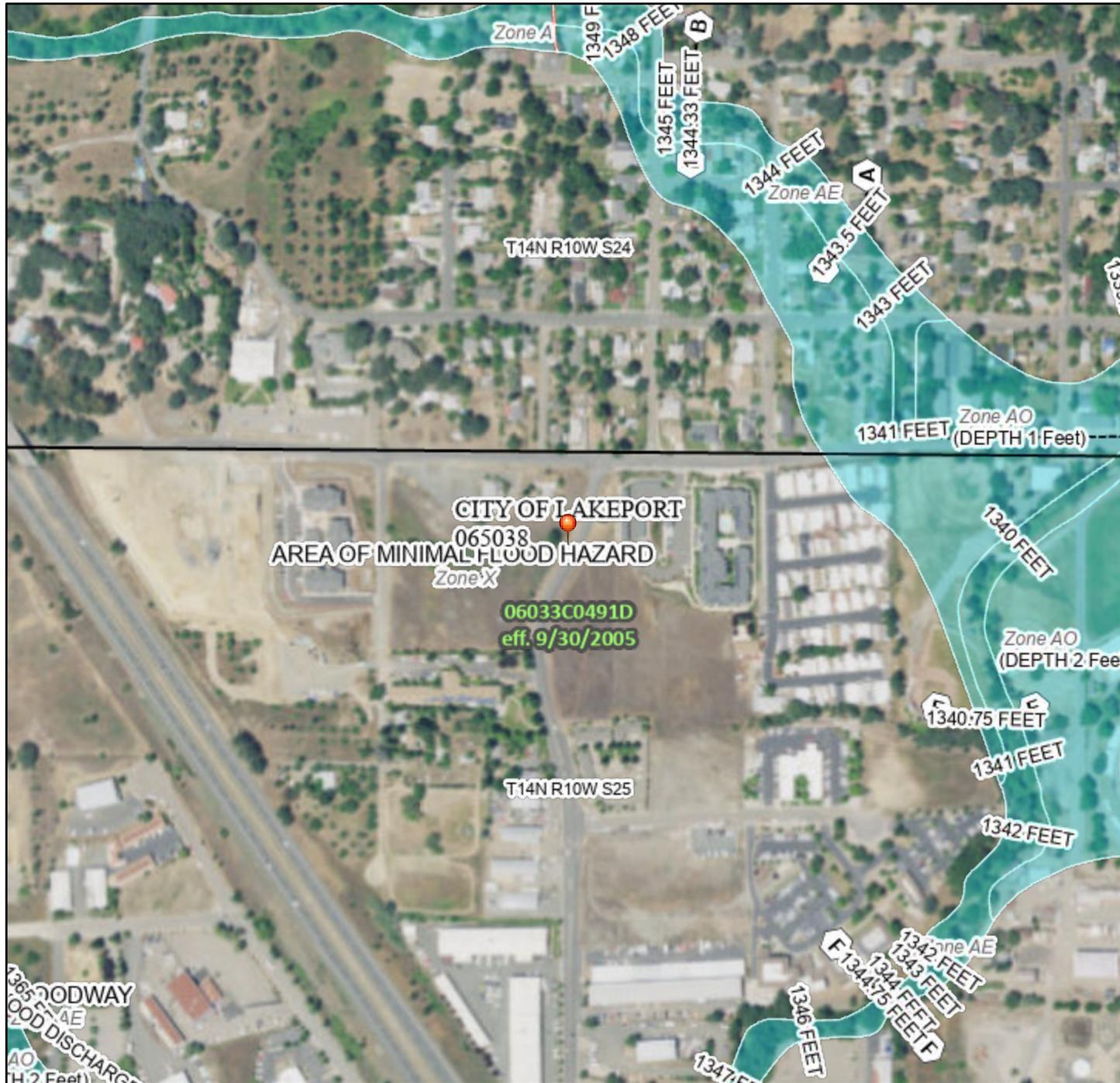
WEBSITE BY

 [LOGIN](#)
LAKPORT, CA

National Flood Hazard Layer FIRMMette



122°55'47"W 39°2'37"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/7/2022 at 2:33 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Social Services

MENU

Background

Lake County is a growing rural community located in Northern California; it covers a land area of 1,258 square miles and has a total population of 65,147 persons (2005 Census). Lake County is surrounded by mountainous terrain and is divided into northern and southern “shores” by Clear Lake, California’s largest all-natural lake. Lake County has two incorporated cities, Clearlake on the south shore and Lakeport on the north shore. There are numerous small towns surrounding the lake and situated throughout the County.

Lake County Department of Social Services (LCDSS) is mandated to provide care and assistance for local children and adults who are endangered by abuse, neglect or exploitation; administer County, State and Federal assistance programs; and provide services and support to enable families to become financially self-sufficient. These mandates are accomplished through partnerships with the community for integrated services and a work environment that supports exceptional performance through teamwork.

LCDSS maintains offices open to the public on both the north and south shores of the County. There are three offices in the south shore area, two are located in the town of Lower Lake, about three miles outside the city limits of Clearlake. All Administrative Services, as well as Eligibility Services for California Work Opportunities and Responsibility to Kids (CalWORKs), Food Stamps, Medi-Cal, County Medical Services Program (CMSP) and General Relief (GR), are performed at the south shore office located adjacent to Anderson Marsh State Historic Park.

Adult Services, which is located at 16170 Main Street, Unit D, Lower Lake administers the following services. Adult Protective Services (APS), In-Home Supportive Services (IHSS), IHSS Public Authority and Public Guardian/Administrator Services. The north shore office is located in the City of Lakeport, the County Seat. This location administers Children Services programs.

The Housing Services office located at 14092 Lakeshore Drive in Clearlake administers the Section 8 Housing Program and other housing development grants and programs.

[Back to Top](#)

Contact Us

Administration

15975 Anderson Ranch Parkway

Lower Lake, CA 95457

Phone: (707) 995-4200

Fax: (707) 995-4294

TTY: 711



County of Lake, California official website
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[Sitemap \(/Sitemap.htm\)](/Sitemap.htm)

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Briette,

Thank you for checking in with this. Yes this approach is acceptable at this time. In the future we will review the new BAAQMD methods and may update our recommendation at that time.

Douglas Gearhart, APCO
Lake County Air Quality Management District
2617 S. Main St.
Lakeport, CA 95453

Ph. (707) 263-7000
Fx. (707) 263-0421

Web: WWW.LCAQMD.NET

dougg@lcaqmd.net

On Apr 27, 2022, at 2:05 PM, Briette Shea <bshea@raneymanagement.com> wrote:

Hi Doug,

I am following up on our phone call this morning. For the air quality analysis in our CEQA document, we are proposing to compare project emissions to the Bay Area AQMD's thresholds of significance. It is noted that the Bay Area AQMD has recently adopted new thresholds of significance for GHGs; however, because the newly adopted thresholds are qualitative only, we will compare project GHG emissions to the quantitative thresholds adopted in 2017.

Please confirm that this approach is acceptable to the Lake County AQMD.

Thank you for your help,

Briette Shea (she/her)

Senior Associate / Air Quality Technician

phone. (916) 372-6100 1501 Sports Drive, Suite A Sacramento, CA 95834
fax. (916) 419-6108 www.raneymanagement.com

Bevins Street Senior Apartments Project

Personal Communications Log

Date: January 25, 2022

Parties: AT&T Environmental Health and Safety Department Representative; Jesse Fahrney, Associate, Raney Planning & Management

I called the AT&T Environmental Health and Safety Department hotline at (800) 566-9347 regarding the Aboveground Storage Tank located at 555 Lakeport Boulevard, Lakeport CA 95453. According to the representative I spoke to, the Aboveground Storage Tank is approximately 1,500 gallons. I asked about the diked area surrounding the tank and was told that that the representative did not possess any further information regarding the Aboveground Storage Tank beyond the size of the tank.

Date: January 25, 2022

Parties: Michelle Humphrey, City of Lakeport Public Works Department; Jesse Fahrney, Associate, Raney Planning & Management

I called Michelle Humphrey at the City of Lakeport Public Works Department to obtain more information regarding the Aboveground Storage Tanks located at the City's Corporation Yard – 591 Martin Street, Lakeport CA 95453. Based on the discussion, Michelle indicated that four tanks are located on-site, and none of the tanks have a diked area surrounding them. The descriptions of the tanks are as follows:

- 1,000-gallon double barrel clear diesel tank;
- 1,000-gallon double barrel dyed diesel tank;
- 1,000-gallon double barrel gasoline tank; and
- 250-gallon double barrel used oil tank.

Sutter Lakeside Hospital



5176 Hill Road East
Lakeport, CA, 95453

(707) 262-5000

NETWORK AFFILIATION

This location is part of Sutter Health's Sutter Lakeside Hospital.

HOURS:

Monday – Friday

Open 24 Hours

Saturday – Sunday

Open 24 Hours

EMERGENCY ROOM:

Open 24 hours/day

About Sutter Lakeside Hospital

Sutter Lakeside Hospital is a community-based hospital providing general surgery, labor and delivery, intensive care, emergency, family medicine, medical imaging, physical therapy and many other services.

The Joint Commission recognizes this hospital as a **Primary Stroke Center** for their exceptional ability to provide high-quality stroke care.

Frequently Asked Questions

Is there a cafeteria at this location?

Yes, the cafeteria is open for breakfast, 7:30 a.m. to 9:30 a.m., lunch, 11:30 a.m. to 1:30 p.m., and dinner, 5:30 p.m. to 7 p.m.

Is there a gift shop at this location?

Yes. For more information, call (707) 262-5000, ext. 5209.

Services Offered

The following services are available at this location.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A

Alzheimer's and Brain Health

DEMENTIA TREATMENTS AND INTERVENTIONS

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Asthma Care

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EDUCATION AND SUPPORT

PEDIATRIC ASTHMA CARE

+ MORE SERVICES

TREATMENTS AND PROCEDURES

B

Back and Spine Services

BACK AND SPINE SURGERY

EVALUATION AND DIAGNOSTIC SERVICES

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Bioethics Services

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EDUCATION

ORGANIZATIONAL ETHICS

D

Diabetes Services

ADULT DIABETES CARE
(707) 263-6885

+ MORE SERVICES

GESTATIONAL DIABETES CARE

+ MORE SERVICES

PREDIABETES CARE

E

Emergency Services

STROKE AND NEUROVASCULAR CARE

TRAUMA

G

Gastroenterology

COLORECTAL CANCER

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INFLAMMATORY BOWEL DISORDER PROGRAMS

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Gynecology and Women's Health

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FAMILY PLANNING

+ MORE SERVICES

FERTILITY SERVICES

GYNECOLOGIC SURGERY

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MENOPAUSE CARE

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+ MORE SERVICES

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ADULT CONGENITAL HEART DISEASE

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CARDIAC REHABILITATION

+ MORE SERVICES

CARDIOVASCULAR IMAGING AND DIAGNOSTIC SERVICES

+ MORE SERVICES

HEART DISEASE PREVENTION

+ MORE SERVICES

INTERVENTIONAL RADIOLOGY

STROKE AND CEREBROVASCULAR DISEASE

I

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BREAST IMAGING SERVICES

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NUCLEAR MEDICINE

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WOMEN'S IMAGING

K

Kidney Disease and Nephrology

EVALUATION AND DIAGNOSTIC SERVICES

TREATMENTS AND PROCEDURES

L

Lab and Pathology

(707) 262-5011

Mon - Fri

6:30 am – 5:00 pm

O

Orthopedic Services

BACK AND SPINE

FOOT AND ANKLE

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HAND, WRIST AND ELBOW

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HIP

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P

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ADVANCED ILLNESS MANAGEMENT (AIM)

Physical Therapy and Rehabilitation

HAND THERAPY

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NEUROLOGICAL REHABILITATION

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OCCUPATIONAL THERAPY

+ MORE SERVICES

PELVIC FLOOR AND INCONTINENCE THERAPY

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STROKE REHABILITATION

WOUND CARE

Pregnancy and Childbirth Services

PRENATAL CARE AND TESTING

+ MORE SERVICES

Primary Care

(707) 263-6885

Mon - Fri

8:00 am – 5:00 pm

FAMILY MEDICINE

+ MORE SERVICES

Pulmonary Care

EVALUATION AND DIAGNOSTIC SERVICES

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PULMONARY CRITICAL CARE

S

Surgical Services

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QuickFacts Lakeport city, California

QuickFacts provides statistics for all states and counties, and for cities and towns with a **population of 5,000 or more**.

Table

All Topics	Lakeport city, California
Population Estimates, July 1 2021, (V2021)	NA
PEOPLE	
Population	
Population Estimates, July 1 2021, (V2021)	NA
Population estimates base, April 1, 2020, (V2021)	NA
Population, percent change - April 1, 2020 (estimates base) to July 1, 2021, (V2021)	NA
Population, Census, April 1, 2020	5,026
Population, Census, April 1, 2010	4,753
Age and Sex	
Persons under 5 years, percent	3.2%
Persons under 18 years, percent	18.8%
Persons 65 years and over, percent	25.6%
Female persons, percent	53.7%
Race and Hispanic Origin	
White alone, percent	82.5%
Black or African American alone, percent (a)	0.5%
American Indian and Alaska Native alone, percent (a)	3.8%
Asian alone, percent (a)	5.7%
Native Hawaiian and Other Pacific Islander alone, percent (a)	0.0%
Two or More Races, percent	3.3%
Hispanic or Latino, percent (b)	16.5%
White alone, not Hispanic or Latino, percent	71.1%
Population Characteristics	
Veterans, 2015-2019	440
Foreign born persons, percent, 2015-2019	11.0%
Housing	
Housing units, July 1, 2019, (V2019)	X
Owner-occupied housing unit rate, 2015-2019	64.8%
Median value of owner-occupied housing units, 2015-2019	\$256,300
Median selected monthly owner costs -with a mortgage, 2015-2019	\$1,633
Median selected monthly owner costs -without a mortgage, 2015-2019	\$524
Median gross rent, 2015-2019	\$800
Building permits, 2020	X
Families & Living Arrangements	
Households, 2015-2019	2,129
Persons per household, 2015-2019	2.24
Living in same house 1 year ago, percent of persons age 1 year+, 2015-2019	91.6%
Language other than English spoken at home, percent of persons age 5 years+, 2015-2019	19.7%
Computer and Internet Use	
Households with a computer, percent, 2015-2019	89.3%
Households with a broadband Internet subscription, percent, 2015-2019	80.5%
Education	
High school graduate or higher, percent of persons age 25 years+, 2015-2019	86.3%
Bachelor's degree or higher, percent of persons age 25 years+, 2015-2019	25.7%
Health	
With a disability, under age 65 years, percent, 2015-2019	6.8%
Persons without health insurance, under age 65 years, percent	9.5%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2015-2019	53.1%

In civilian labor force, female, percent of population age 16 years+, 2015-2019	52.7%
Total accommodation and food services sales, 2012 (\$1,000) (c)	17,546
Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	51,327
Total manufacturers shipments, 2012 (\$1,000) (c)	D
Total retail sales, 2012 (\$1,000) (c)	149,422
Total retail sales per capita, 2012 (c)	\$31,826
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2015-2019	15.7
Income & Poverty	
Median household income (in 2019 dollars), 2015-2019	\$58,967
Per capita income in past 12 months (in 2019 dollars), 2015-2019	\$36,715
Persons in poverty, percent	△ 10.8%
 BUSINESSES	
Businesses	
Total employer establishments, 2019	X
Total employment, 2019	X
Total annual payroll, 2019 (\$1,000)	X
Total employment, percent change, 2018-2019	X
Total nonemployer establishments, 2018	X
All firms, 2012	895
Men-owned firms, 2012	467
Women-owned firms, 2012	281
Minority-owned firms, 2012	93
Nonminority-owned firms, 2012	732
Veteran-owned firms, 2012	77
Nonveteran-owned firms, 2012	739
 GEOGRAPHY	
Geography	
Population per square mile, 2010	1,554.3
Land area in square miles, 2010	3.06
FIPS Code	0639710

[About datasets used in this table](#)

Value Notes

 Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info  icon to the row in TABLE view to learn about sampling error.

The vintage year (e.g., V2021) refers to the final year of the series (2020 thru 2021). Different vintage years of estimates are not comparable.

Fact Notes

- (a) Includes persons reporting only one race
- (c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data
- (b) Hispanics may be of any race, so also are included in applicable race categories

Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper in open ended distribution.
- F Fewer than 25 firms
- D Suppressed to avoid disclosure of confidential information
- N Data for this geographic area cannot be displayed because the number of sample cases is too small.
- FN Footnote on this item in place of data
- X Not applicable
- S Suppressed; does not meet publication standards
- NA Not available
- Z Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Expenses Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

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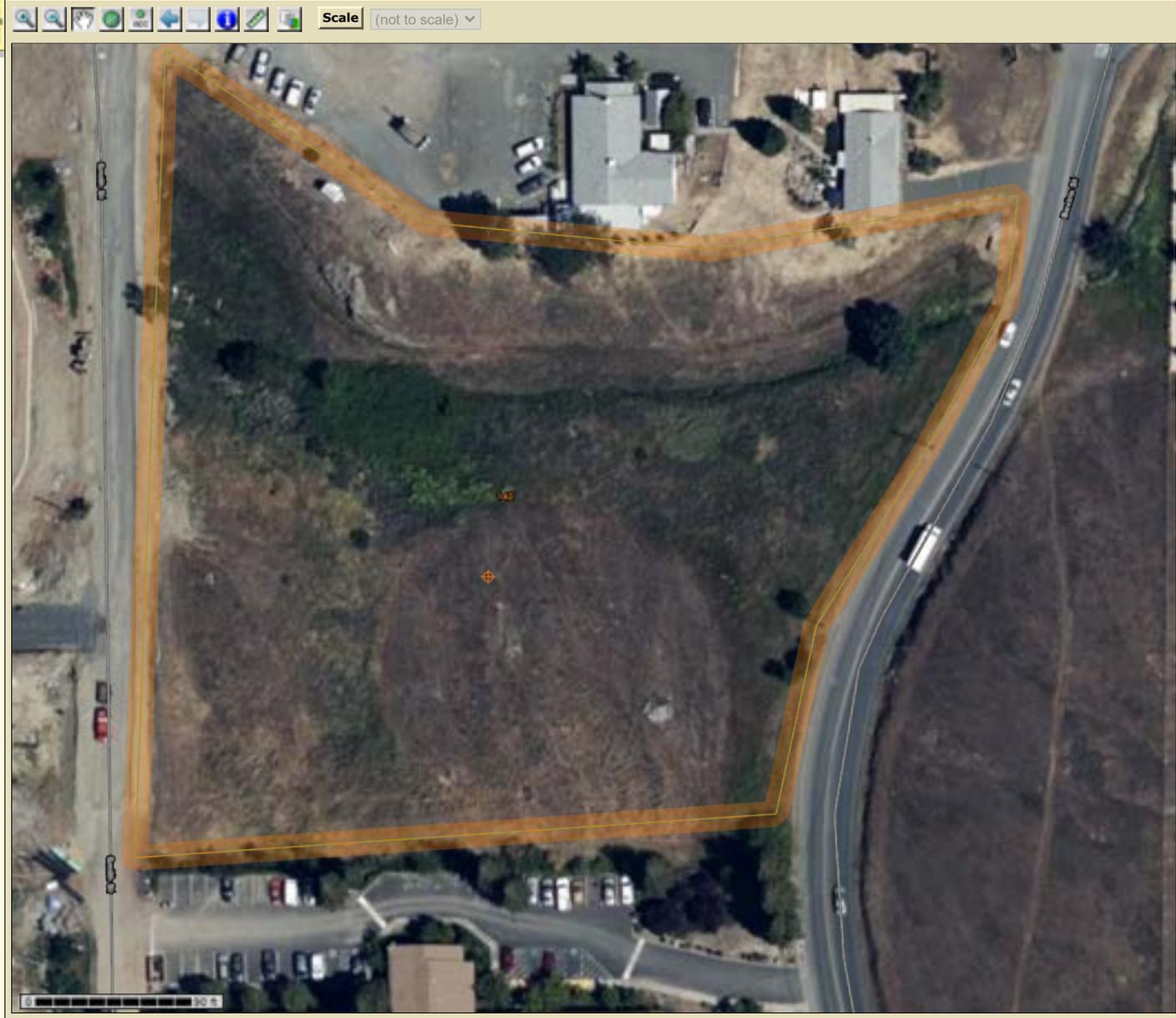
Map Unit Legend

Lake County, California (CA033)

Lake County, California (CA033)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
142	Henneke-Montara-Rock outcrop complex, 10 to 50 percent slopes, MLRA 15	3.6	100.0%
Totals for Area of Interest		3.6	100.0%

Soil Map



Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft² - hr - people and 10,000 BTU/ft² - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
What is the volume (gal) of the container?	<input type="text" value="1000"/>
What is the Diked Area Length (ft)?	<input type="text"/>
What is the Diked Area Width (ft)?	<input type="text"/>
<input type="button" value="Calculate Acceptable Separation Distance"/>	
Diked Area (sqft)	<input type="text"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>

ASD for Thermal Radiation for People (ASDPPU)	276.57
ASD for Thermal Radiation for Buildings (ASDBPU)	50.28
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: [Mitigation Options \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us** (<https://www.hudexchange.info/contact-us/>) form.

Related Information

- [ASD User Guide \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)

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Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
What is the volume (gal) of the container?	<input type="text" value="250"/>
What is the Diked Area Length (ft)?	<input type="text"/>
What is the Diked Area Width (ft)?	<input type="text"/>
<input type="button" value="Calculate Acceptable Separation Distance"/>	
Diked Area (sqft)	<input type="text"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>

ASD for Thermal Radiation for People (ASDPPU)	155.23
ASD for Thermal Radiation for Buildings (ASDBPU)	26.49
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: [Mitigation Options \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

Providing Feedback & Corrections

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Related Information

- [ASD User Guide \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft² - hr - people and 10,000 BTU/ft² - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

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Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
What is the volume (gal) of the container?	<input type="text" value="1500"/>
What is the Diked Area Length (ft)?	<input type="text"/>
What is the Diked Area Width (ft)?	<input type="text"/>
<input type="button" value="Calculate Acceptable Separation Distance"/>	
Diked Area (sqft)	<input type="text"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>

ASD for Thermal Radiation for People (ASDPPU)	327.46
ASD for Thermal Radiation for Buildings (ASDBPU)	60.65
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: [Mitigation Options \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us** (<https://www.hudexchange.info/contact-us/>) form.

Related Information

- [ASD User Guide \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft² - hr - people and 10,000 BTU/ft² - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
What is the volume (gal) of the container?	<input type="text" value="8999"/>
What is the Diked Area Length (ft)?	<input type="text"/>
What is the Diked Area Width (ft)?	<input type="text"/>
<input type="button" value="Calculate Acceptable Separation Distance"/>	
Diked Area (sqft)	<input type="text"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>

ASD for Thermal Radiation for People (ASDPPU)	690.74
ASD for Thermal Radiation for Buildings (ASDBPU)	138.84
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: [Mitigation Options \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us** (<https://www.hudexchange.info/contact-us/>) form.

Related Information

- [ASD User Guide \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	<input type="text" value="Bevin's Street Senior Apartments"/>
Record Date	<input type="text" value="01/10/2022"/> 
User's Name	<input type="text" value="Raney Planning & Management"/>

Road # 1 Name:	<input type="text" value="SR 29"/>
-----------------------	------------------------------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input type="checkbox"/>	Heavy Trucks <input type="checkbox"/>
Effective Distance	<input type="text" value="580"/>	<input type="text"/>	<input type="text"/>
Distance to Stop Sign	<input type="text"/>	<input type="text"/>	<input type="text"/>
Average Speed	<input type="text" value="55"/>	<input type="text"/>	<input type="text"/>
Average Daily Trips (ADT)	<input type="text" value="14400"/>	<input type="text"/>	<input type="text"/>
Night Fraction of ADT	<input type="text" value="15"/>	<input type="text"/>	<input type="text"/>
Road Gradient (%)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Vehicle DNL	<input type="text" value="53"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Calculate Road #1 DNL	<input type="text" value="53"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
		<input type="button" value="Reset"/>	

Airport Noise Level

Loud Impulse Sounds? Yes No

Combined DNL for all Road and Rail sources

Combined DNL including Airport

Site DNL with Loud Impulse Sound

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)



Chico

101

5

80

Reno

Carson City

Sacramento

Santa Rosa

Napa

Vacaville

Fairfield

Concord

Antioch

Stockton

San Francisco

Livermore

Modesto

Fremont

San Jose

Salinas

California

Fresno

99

Visalia

5

Coastal Barrier Resources System

Ecological Services

CBRS Menu

- CBRS Home
- Legislation & Testimony
- Historical Changes
- CBRA Prohibitions
- Flood Insurance
- Official Maps and Data +
- Boundary Modifications
- Mapping Projects +
- CBRS Documentation
- Project Consultations +

Help and Contacts



Frequently Asked Questions



Glossary



Documents Library



Contact Us



For CBRA news, sign up for our listserv electronic mailing list

Coastal Barrier Resources Act

In the 1970s and 1980s, Congress recognized that certain actions and programs of the Federal Government have historically subsidized and encouraged development on coastal barriers, resulting in the loss of natural resources; threats to human life, health, and property; and the expenditure of millions of tax dollars each year. To remove the Federal incentive to develop these areas, the Coastal Barrier Resources Act (CBRA) of 1982 designated relatively undeveloped coastal barriers along the Atlantic and Gulf coasts as part of the John H. Chafee Coastal Barrier Resources System (CBRS), and made these areas ineligible for most new Federal expenditures and financial assistance.

The Coastal Barrier Improvement Act (CBIA) of 1990 reauthorized the CBRA; expanded the CBRS to include undeveloped coastal barriers along the Florida Keys, Great Lakes, Puerto Rico, and U.S. Virgin Islands; and added a new category of coastal barriers to the CBRS called "otherwise protected areas" (OPAs). OPAs are predominantly comprised of conservation and/or recreation areas such as national wildlife refuges, state and national parks, local conservation areas, and private conservation areas, though they may also contain private areas that are not held for conservation and/or recreation.

The law encourages the conservation of hurricane prone, biologically rich coastal barriers by restricting Federal expenditures that encourage development, such as Federal flood insurance. Areas within the CBRS can be developed provided that private developers or other non-Federal parties bear the full cost. Between 1982 and 2010, CBRA has saved over \$1 billion in Federal dollars and will save millions more in the future.

Taxpayer Savings

In the past, certain actions and programs of the Federal government had the effect of encouraging development of fragile, high-risk, and ecologically sensitive coastal barriers. The Coastal Barrier Resources Act (CBRA) of 1982 and its amendments limit Federal expenditures and financial assistance which have the effect of encouraging development on designated coastal barriers. The result is a savings in Federal dollars, the protection of human lives, and conservation of natural resources. CBRA and its amendments do not prevent or regulate development, they only remove the Federal incentive for development on designated coastal barriers. Therefore, individuals who choose to live and invest in these hazard-prone areas bear the full cost of development and rebuilding instead of passing it on to American taxpayers. An economic study conducted by the U.S. Fish and Wildlife Service in 2002 estimated that by 2010, CBRA will have saved American taxpayers approximately \$1.3 billion by restricting Federal spending for roads, wastewater systems, potable water supply, and disaster relief.

The savings estimated in this study are conservative for the following reasons: the Federal programs Congress directed the Service to examine comprise but a fraction of the Federal programs, policies, and funding sources that promote, protect, and rebuild development along our coasts; the methods the Service used to estimate Stafford Act savings assume the cost per developed acre in the entire disaster area is constant, but this is not generally the case; costs for infrastructure did not consider the geology of coastal barriers and how much more expensive it is to build in these places because they are unstable and flood prone; the Service assumed no construction occurred on wetlands, which has probably happened in some areas; the Service only considered initial, on-site construction costs, but did not assess the costs of operating and maintaining infrastructure or connecting development to existing facilities.

[The Coastal Barrier Resources Act, Harnessing the Power of Market Forces to Conserve America's Coasts and Save Taxpayers' Money.](#)

John H. Chafee Coastal Barrier Resources System

The Coastal Barrier Resources Act (CBRA) established the John H. Chafee Coastal Barrier Resources System (CBRS) in 1982. The CBRS consists of the undeveloped coastal barriers and other areas located on the coasts of the United States that are identified and depicted on a series of maps entitled "John H. Chafee Coastal Barrier Resources System." These maps are controlling and indicate which lands are affected by the CBRA. The maps are maintained by the Department of the Interior through the Fish and Wildlife Service. Aside from three minor exceptions, only Congress has the authority to add or delete land from the CBRS and create new units. These exceptions include: (1) voluntary additions to the CBRS by property owners; (2) additions of excess Federal property to the CBRS; and (3) the CBRA 5-year review requirement that solely considers changes that have occurred to System units by natural forces such as erosion and accretion.

The CBRS was renamed the "John H. Chafee Coastal Barrier Resources System" by Pub. L. 106-167 in 1999 to honor the late Senator Chafee. CBRA has been amended several times to replace certain maps with new maps containing modified boundaries.

Types of CBRS Units

The CBRS contains two types of units, System Units and Otherwise Protected Areas (OPAs). OPAs are denoted with a "P" at the end of the unit number (e.g., FL-64P, P10P).

System Units contain areas that were relatively undeveloped at the time of their designation within the CBRS. System Units are predominantly comprised of privately owned areas, though they may also contain areas that are held for conservation and/or recreation. The boundaries for areas included within System Units are generally intended to follow geomorphic, development, or cultural features. Most new Federal expenditures and financial assistance, including Federal flood insurance, are prohibited within System units. The CBRS currently includes 588 System Units encompassing approximately 1.4 million acres of land and associated aquatic habitat.

OPAs are predominantly comprised of conservation and/or recreation areas such as national wildlife refuges, state and national parks, local conservation areas, and private conservation areas, though they may also contain private areas that are not held for conservation and/or recreation. The boundaries of these units are generally intended to coincide with the boundaries of conservation or recreation areas such as state parks and national wildlife refuges. The only Federal spending prohibition within OPAs is the prohibition on Federal flood insurance. The CBRS currently includes 282 OPAs encompassing approximately 2.1 million acres of land and associated aquatic habitat.

Learn more:

- [Coastal Barrier Resources System Fact Sheet \(PDF\)](#)
- [Coastal Barrier Resources System Map Units](#) - Web page will open in a new window. List can be sorted by State, County, or Unit #.
- [What is an "Undeveloped Coastal Barrier"?](#)

What is an "Undeveloped Coastal Barrier"?

The Coastal Barrier Resources Act (CBRA) of 1982 defines an "undeveloped coastal barrier" as a depositional geologic feature that is subject to wave, tidal and wind energies; and protects landward aquatic habitats from direct wave attack. CBRA further defines a coastal barrier as all associated aquatic habitats, including the adjacent wetlands, marshes, estuaries, inlets and near-shore waters, but only if such features and associated habitats contain few man-made structures and these structures, and people's activity associated with them, do not significantly impede geomorphic and ecological processes.

Section 2 of the Coastal Barrier Reauthorization Act of 2000 specifies that, at the time of the inclusion of a System unit within the System, a coastal barrier area is considered undeveloped if (1) the density of development is less than one structure per five acres of land above mean high tide; and (2) there is not a full suite of existing infrastructure consisting of a road with a reinforced road bed, wastewater disposal system, electric service, and fresh water supply to each lot or building site in the area.

CBRA sought to include relatively undeveloped coastal barriers within the CBRS (i.e., those areas containing few man-made structures). Before CBRA was enacted in 1982, the Secretary of the Interior was directed by the Omnibus Budget Reconciliation Act of 1981 (Pub. L. 97-35) to map undeveloped coastal barriers for Congressional consideration. The definitions and delineation criteria that guided the Department of the Interior's (Department) mapping efforts were published on August 16, 1982, in the Federal Register (Vol. 47, No. 158). The Department considered the density of structures and availability of infrastructure on the ground to evaluate development status. To be considered developed, the density of development on each coastal barrier area must have been more than one structure per five acres of land above mean high tide prior to its designation within the CBRS. In addition, a coastal barrier area was considered developed, even when there was less than one structure per five acres of land above mean high tide, if there was a full complement of infrastructure on the ground before designation. A full complement of infrastructure includes all of the following components for each lot or building site in the area: a road with a reinforced road bed, a wastewater disposal system, electric service, and a fresh water supply. The intent of the infrastructure criterion was to exclude areas where there was intensive private capitalization prior to its inclusion within the CBRS demonstrating a substantial on-the-ground commitment to complete the development. These criteria were later codified by the Coastal Barrier Resources Reauthorization Act of 2000 (Pub. L. 106-514) for consideration by the Secretary of the Interior when making recommendations to Congress regarding additions to or deletions from the CBRS.

In applying the density criterion, the Service generally considers the entire CBRS unit, not individual subdivisions. In cases where there are discrete segments of a coastal barrier unit (i.e., areas separated by inlets or by intervening areas that are otherwise protected or clearly developed), the density criterion is applied to each discrete segment.

Last updated: January 16, 2020

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[Accessibility](#) | [Privacy](#) | [Notices](#) | [Disclaimer](#) | [FOIA](#)



CALIFORNIA

California has approximately 189,454 miles of river, of which 1,999.6 miles are designated as wild & scenic—1% of the state's river miles.

Eel Wild And Scenic River

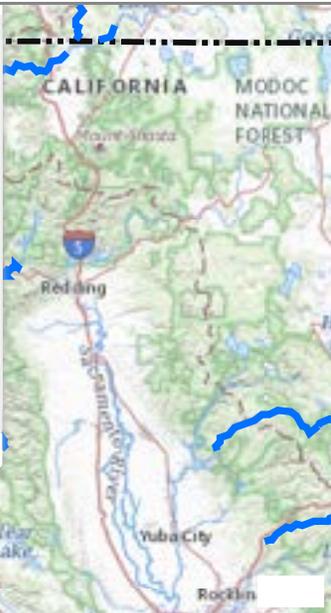
Responsible Agency: USFS, NPS

River Category: State-Administered

For more information click [here](#)

Photo by: Bureau of Land Management





Choose A State

Choose A River

Seen as barren by the first explorers to today's first-time visitors, the rivers of the high desert simply hide their treasures well.

Legend

[+ View larger map](#)

- Amargosa River
- American River (Lower)
- American River (North Fork)
- Bautista Creek
- Big Sur River
- Black Butte River
- Cottonwood Creek
- Deep Creek
- Eel River
- Feather River
- Fuller Mill Creek
- Kern River
- Kings River
- Klamath River
- Merced River
- Owens River Headwaters
- Palm Canyon Creek

- Piru Creek**
- San Jacinto River (North Fork)**
- Sespe Creek**
- Sisquoc River**
- Surprise Canyon Creek**
- Smith River**
- Trinity River**
- Tuolumne River**
- Whitewater River**

[NATIONWIDE RIVERS INVENTORY](#) | [CONTACT US](#) | [PRIVACY NOTICE](#) | [Q & A SEARCH ENGINE](#) | [SITE MAP](#)



Designated Rivers

- [About WSR Act](#)
- [State Listings](#)
- [Profile Pages](#)

National System

- [WSR Table](#)
- [Study Rivers](#)
- [Stewardship](#)
- [WSR Legislation](#)

River Management

- [Council](#)
- [Agencies](#)
- [Management Plans](#)
- [River Mgt. Society](#)
- [GIS Mapping](#)

Resources

- [Q & A Search](#)
- [Bibliography](#)
- [Publications](#)
- [GIS Mapping](#)
- [Logo & Sign Standards](#)



FHSZ Viewer

Help



ADDRESS SEARCH ✕

ZOOM TO ADDRESS

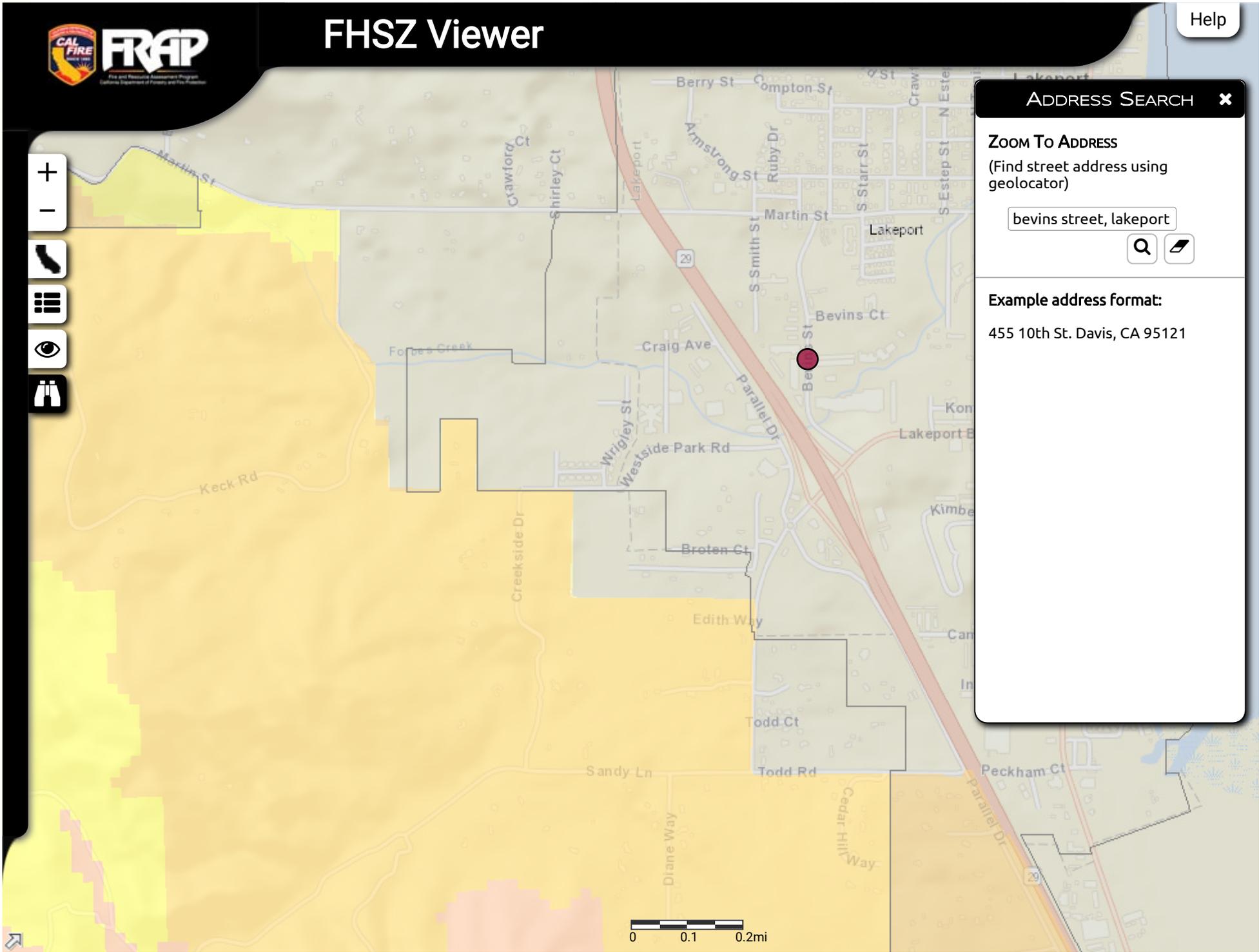
(Find street address using geolocator)

bevins street, lakeport



Example address format:

455 10th St. Davis, CA 95121



National Risk Index

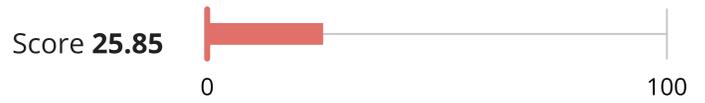


January 13, 2023

Lake County, California

Summary

Risk Index is **Relatively High**



Expected Annual Loss is **Relatively Moderate**



Social Vulnerability is **Relatively High**



Community Resilience is **Relatively Low**



While reviewing this report, keep in mind that low risk is driven by lower loss due to natural hazards, lower social vulnerability, and higher community resilience.

For more information about the National Risk Index, its data, and how to interpret the information it provides, please review the **About the National Risk Index** and **How to Take Action** sections at the end of this report. Or, visit the National Risk Index website at hazards.fema.gov/nri/learn-more to access supporting documentation and links.

Risk Index

The Risk Index rating is **Relatively High** for **Lake County, CA** when compared to the rest of the U.S.



Score **25.85**



96.5% of U.S. counties have a lower Risk Index

46.5% of counties in California have a lower Risk Index

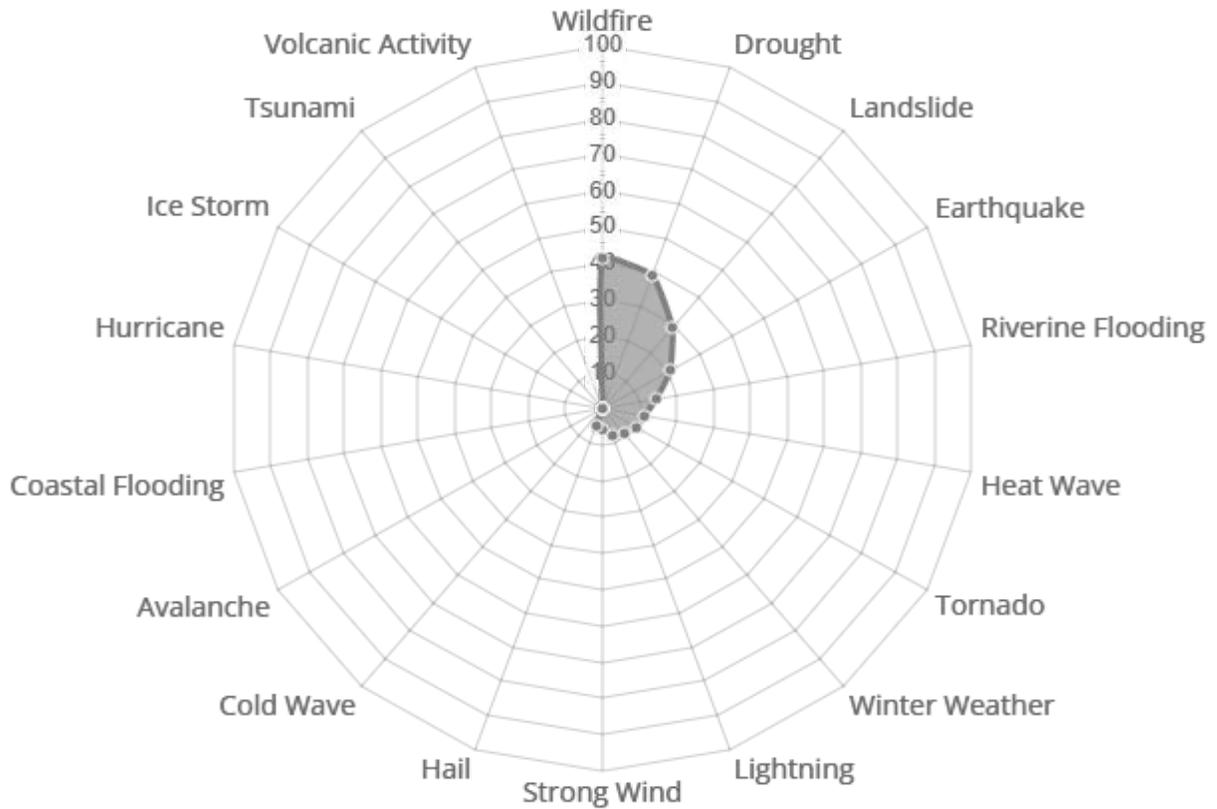
Risk Index Legend

- Very High
 Relatively High
 Relatively Moderate
 Relatively Low
 Very Low
- No Rating
 Not Applicable
 Insufficient Data

Hazard Type Risk Index

Hazard type Risk Index scores are calculated using data for only a single hazard type, and reflect a community's relative risk for only that hazard type.

Hazard Type	Risk Index Rating	Risk Index Score	
Avalanche	Not Applicable	--	
Coastal Flooding	Not Applicable	--	
Cold Wave	No Rating	0.00	0 ----- 100
Drought	Relatively High	38.93	0 ----- 100
Earthquake	Relatively Moderate	20.91	0 ----- 100
Hail	Very Low	5.10	0 ----- 100
Heat Wave	Relatively Moderate	11.20	0 ----- 100
Hurricane	Not Applicable	--	
Ice Storm	Not Applicable	--	
Landslide	Relatively High	29.21	0 ----- 100
Lightning	Very Low	8.09	0 ----- 100
Riverine Flooding	Relatively Moderate	14.33	0 ----- 100
Strong Wind	Very Low	5.71	0 ----- 100
Tornado	Relatively Low	10.14	0 ----- 100
Tsunami	Not Applicable	--	
Volcanic Activity	Not Applicable	--	
Wildfire	Relatively High	41.63	0 ----- 100
Winter Weather	Relatively Low	9.31	0 ----- 100



The chart above demonstrates the relative distribution of hazard type Risk Index scores for **Lake County, CA**. Risk Index scores are plotted for each hazard type included in the National Risk Index. Higher relative risk corresponds to larger colored areas inside a given hazard type chart slice.

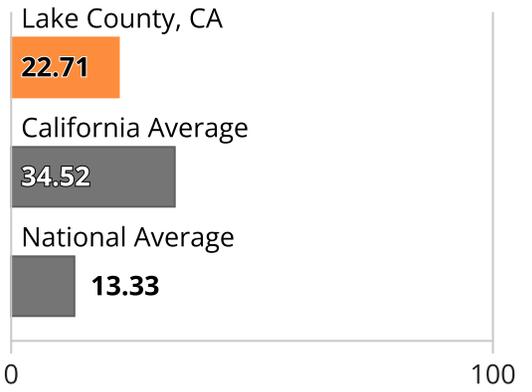
Expected Annual Loss

In **Lake County, CA**, expected loss each year due to natural hazards is **Relatively Moderate** when compared to the rest of the U.S.



Score

22.71



91.6% of U.S. counties have a lower Expected Annual Loss

24.1% of counties in California have a lower Expected Annual Loss

Expected Annual Loss Legend

- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
- No Expected Annual Losses
- Not Applicable
- Insufficient Data

Composite Expected Annual Loss		\$20,043,838.03	
Building Value	\$12,766,465.35	Population	0.24 fatalities
Population Equivalence	\$1,806,740.67	Agriculture Value	\$5,470,632.01

Expected Annual Loss for Hazard Types

Expected Annual Loss scores for hazard types are calculated using data for only a single hazard type, and reflect a community's relative expected annual loss for only that hazard type. **12 of 18** hazard types contribute to the expected annual loss for **Lake County, CA**.

Hazard Type	Expected Annual Loss Rating	Expected Annual Loss Score
Avalanche	Not Applicable	--
Coastal Flooding	Not Applicable	--
Cold Wave	No Expected Annual Losses	0.00 
Drought	Relatively High	28.14 
Earthquake	Relatively Moderate	18.37 
Hail	Very Low	4.20 
Heat Wave	Relatively Low	9.40 
Hurricane	Not Applicable	--
Ice Storm	Not Applicable	--
Landslide	Relatively High	28.15 
Lightning	Very Low	9.16 
Riverine Flooding	Relatively Low	10.84 
Strong Wind	Very Low	7.45 
Tornado	Very Low	7.67 
Tsunami	Not Applicable	--
Volcanic Activity	Not Applicable	--
Wildfire	Relatively High	31.47 

Hazard Type	Expected Annual Loss Rating	Expected Annual Loss Score		
Winter Weather	Very Low	8.77	0 	100

Expected Annual Loss Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	--	--	--	--	--
Cold Wave	\$0	\$0	\$0	0.00	\$0
Drought	\$5,435,384	n/a	n/a	n/a	\$5,435,384
Earthquake	\$8,689,672	\$7,402,979	\$1,286,693	0.17	n/a
Hail	\$4,957	\$86	\$3,886	0.00	\$985
Heat Wave	\$58,240	\$15	\$50,647	0.01	\$7,578
Hurricane	--	--	--	--	--
Ice Storm	--	--	--	--	--
Landslide	\$193,768	\$27,267	\$166,501	0.02	n/a
Lightning	\$11,507	\$220	\$11,287	0.00	n/a
Riverine Flooding	\$637,687	\$467,149	\$148,298	0.02	\$22,240
Strong Wind	\$7,410	\$425	\$6,506	0.00	\$480
Tornado	\$65,006	\$49,250	\$15,620	0.00	\$136
Tsunami	--	--	--	--	--
Volcanic Activity	--	--	--	--	--
Wildfire	\$4,935,870	\$4,818,971	\$113,071	0.01	\$3,828
Winter Weather	\$4,336	\$105	\$4,231	0.00	\$0

Exposure Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	--	--	--	--	--
Cold Wave	\$0	\$0	\$0	0.00	\$0
Drought	\$51,117,938	n/a	n/a	n/a	\$51,117,938
Earthquake	\$498,179,026,000	\$6,725,026,000	\$491,454,000,000	64,665.00	n/a
Hail	\$498,250,895,000	\$6,725,026,000	\$491,454,000,000	64,665.00	\$71,869,000
Heat Wave	\$498,250,873,110	\$6,725,025,861	\$491,453,990,294	64,665.00	\$71,856,955
Hurricane	--	--	--	--	--
Ice Storm	--	--	--	--	--
Landslide	\$319,962,685,815	\$4,604,859,131	\$315,357,826,684	41,494.45	n/a
Lightning	\$498,179,026,000	\$6,725,026,000	\$491,454,000,000	64,665.00	n/a
Riverine Flooding	\$82,956,885,127	\$1,142,168,666	\$81,805,047,848	10,763.82	\$9,668,612
Strong Wind	\$498,250,895,000	\$6,725,026,000	\$491,454,000,000	64,665.00	\$71,869,000
Tornado	\$498,250,895,000	\$6,725,026,000	\$491,454,000,000	64,665.00	\$71,869,000
Tsunami	--	--	--	--	--
Volcanic Activity	--	--	--	--	--
Wildfire	\$103,772,184,689	\$1,539,337,788	\$102,195,791,099	13,446.81	\$37,055,802
Winter Weather	\$498,250,875,537	\$6,725,025,861	\$491,453,990,294	64,665.00	\$71,859,382

Annualized Frequency Values

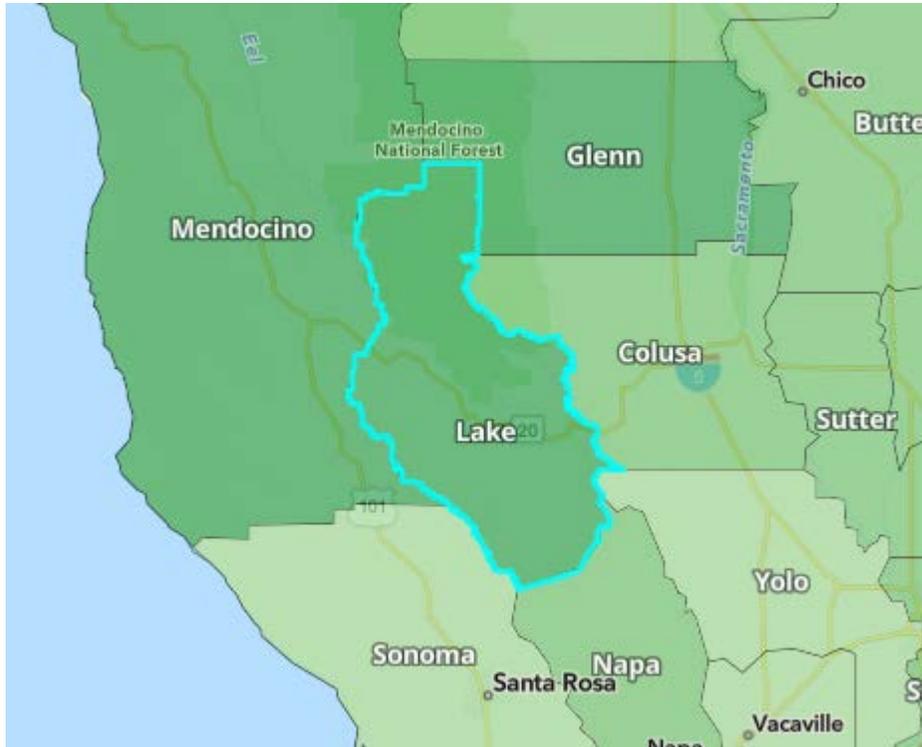
Hazard Type	Annualized Frequency	Events on Record	Period of Record
Avalanche	--	--	--
Coastal Flooding	--	--	--
Cold Wave	0 events per year	0	2005-2017 (12 years)
Drought	36.9 events per year	798	2000-2017 (18 years)
Earthquake	0.882% chance per year	n/a	2017 dataset
Hail	0.1 events per year	3	1986-2017 (32 years)
Heat Wave	1.2 events per year	65	2005-2017 (12 years)
Hurricane	--	--	--
Ice Storm	--	--	--
Landslide	0 events per year	6	2010-2019 (10 years)
Lightning	0.7 events per year	16	1991-2012 (22 years)
Riverine Flooding	0.5 events per year	13	1996-2019 (24 years)
Strong Wind	0 events per year	1	1986-2017 (32 years)
Tornado	0.1 events per year	0	1986-2019 (34 years)
Tsunami	--	--	--
Volcanic Activity	--	--	--
Wildfire	0.934% chance per year	n/a	2016 dataset
Winter Weather	3 events per year	185	2005-2017 (12 years)

Historic Loss Ratios

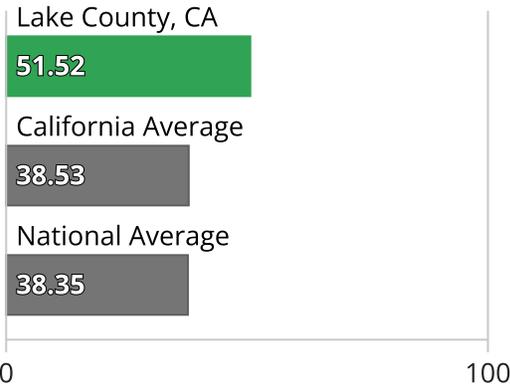
Hazard Type	Overall Rating	Building Value	Population	Agriculture Value
Avalanche	--	--	--	--
Coastal Flooding	--	--	--	--
Cold Wave	No Rating	\$6.35 per \$10M	3.71 per 1M	\$5.30 per \$1K
Drought	Very Low	n/a	n/a	\$3.06 per \$1K
Earthquake	Relatively Moderate	\$8.82 per \$1K	3.22 per 100K	n/a
Hail	Very Low	\$1.89 per \$10M	1.16 per 10M	\$2.13 per \$10K
Heat Wave	Very Low	\$1.56 per \$1B	7.36 per 100M	\$7.62 per \$100K
Hurricane	--	--	--	--
Ice Storm	--	--	--	--
Landslide	Very Low	\$1.15 per \$10K	1.03 per 100K	n/a
Lightning	Relatively Moderate	\$8.86 per \$100M	6.35 per 100M	n/a
Riverine Flooding	Very Low	\$7.55 per \$10K	3.35 per 1M	\$4.25 per \$1K
Strong Wind	Very Low	\$2.06 per \$1M	4.31 per 10M	\$2.30 per \$10K
Tornado	Very Low	\$5.81 per \$100K	2.52 per 10M	\$1.50 per \$100K
Tsunami	--	--	--	--
Volcanic Activity	--	--	--	--
Wildfire	Very Low	\$4.00 per \$10	1.43 per 10K	\$1.05 per \$100
Winter Weather	Very Low	\$1.20 per \$100M	6.85 per 1B	\$1.78 per \$1T

Social Vulnerability

Social groups in **Lake County, CA** have a **Relatively High** susceptibility to the adverse impacts of natural hazards when compared to the rest of the U.S.



Score **51.52**



91.0% of U.S. counties have a lower Social Vulnerability

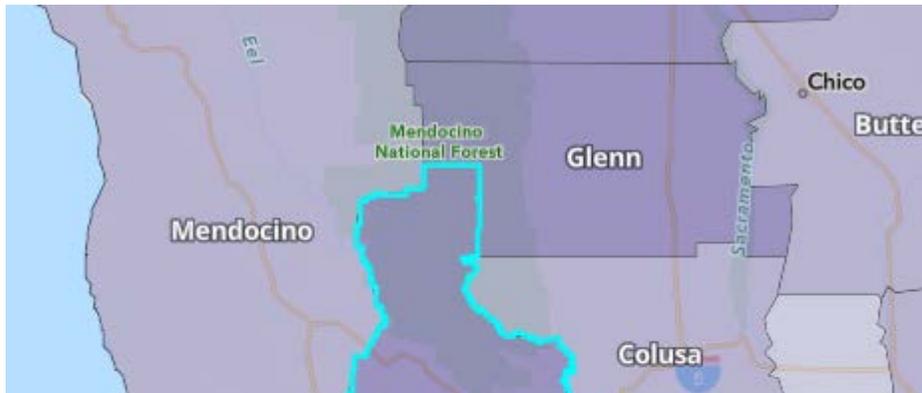
98.2% of counties in California have a lower Social Vulnerability

Social Vulnerability Legend

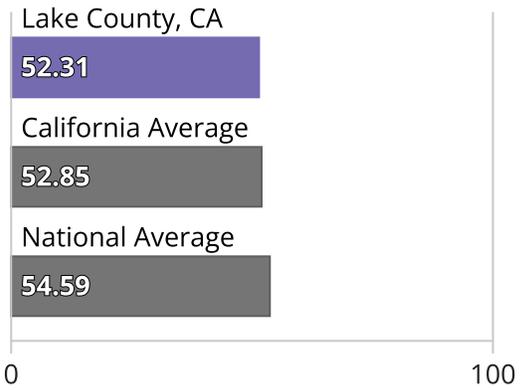
- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
- Data Unavailable

Community Resilience

Communities in **Lake County, CA** have a **Relatively Low** ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.



Score **52.31**



78.7% of U.S. counties have a higher Community Resilience

63.8% of counties in California have a higher Community Resilience

Community Resilience Legend

- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
-
- Data Unavailable

About the National Risk Index

The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather.

The National Risk Index leverages available source data for Expected Annual Loss due to these 18 hazard types, Social Vulnerability, and Community Resilience to develop a baseline relative risk measurement for each United States county and Census tract. These measurements are calculated using average past conditions, but they cannot be used to predict future outcomes for a community. The National Risk Index is intended to fill gaps in available data and analyses to better inform federal, state, local, tribal, and territorial decision makers as they develop risk reduction strategies.

Explore the National Risk Index Map at hazards.fema.gov/nri/map.

Visit the National Risk Index website at hazards.fema.gov/nri/learn-more to access supporting documentation and links.

Calculating the Risk Index

Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability and Community Resilience:

$$\text{Risk Index} = \text{Expected Annual Loss} \times \text{Social Vulnerability} \div \text{Community Resilience}$$

Risk Index scores are presented as a composite score for all 18 hazard types, as well as individual scores for each hazard type.

For more information, visit hazards.fema.gov/nri/determining-risk.

Calculating Expected Annual Loss

Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios for 18 hazard types:

$$\text{Expected Annual Loss} = \text{Exposure} \times \text{Annualized Frequency} \times \text{Historic Loss Ratio}$$

Expected Annual Loss scores are presented as a composite score for all 18 hazard types, as well as individual scores for each hazard type.

For more information, visit hazards.fema.gov/nri/expected-annual-loss.

Calculating Social Vulnerability

Social Vulnerability is measured using the Social Vulnerability Index (SoVI) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI).

For more information, visit hazards.fema.gov/nri/social-vulnerability.

Calculating Community Resilience

Community Resilience is measured using the Baseline Resilience Indicators for Communities (HVRI BRIC) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI).

For more information, visit hazards.fema.gov/nri/community-resilience.

How to Take Action

There are many ways to reduce natural hazard risk through mitigation. Communities with high National Risk Index scores can take action to reduce risk by decreasing Expected Annual Loss due to natural hazards, decreasing Social Vulnerability, and increasing Community Resilience.

For information about how to take action and reduce your risk, visit hazards.fema.gov/nri/take-action.

Disclaimer

The National Risk Index (the Risk Index or the Index) and its associated data are meant for planning purposes only. This tool was created for broad nationwide comparisons and is not a substitute for localized risk assessment analysis. Nationwide datasets used as inputs for the National Risk Index are, in many cases, not as accurate as available local data. Users with access to local data for each National Risk Index risk factor should consider substituting the Risk Index data with local data to recalculate a more accurate risk index. If you decide to download the National Risk Index data and substitute it with local data, you assume responsibility for the accuracy of the data and any resulting data index. Please visit the [Contact Us](#) page if you would like to discuss this process further.

The methodology used by the National Risk Index has been reviewed by subject matter experts in the fields of natural hazard risk research, risk analysis, mitigation planning, and emergency management. The processing methods used to create the National Risk Index have produced results similar to those from other natural hazard risk analyses conducted on a smaller scale. The breadth and combination of geographic information systems (GIS) and data processing techniques leveraged by the National Risk Index enable it to incorporate multiple hazard types and risk factors, manage its nationwide scope, and capture what might have been missed using other methods.

The National Risk Index does not consider the intricate economic and physical interdependencies that exist across geographic regions. Keep in mind that hazard impacts in surrounding counties or Census tracts can cause indirect losses in your community regardless of your community's risk profile.

Nationwide data available for some risk factors are rudimentary at this time. The National Risk Index will be continuously updated as new data become available and improved methodologies are identified.

The National Risk Index Contact Us page is available at hazards.fema.gov/nri/contact-us.