

DRAFT ENVIRONMENTAL IMPACT REPORT

General Plan Update

City of Lakeport

SCH #2005102104



Prepared for
City of Lakeport Community Development Department

November 2008



Quad Knopf

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Introduction

The City of Lakeport is proposing to update the Lakeport General Plan that would increase the City's Sphere of Influence. In addition, the land-use designation for certain areas within the city limits would be amended to allow a broader mix of uses than currently allowed. With the implementation of the proposed general plan, buildout of the Specific Plan area would result in a variety of potential impacts including: increased residential development, commercial development, and open space.

This Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines and is an informational document intended to inform public decision-makers, responsible or interested agencies and the general public of the potential environmental effects of the proposed project, and where applicable, mitigation measures that can be implemented to reduce or avoid the potential adverse environmental effects.

Project Description

Summarized below are the changes made to the General Plan land use designations from the previous General Plan.

1. From Residential to Office. Bordered by 4th Street, Tunis Street, and 1st Street.
2. From Commercial to High Density Residential along South Smith Street.
3. From Major Retail to Office and Residential. Located on the east side of Highway 29, bisected by Central Park Avenue.
4. From Major Retail/Low Density Residential to Residential. Bordered by Sandy Lane, Todd Road, and Edith Way.
5. From Commercial to Residential along 20th Street to be consistent with underlying zoning.
6. Change the Industrial designation in the vicinity of Kimberly Lane to Major Retail.
7. The expanded Sphere of Influence is designated "Specific Plan Area." Comprises approximately 600 acres.
8. The current General Plan designation of "Low Density Residential" and "Medium Density Residential" are proposed to be combined into the classification "Residential."

As part of the comprehensive amendment to the existing General Plan, the City proposed to modify (or create, in the case of the urban boundary element) the following elements:

- Land Use Element

- Urban Boundary Element (new)
- Transportation Element
- Community Design Element
- Economic Development (new)
- Conservation Element
- Open Space & Parks Element
- Noise Element
- Safety Element

Note: The Housing Element was adopted in July 2004 and has not been revised as a part of this General Plan Update.

Summary of Impacts and Mitigation Measures

Section 15123(b)(1) of the Guidelines for the California Environmental Quality Act (State CEQA Guidelines) provides that the summary shall identify each significant effect with proposed mitigation measures that would reduce or avoid that effect. This information is summarized in Table S-1, Summary of Impacts and Mitigation Measures.

Potential Areas of Controversy and Issues to be Resolved

The following issues could produce controversy in reviewing and considering the proposed project:

- Aesthetics: Effects on the visual character and quality of the surrounding area, including the proposed Specific Plan Area south of the city limits, as a result of expansion of the Sphere of Influence.
- Agricultural Resources: Conversion of agricultural land uses and loss of prime farmland in the proposed Specific Plan Area.
- Air Quality: Impacts to air quality from emissions generated by construction and increased traffic in the Specific Plan Area. Potential disturbance of natural occurring asbestos as a result of new construction.
- Biological Resources: Impacts to native vegetation, riparian, and other habitat as a result of expansion of the Sphere of Influence.
- Hydrology/Water Quality: Changes to drainage patterns, potential flooding impacts, and identification of effects on water quality.
- Land Use and Planning: Conflicts with existing County General Plan policies as a result of the expansion of the Sphere of Influence.

- Utilities: Impacts to the city's utility service systems as a result of expansion of the Sphere of Influence
- Transportation/Traffic: Direct and cumulative increases in area traffic as a result of potential development in the Specific Plan Area.

Alternatives to this Project

ALTERNATIVE 1: NO PROJECT ALTERNATIVE

In accordance with Section 15126.6(e)(3)(B) of the State CEQA Guidelines, the No Project alternative consists of an analysis of the circumstances under which the project does not proceed. In the case of the proposed project, this would mean the proposed General Plan Update would not be adopted and or approved. This scenario assumes that the existing General Plan would continue to administer land use policy in the City.

ALTERNATIVE 2: UNCHANGED SPHERE OF INFLUENCE ALTERNATIVE

This alternative would leave in place the current Sphere of Influence, shown on [Figure 4-1](#). The Specific Plan Area would remain outside of the Sphere of Influence, and the unincorporated area north of the city limits would remain within. Other changes to the General Plan, including changes to current designations and changes to and reorganization of the General Plan elements, would still be included in this alternative.

ALTERNATIVE 3: REDUCED SIZE SPHERE OF INFLUENCE ALTERNATIVE

This alternative, shown on [Figure 4-2](#), would eliminate the expansion of the Sphere of Influence to south, where a Specific Plan Area designation is proposed. As with the proposed project, the northern boundary of the Sphere of Influence would be moved southward to the current northern city limits. Other changes to the General Plan, including changes to current designations and changes to and reorganization of the General Plan elements, would still be included in this alternative.

**Table S-1
Summary of Impacts and Mitigation Measures**

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.1 Aesthetics					
3.1-1	Substantially degrade the existing visual character.	Potentially Significant	3.1-1	<p>The following policy and program shall be added to the updated Lakeport General Plan Conservation Element:</p> <p>Policy C-1.4: Hillside Protection. Development in areas with a 25% slope or greater shall be subject to the following criteria:</p> <ul style="list-style-type: none"> • 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. • Oak trees shall be further protected during construction through the use of orange 	Less Than Significant

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				fencing placed a minimum of 8 feet from the dripline of the trees.	
3.2 Agricultural Resources					
3.2-1	Conversion and loss of Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use.	Potentially Significant	3.2-1a	The City will encourage property owners outside the City limits but within the SOI to maintain their land in agricultural production until the land is converted to urban uses. The City will also work cooperatively with land trusts and other non-profit organizations to preserve agricultural land in the region. This may include the use of conservation easements. Infill development will be preferred and encouraged over fringe development. Sequential and contiguous development is also preferred and encouraged over leap-frog development.	Significant and Unavoidable
		Potentially Significant	3.2-1b	Prior to recording final maps for any development project, any project impacting Prime Farmland, Unique Farmland or Farmland of Statewide importance shall preserve land of equal or better quality in terms of agricultural value at a minimum ratio of 1:1 and shall protect the land for agricultural use through permanent land use restrictions such as an agricultural conservation easements. An organization such as the Lake County Land Trust shall be used to facilitate the establishment of the conservation easement. The purpose of the conservation easement shall be to assure that the land remains available for farming. The	Significant and Unavoidable

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				land shall be available as closely as possible to the plan area, to the satisfaction of the City of Lakeport Community Development Department. The proposed conservation easement for the property shall be submitted to the city or county for review and approval.	
3.2-2	Conflict with existing zoning for agricultural use.	Less Than Significant		No mitigation measures are required.	
3.3 Air Quality					
3.3-1	Construction Emissions of ROG, NO _x , and PM.	Less Than Significant		No mitigation measures are required.	
3.3-2	Operational Emissions of ROG, NO _x , CO and PM.	Less Than Significant		No mitigation measures are required.	
3.3-3	Toxic Air Emissions.	Less Than Significant		No mitigation measures are required.	
3.3-4	Potential impact to global climate change.	Potentially Significant	3.3-4	<p>To reduce greenhouse gas emissions and thus reduce air quality impacts, the following objectives, policies, and programs shall be added into the General Plan Update:</p> <p>Land Use Element:</p> <ul style="list-style-type: none"> Encourage public and private construction of LEED (Leadership in Energy and Environmental Design) certified (or equivalent) buildings. 	Less Than Significant

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				<p>Conservation Element:</p> <ul style="list-style-type: none"> • Continue to maintain and update energy conservation programs and information provided to the public. • Work with utility providers to provide free energy audits for the public. • The project level applicants and City shall jointly develop a tree planting informational packet to help project area residents understand their options for planting trees that can absorb carbon dioxide. • Preserve and replace onsite trees (that are removed due to development) as a means of providing carbon storage. • Recognize and promote energy saving measures beyond Title 24 requirements for residential and commercial projects. <p>Transportation Element:</p> <ul style="list-style-type: none"> • Require vehicle-reduction measures through carpooling, public transit incentives, and linkages of electric shuttle service to public transit as well as local and regional pedestrian and bike trails during the project review stages. 	

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				<ul style="list-style-type: none"> • Prioritized parking within commercial and retail areas shall be given to electric vehicles, hybrid vehicles, and alternative fuel vehicles. • All non-residential projects shall provide bicycle lockers and/or racks. • Create conditions of approval for projects to limit idling time for commercial vehicles, including delivery and construction vehicles. <p>Other mitigation measures:</p> <ul style="list-style-type: none"> • Where feasible, include in new buildings facilities to support the use of low/zero carbon fueled vehicles, such as the charging of electric vehicles from green electricity sources • Incorporate energy efficient bulbs and appliances for traffic lights, street lights, and other electrical uses. • Encourage large businesses to develop commute trip reduction plans that encourage employees who commute alone to consider alternative transportation modes. 	
3.3-5	Odorous Emissions	Less Than Significant		No mitigation measures are required.	

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.3-6	Naturally Occurring Asbestos.	Potentially Significant	3.3-6	<p>The following policy and program shall be added to the updated Lakeport General Plan Conservation Element:</p> <p>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.</p> <p>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.</p>	Less Than Significant
3.4 Biological Resources					
3.4-1	Substantial adverse impacts on candidate, special-status or sensitive species.	Less Than Significant		No mitigation measures are required.	
3.4-2	Substantial adverse affect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS.	Less Than Significant		No mitigation measures are required.	
3.4-3	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native	Less Than Significant		No mitigation measures are required.	

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
	resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.				
3.4-4	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less Than Significant		No mitigation measures are required.	
3.5 Cultural Resources					
3.5-1	Future development of the Specific Plan area could disturb or destroy buried/previously unidentified cultural resources (archaeological, paleontological, or human remains) within the project site.	Potentially Significant	3.5-1	<p>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 should conduct archival and/or field research to determine the structure's historical value. Relocation of historic structures (if necessary) should be implemented where practical.</p> <p>Program PR 1.10-c: 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 shall be consulted if human remains are encountered.</p>	Less Than Significant

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.6 Geology, Soils and Mineral Resources					
3.6-1	Expose people or structures to potential substantial adverse effects from fault rupture and seismic-related ground failure.	Less Than Significant		No mitigation measures are required.	
3.6-2	Result in substantial soil erosion or soil instability.	Less Than Significant		No mitigation measures are required.	
3.6-3	Result in potential structural damage due to expansive soils.	Less Than Significant		No mitigation measures are required.	
3.7 Hydrology/Water Quality					
3.7-1	Depletion of groundwater or interference with recharge.	Less Than Significant		No mitigation measures are required.	
3.7-2	Alteration of drainage patterns that could result in flooding.	Less Than Significant		No mitigation measures are required.	
3.7-3	Demand for new storm drainage.	Less Than Significant		No mitigation measures are required.	
3.7-4	Placement of people and/or structures in 100-year flood zones as a result of new development.	Less Than Significant		No mitigation measures are required.	
3.7-5	Inundation by seiche.	Less Than Significant		No mitigation measures are required.	
3.8 Land Use and Planning					
3.8-1	Changes in land use designations which may conflict with policies intended to avoid or mitigate an environmental effect.	Less Than Significant		No mitigation measures are required.	

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.9 Noise					
3.9-1	Exposure of noise-sensitive land uses to construction noise, excessive ground-borne vibration or ground-borne noise levels.	Less Than Significant		No mitigation measures are required.	
3.9-2	Exposure of noise-sensitive land uses to a substantial temporary, periodic or permanent increase in ambient noise levels.	Less Than Significant		No mitigation measures are required.	
3.9-3	For a project within the vicinity of a private airstrip, would the project expose people living or working in the General Plan area to excessive noise levels.	No Impact		No mitigation measures are required.	
3.10 Population and Housing					
3.10-1	Development in the Specific Plan Area in accordance with the updated General Plan would increase the population in planning area.	Growth Inducing & Potentially Significant	3.10-1	A specific plan shall be prepared for the 600 acre site designated as a specific plan area. This specific plan shall be completed in accordance with the provisions Section 65450 through 65457 of the California Government Code. The specific plan will identify the location of all utilities and circulation systems and be prepared in accordance with the Lakeport General Plan. Prior to adoption of the specific plan, an environmental review shall be required pursuant to the California Environmental Quality Act.	Significant & Unavoidable

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.11 Public Services and Recreation					
3.11-1	Increased demand for law enforcement services in the plan area.	Less Than Significant		No mitigation measures are required.	
3.11-2	Increased demand for fire protection services in the plan area.	Less Than Significant		No mitigation measures are required.	
3.11-3	Impacts to local schools resulting from increased population and school enrollment in the plan area.	Less Than Significant		No mitigation measures are required.	
3.11-4	Increased demand on parks and recreational facilities resulting from increased population in the plan area.	Less Than Significant		No mitigation measures are required.	
3.12 Transportation/Traffic					
3.12-1	Buildout of the Lakeport General Plan will increase the traffic volume on State Route 29 and will result in Levels of Service in excess of the City's LOS D standard on non-freeway sections.	Less Than Significant		No mitigation measures are required.	
3.12-2	Buildout of the Lakeport General Plan will increase traffic on existing SR 29 interchanges and result in the need to upgrade these facilities.	Less Than Significant		No mitigation measures are required.	

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.12-3	Buildout of the Lakeport General Plan will result in LOS D, E or F conditions on various City streets.	Significant and Unavoidable		No feasible mitigation measures are available.	Significant and Unavoidable
3.12-4	Buildout of the Lakeport General Plan will add traffic to the inter-regional roadway system, including streets and highways in Lake County outside of the City's Sphere of Influence.	Less Than Significant		No mitigation measures are required.	
3.12-5	Buildout of the Lakeport General Plan could result in peak hour Levels of Service in excess of LOS C at intersections in Lakeport.	Potentially Significant	3.12-5	<p>Signalization of the following five intersections shall be included as improvement projects in the City's Five Year Roadway Capital Improvement Program:</p> <ul style="list-style-type: none"> • Lakeshore Blvd. / 20th Street • Martin Street / Russell Street • Todd Road / Sandy Lane • SR 29 / SR 175 / Main Street • Lakeport Blvd. /Main Street • 11th Street / Main Street • 11th Street / Forbes Street <p>Alternatives to signalization that result in a LOS "C," such as the installation of roundabouts shall be considered and shall constitute adequate mitigation for this impact.</p>	Less Than Significant
3.12-6	Adoption and implementation of the Lakeport General Plan Update could result in inadequate bicycle and pedestrian facilities.	Less Than Significant		No mitigation measures are required.	

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.12 Utility Service Systems					
3.13-1	Increased demand for wastewater treatment.	Less Than Significant		No mitigation measures are required.	
3.13-2	Increased demand for storm drainage facilities.	Less Than Significant		No mitigation measures are required.	
3.13-3	Increased demand for solid waste disposal needs.	Less Than Significant		No mitigation measures are required.	
3.13-4	Increased demand for water supplies and treatment facilities.	Less Than Significant		No mitigation measures are required.	

CHAPTER ONE

INTRODUCTION

CHAPTER ONE

INTRODUCTION

This document is a Draft Program Environmental Impact Report (Draft EIR) prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] §2100 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] § 15000 et seq.). This EIR identifies and assesses the anticipated environmental effects of the adoption and implementation of an update to the City of Lakeport's General Plan. 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. In accordance with §15050 and §15367 of the State CEQA Guidelines, the City serves as the Lead Agency for this EIR.

1.1 Procedures and Purpose

Pursuant to Section 15168 of the *Guidelines for Implementation of the California Environmental Quality Act* (CEQA Guidelines), a Program Environmental Impact Report (EIR) is prepared for a series of related actions that can be characterized as one large project, such as a general plan or specific plan. In contrast, a project EIR, the most common type of EIR, examines the impacts that would result from a specific development proposal or other project.

Through the preparation of an Initial Study, the City of Lakeport determined that a Program EIR should be prepared for the *City of Lakeport General Plan Update* pursuant to CEQA Guidelines Section 15063. A Notice of Preparation (NOP) was circulated from October 25, 2005 to November 23, 2005 for review and comment by responsible, trustee, local and other interested agencies. The NOP and responses to the NOP are included as [Appendix A](#) of this EIR.

As defined by Section 15378 of the CEQA Guidelines, a project is any action that "...has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment..." Section 15093 of the Guidelines requires decision-makers to balance the benefits of a proposed project against any unavoidable environmental effects of the project. If the benefits of the project outweigh the unavoidable adverse environmental effects, the decision-makers may adopt a statement of overriding considerations, finding that the environmental effects are acceptable in light of the project's benefits to the public.

Under CEQA, the lead agency is usually the public agency with authority to approve or deny the project. In this case, the Lakeport City Council will act as Lead Agency with authority to certify the EIR. Under Section 15381 of the CEQA Guidelines, a responsible agency is a public agency other than the lead agency that has discretionary approval authority over the project, and will utilize the EIR prepared for the City. No additional public agencies whose discretionary approval is required have been identified. The Lead Agency (Lakeport City Council) is the City government body, which has discretionary authority to amend land use policies and regulations within city limits.

The CEQA process requires that the lead agency seriously consider input from other interested public agencies, citizen groups and individuals. CEQA provides for a public process requiring full disclosure of the expected environmental consequences of the proposed action. The public must be given a meaningful opportunity to comment. CEQA also requires monitoring to ensure that mitigation measures are carried out.

CEQA requires a 45-day public review period for commenting on a Draft EIR. During the review period, any agency, group or individual may comment in writing on the Draft EIR, and the lead agency must respond in writing to each comment on environmental issues in a Final EIR. According to Section 15202 of the CEQA Guidelines, CEQA does not require formal hearings at any stage of the environmental review process; however, it is typical to consider the EIR and its findings during public hearings required for the associated project.

1.2 Organization of the EIR

CHAPTER ONE

Chapter One briefly describes the procedures and purpose for environmental evaluation of the proposed project, the contents and organization of the Draft EIR, and a brief methodology discussions.

CHAPTER TWO

Chapter Two provides the project location, proposed action, project description, the project objectives, the uses of the EIR, and agency actions and permit requirements.

CHAPTER THREE

Chapter Three provides an environmental analysis evaluating each topical area. Each topical area is organized as follows:

Introduction. Each environmental topic is preceded by a description of the topic and a brief statement of the rationale for addressing the topic.

Environmental Setting. Description of the existing environment in and around the project area.

Regulatory Setting. A discussion of the regulatory environment that may be applicable to the proposed project.

Thresholds of Significance. The thresholds of significance are the standards or thresholds by which impacts are measured, with the objective being the determination of whether an impact will be significant or less than significant. The purpose is to establish the level at which an environmental impact will be considered significant.

Impacts. Each impact associated with an environmental topic is described and listed by number for reference.

Discussion/Conclusion. This is an analysis and concluding statement identifying whether the impact is significant or less-than-significant. If found to be significant, the conclusion states whether the impact can be avoided or reduced to an acceptable level through implementation of mitigation measures, or whether the impact is significant and unavoidable.

Mitigation Measures. Each feasible mitigation measure is described and listed by number. Existing regulations are described, but are not treated as mitigation measures that must be repeated in the EIR. Rather, they are assumed to be existing law with which the proposed project must comply.

CHAPTER FOUR

Chapter Four describes and evaluates alternatives to the proposed project. The proposed project is compared to each alternative, and the environmental ramifications of each are analyzed. Per requirements of CEQA Guidelines §15126 [d][2], the “no project” alternative must be considered to compare the environmental consequences of the project as proposed to the consequences of taking no action.

CHAPTER FIVE

Chapter Five evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth inducing effects, and significant and unavoidable environmental effects.

APPENDICES

References to published literature or technical reports cited in the text have been included at the end of this Draft EIR to facilitate full environmental review of the proposed project. Also included are the names and agencies of individuals contacted for information during EIR preparation.

1.3 Methodology

As described in Section 1.1 above, the City of Lakeport has determined that a Program EIR should be prepared for the project.

Section 15168 of the CEQA Guidelines provides the following description of when a program EIR is used:

- (a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

- (1) Geographically,

- (2) As logical parts in the chain of contemplated actions,
- (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
- (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

Section 15168(c) and (d) also describe the use of a program EIR with later activities.

- (c) Use With Later Activities. Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.
- (d) Use With Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program...

Refer to CEQA Guidelines Sections 15168(c) and (d) for greater detail on the process of using a program EIR for later activities.

Section 15183 of the CEQA Guidelines includes the following discussion regarding projects consistent with a community plan, General Plan or zoning:

- (a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.
- (b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:
 - (1) Are peculiar to the project or the parcel on which the project would be located,
 - (2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,

- (3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or
 - (4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.
- (c) If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as contemplated by subdivision (e) below, then an additional EIR need not be prepared for the project solely on the basis of that impact.
- (d) This section shall apply only to projects which meet the following conditions:
- (1) The project is consistent with:
 - (A) A community plan adopted as part of a general plan,
 - (B) A zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or
 - (C) A general plan of a local agency, and
 - (2) An EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.
- (e) This section shall limit the analysis of only those significant environmental effects for which:
- (1) Each public agency with authority to mitigate any of the significant effects on the environment identified in the EIR on the planning or rezoning action undertakes or requires others to undertake mitigation measures specified in the EIR which the lead agency found to be feasible, and
 - (2) The lead agency makes a finding at a public hearing as to whether the feasible mitigation measures will be undertaken.
- (f) An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future

projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR. Such development policies or standards need not apply throughout the entire city or county, but can apply only within the zoning district in which the project is located, or within the area subject to the community plan on which the lead agency is relying. Moreover, such policies or standards need not be part of the general plan or any community plan, but can be found within another pertinent planning document such as a zoning ordinance. Where a city or county, in previously adopting uniformly applied development policies or standards for imposition on future projects, failed to make a finding as to whether such policies or standards would substantially mitigate the effects of future projects, the decision-making body of the city or county, prior to approving such a future project pursuant to this section, may hold a public hearing for the purpose of considering whether, as applied to the project, such standards or policies would substantially mitigate the effects of the project. Such a public hearing need only be held if the city or county decides to apply the standards or policies as permitted in this section.

(g) Examples of uniformly applied development policies or standards include, but are not limited to:

- (1) Parking ordinances,
- (2) Public access requirements,
- (3) Grading ordinances,
- (4) Hillside development ordinances,
- (5) Flood plain ordinances,
- (6) Habitat protection or conservation ordinances,
- (7) View protection ordinances.

(h) An environmental effect shall not be considered peculiar to the project or parcel solely because no uniformly applied development policy or standard is applicable to it.

Analysis contained in the Initial Study prepared for this project (see [Appendix A](#)) and responses to the Notice of Preparation have identified the following areas, organized to correspond to the subjects addressed in the General Plan Update, which may result in potentially significant impacts requiring in-depth review and which are analyzed in this EIR. All impacts are analyzed in comparison to existing conditions in the Plan area.

AESTHETICS/LIGHT AND GLARE

This section will address the impact of the *Lakeport General Plan Update* from the standpoint of impacts from light and glare and effects on scenic views in the city.

AGRICULTURAL RESOURCES

This section addresses potential impacts to agricultural resources in the plan area from implementation of the proposed project. The analysis specifically focuses on the potential productivity of the soils in the plan area to support agriculture, and the potential impacts that the project may have on the continued use of surrounding properties for agricultural production.

AIR QUALITY

The air quality section addresses the direct and cumulative air quality impacts of the General Plan Update which affects territory within the Lake County Air Quality Management District (LCAQMD). This section discusses the overall magnitude of emissions resulting from the implementation of the *Lakeport General Plan Update*, as well as measures that could be implemented to reduce emissions that could occur as a result of implementation of the program.

BIOLOGICAL RESOURCES

This section evaluates the available data to determine whether the project has any potential to disturb species of special concern or adversely affect habitat, and recommends measures that are necessary to mitigate potential impacts.

CULTURAL RESOURCES

Existing cultural resources (archaeological and historical) that could be affected by adoption and implementation of the *Lakeport General Plan Update* are described in this section, and impacts and mitigation measures are identified.

GEOLOGY/SOILS

This section discusses potential geological hazards caused by adoption and implementation of the *Lakeport General Plan Update*.

HYDROLOGY AND WATER QUALITY

This section addresses potential impacts on the quality of surface and groundwater. Flooding impacts are also addressed.

LAND USE AND PLANNING

This section focuses on impacts related to land use conflicts. Potential conflicts with adopted plans and policies that may lead to environmental impacts are also addressed.

POPULATION AND HOUSING

This section addresses the potential of the *Lakeport General Plan Update* to induce population growth. Potential impacts to the stock of housing are also addressed.

PUBLIC SERVICES AND RECREATION

Subjects addressed in this section include impacts on police and fire protection, education/schools, and solid waste. Mitigation measures are recommended for any identified potential adverse effects.

TRANSPORTATION AND CIRCULATION

This section analyzes roadway capacities and future cumulative traffic conditions in the context impacts from the adoption and implementation of the *Lakeport General Plan Update* upon roadway facilities.

UTILITY SERVICE SYSTEMS

This section will address the impact of the *Lakeport General Plan Update* on existing utility service systems and the potential need for construction of additional facilities.

CHAPTER TWO

PROJECT DESCRIPTION

CHAPTER TWO

PROJECT DESCRIPTION

Consistent with Section 15124 of the CEQA Guidelines, this section provides the description of the proposed project. This description forms the basis of the actions and activities to be considered in the analysis of the EIR.

2.1 Project Location

The City of Lakeport is located approximately 42 miles north of Santa Rosa and 91 miles north of San Francisco, in Lake County, California. Lakeport sits on the northwestern shore of Clear Lake in the western/central section of Lake County (see [Figure 2-1](#)). Lakeport is the County Seat and is the regional center of commerce and governmental activity in the county. Incorporated in 1888, the city lies 16 miles northwest of Clearlake, the largest city in Lake County. Principal highway access to Lakeport is via State Highway 29, which runs to the west of the city in a general north/south direction. The city limits currently contain approximately 2.7 square miles.

2.2 Proposed Action

To meet the objectives, as defined in Section 2.4, the City is proposing amendments to the existing General Plan that would increase the City's Sphere of Influence. In addition, the land-use designation for certain areas within the city limits would be amended to allow a broader mix of uses than currently allowed. With the implementation of the proposed General Plan, buildout of the Specific Plan area would result in a variety of potential uses including: increased residential development, commercial development, and open space.

Summarized below are the changes made to the General Plan land use designations from the previous General Plan.

1. From Residential to Office. Bordered by 4th Street, Tunis Street, and 1st Street.
2. From Commercial to High Density Residential along South Smith Street.
3. From Major Retail to Office and Residential. Located on the east side of Highway 29, bisected by Central Park Avenue.
4. From Major Retail/Low Density Residential to Residential. Bordered by Sandy Lane, Todd Road, and Edith Way.
5. From Commercial to Residential along 20th Street to be consistent with underlying zoning.
6. Change the Industrial designation in the vicinity of Kimberly Lane to Major Retail.
7. The expanded Sphere of Influence is designated "Specific Plan Area." Comprises approximately 600 acres.

8. The current General Plan designation of “Low Density Residential” and “Medium Density Residential” are proposed to be combined into the classification “Residential.”

As part of the comprehensive amendment to the existing General Plan, the City proposed to modify (or create, in the case of the urban boundary element) the following elements:

- Land Use Element
- Urban Boundary Element (new)
- Transportation Element
- Community Design Element
- Economic Development (new)
- Conservation Element
- Open Space & Parks Element
- Noise Element
- Safety Element

Note: The Housing Element was adopted in July 2004 and has not been revised as a part of this General Plan Update.

LAND USE ELEMENT

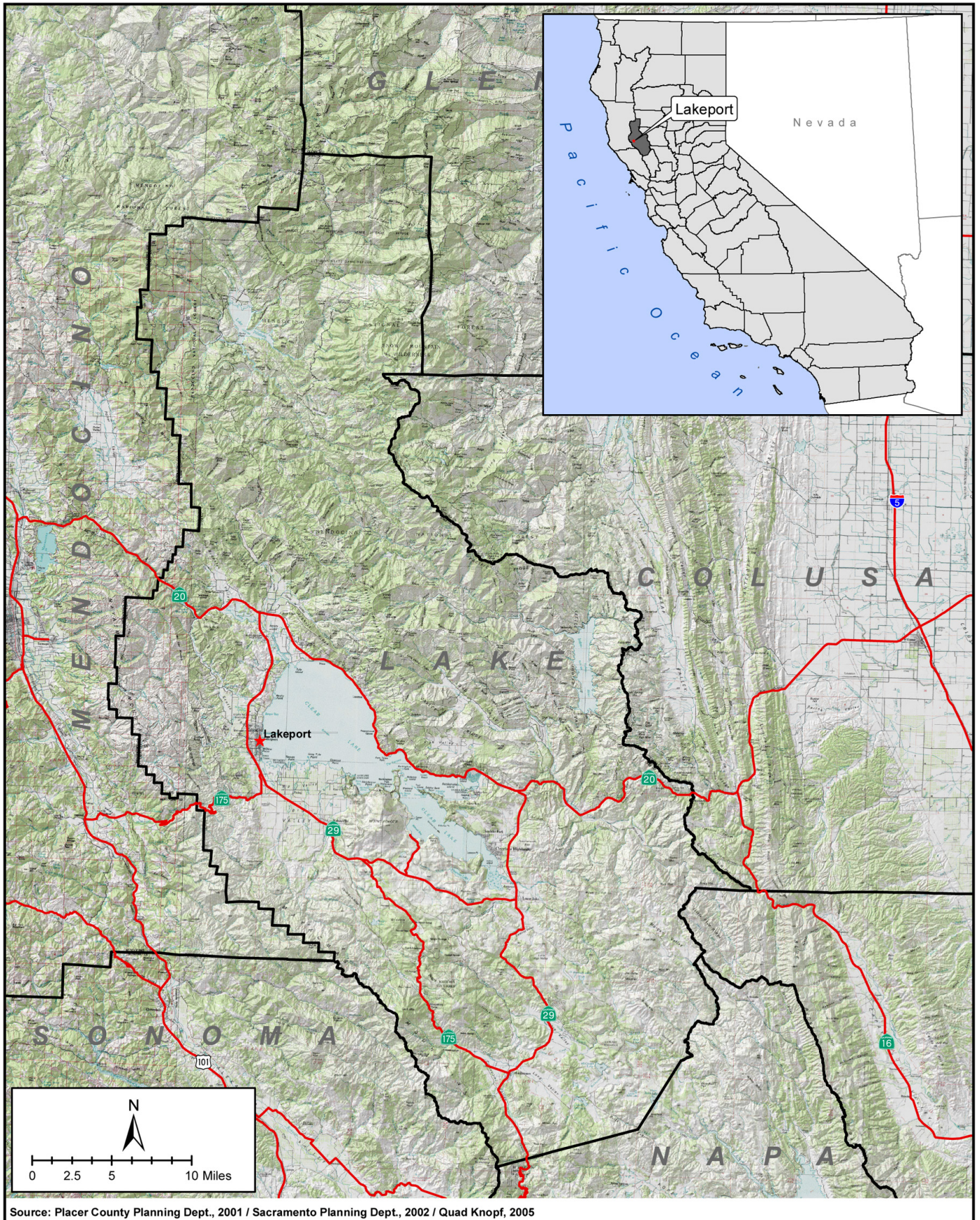
The land use element functions as a guide for the ultimate pattern of development for the City at build-out. It provides an overview of the land use characteristics, objectives, policies, and implementation programs for achieving the City’s land use goals over the next 20 years. Key issues addressed in the Land Use Element include the modification of current land use controls.

URBAN BOUNDARY ELEMENT (NEW)

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 (SOI). The element recognizes the community’s dedication to orderly and managed growth of the city’s boundaries and the desire to maintain the character of many of the areas and neighborhoods within the Lakeport Sphere of Influence. The element estimates demand for land through 2025 (with a base year of 2000) from anticipated population growth, and provides guidance for future development. The Urban Boundary 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.

TRANSPORTATION ELEMENT

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 element addressed the City's 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.

COMMUNITY DESIGN ELEMENT

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.

ECONOMIC DEVELOPMENT

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. 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.

CONSERVATION ELEMENT

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 circulation 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.

This Conservation Element addresses: water and its hydraulic force; oak woodlands; soils; creeks and other waters; harbors; fisheries; wildlife; minerals and other natural resources.

OPEN SPACE & PARKS ELEMENT

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; presents standards for meeting the needs of the community; and identifies future needs. Objectives, policies, and implementation programs are recommended to guide decisions based on the projected open space, parks, and recreational demands of the community.

NOISE ELEMENT

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 Element will provide policies and implementation programs designed to reduce the community's exposure to excessive noise levels.

SAFETY ELEMENT

The Safety Element identifies locally relevant hazards to guide local decisions related to zoning, subdivisions, and entitlement permits. The Element addresses seismic hazards, slope instability leading to mudslides or landslides, flooding, wildland and urban fires. The purpose of the Safety Element is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from the hazards identified above.

2.3 Project Description

The City of Lakeport General Plan provides the principles that guide the city's future growth and development. The proposed project is the adoption and implementation of a Comprehensive Update and Amendment to the City of Lakeport General Plan. [Figure 2-2](#) identifies the proposed modified Sphere of Influence area and proposed land use designations.

The proposed General Plan includes a Specific Plan area to the south of the current Sphere of Influence that would be developed with housing units, a golf course and some related recreational facilities.

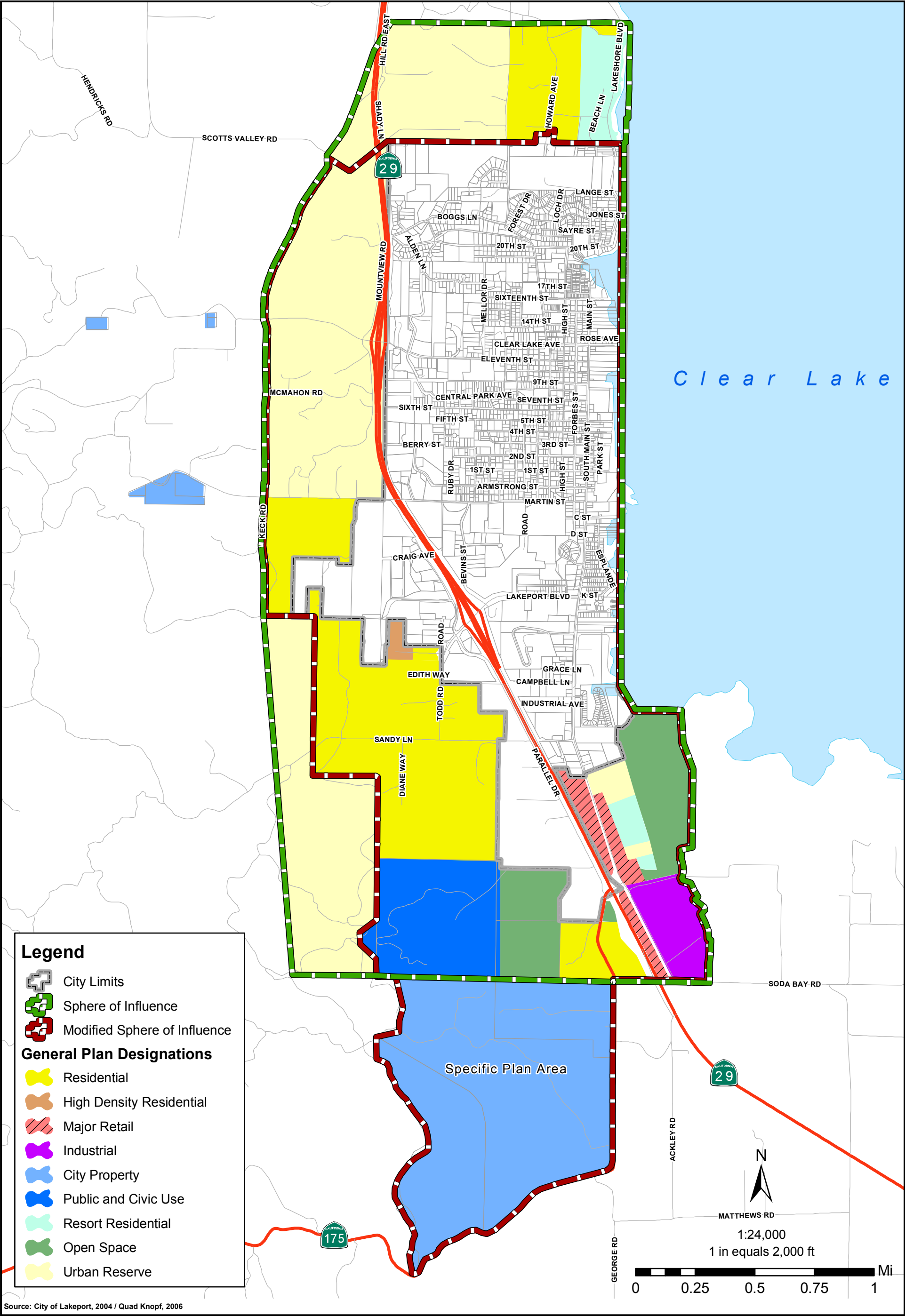
Updates include, in addition to more traditional topics and issues, modified land use controls that will focus on economic development to capture lost sales tax revenue currently generated by Lakeport residents shopping outside of the city, and policies to increase employment and housing opportunities. The city's public infrastructure is also evaluated as well as the means to finance its expansion.

2.4 Project Goals and Objectives

The objective of the project is to update the General Plan for the City of Lakeport, and will include the following: (1) Changes to current General Plan designations, (2) proposed expansion of the City of Lakeport's Sphere of Influence, and (3) changes to and the reorganization of the General Plan Elements.

2.5 Uses of the EIR and Required Agency Actions and Permits

With the exception of the Lake County LAFCO, which reviews changes to Spheres of Influence, annexations to cities and special districts in Lake County; no other agencies must approve the City's actions as described above, as no permits will be issued from resource, regulatory, or



planning agencies as part of project approval. In the interest of disclosure, this Program EIR has been sent to the following agencies for review and comment:

- County of Lake
- City of Clearlake
- Lake County Local Area Formation Commission
- California Department of Fish & Game
- U.S. Fish & Wildlife Service
- National Office of Historic Preservation
- City of Lakeport Municipal Sewer District
- California Regional Water Quality Control Board – Central Valley
- Lake County-Cities Area Planning Council
- Lake County Airport Land Use Commission
- Lakeport Police Department
- Mendocino College
- Lakeport Unified School District
- Lakeport County Fire Protection District
- Lake County Air Quality Management District
- Sonoma State University
- Lake County Office of Education
- Pacific Gas and Electric
- U.S. Army Corps of Engineers
- Big Valley Rancheria
- Mendocino College
- Sonoma State University
- California Parks and Recreation
- California Department of Transportation
- California Air Resources Board
- Native American Heritage Commission
- State Lands Commission

CHAPTER THREE

ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

CHAPTER THREE

ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

3.1 Aesthetics

This section of the Draft Program Environmental Impact Report (Draft EIR) discusses potential impacts to visual resources in the Planning Area from implementation of the proposed General Plan update. Mitigation measures are then identified that may be used to minimize identified impacts. General topics addressed include changes to scenic vistas, resources and character as well as increases in night lighting and sources of glare.

3.1.1 SETTING

Environmental Setting

The City of Lakeport General Plan area is located on the western edge of Clear Lake, which is the largest natural lake within the state. The City sits in a valley within the Northern California Coast Range at the relatively low elevation of 1,343 feet. The areas to the north, west, and south are generally characterized by open land containing grazing, oak woodlands, field crops, vineyards, orchards, and other agricultural uses.

SCENIC VIEWS AND RESOURCES

Visual resources are classified into two categories: scenic views and scenic resources. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor. Scenic resources are described in the CEQA Environmental Checklist as specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements.

The visual character of the General Plan area is basically defined by Clear Lake, the surrounding mountains, lakeside parks, agricultural land, and residential and commercial areas. Lakeport has a “small town” feel to it and supports a modest historic business district near the shoreline. The residential area near the original town center is characterized by older homes and small lot sizes. Other residential portions of the city follow informal suburban patterns, including mobile home parks and rural homesites.

SCENIC HIGHWAYS

There are no officially designated state scenic highways located within Lake County. However, both State Route 20 and State Route 29 are currently eligible for official designation as scenic highways. State Route 29 runs generally north-south through the City of Lakeport.

GENERAL PLAN UPDATE

The updated General Plan proposes to add an Open Space, Parks and Recreation Policy which reads “Policy OS 2.10: Protection of Scenic Views. Protect and preserve valuable scenic view sheds and view corridors.”

The updated General Plan proposes to add “Policy CD 1.6: Visual Compatibility” stating “Architecture of new structures in established areas should be visually compatible with other structures on the site and with adjacent development.”

The updated General Plan proposes to add the word “Fixtures” to Policy CD 7.7, reading Lighting Fixtures.” In addition, the updated General Plan proposes to add “Policy CD 7.8: Aesthetic Character. Install a variety of planters, benches, tree grates, bike racks, public telephones, and trash receptacles to enhance the aesthetic character of the Downtown District. 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.”

The updated General Plan proposes to add the word “Appearance” to Policy CD 7.3, reading “Landscaping Appearance.” In addition, the updated General Plan proposes to revise Program CD 7.3-a to read “Continue to enforce the Zoning Ordinance, which includes landscape standards.”

Regulatory Setting

FEDERAL

There are no specific federal regulations pertaining to visual quality that apply to the proposed project.

STATE

Scenic Highway Program

Created by the California State Legislature in 1963, this program was intended to preserve those highway corridors surrounded by outstanding natural beauty. Once a highway becomes designated as a scenic corridor, a scenic corridor protection program is put into place that will, among other things, encourage only quality development that does not degrade the aesthetic value of the corridor.

LOCAL

City of Lakeport Updated General Plan

These Updated General Plan policies listed below are not adopted; however, if adopted, these would supersede the current General Plan policies and are utilized for the impact analysis below.

Open Space, Parks and Recreation Element

Policy OS 2.10: Protection of Scenic Views. Protect and preserve valuable scenic view sheds and view corridors.

Land Use Element

Policy LU 3.3: Environmental Compatibility. Limit industrial 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.

Community Design Element

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.

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.

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, public telephones, and trash receptacles to enhance the aesthetic character of the Downtown District. 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.

3.1.2 THRESHOLDS OF SIGNIFICANCE

Impacts to aesthetic and visual resources will be assessed on the following thresholds of significance, based on criteria set forth in Appendix G of the State CEQA Guidelines. The project is considered to have a significant impact on the environment if it will:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
or

- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The Initial Study ([Appendix A](#)) found the following impacts to be less than significant due to plan policies which serve to mitigate potential impacts. They will not be discussed further in this EIR:

- Have a substantial, adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.3 IMPACTS AND MITIGATION MEASURES

Impact #3.1-1: Substantially degrade the existing visual character.

Discussion/Conclusion: The General Plan Update includes changes in land use designations and expansion of the city's Sphere of Influence. Although these changes will not in themselves lead to development, future development in accordance with the General Plan update, such as projects located within the Specific Plan Area and downtown, could degrade the existing visual character. Proposed new development will be guided by policies in the General Plan. The Open Space, Parks and Recreation Element of the proposed General Plan contains policies designed to protect scenic views, maintain visual compatibility, and ensure compatibility of new development with surrounding land uses. The Community Design Element contains numerous policies designed to protect the visual quality and character of the Lakeport area. In addition, proposed new developments will be subject to environmental review under CEQA, including analysis of impacts to visual resources, and will be required to be consistent with the policies in the General Plan.

Development of the Specific Plan area could result development of hillside areas and degrade the visual character by road cuts, loss of oak trees, erosion and new structures.

The policies listed in the Regulatory Section would serve to mitigate potential environmental impacts, but not to a less than significant level. This impact is ***potentially significant***.

Mitigation Measures

Implementation of the following mitigation measure will reduce this impact to a level of ***less than significant***.

Mitigation Measure #3.1-1:

The following policy and program shall be added to the updated Lakeport General Plan Conservation Element:

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.*
- *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.*

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3.2 Agriculture Resources

This section of the Draft Program Environmental Impact Report (Draft EIR) addresses potential impacts to agricultural resources in the plan area from implementation of the proposed General Plan update. The analysis specifically focuses on the potential productivity of the soils in the plan area and the potential impacts that the project may have on the continued use of surrounding properties for agricultural production.

3.2.1 SETTING

Environmental Setting

REGIONAL AGRICULTURAL INDUSTRY

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.

In 2003, Lake County was ranked 40th in the state for total value of agricultural production at approximately \$65.2 million. The county's leading commodities include wine grapes, Asian and Bartlett pears, nursery products, cattle and calves, and English walnuts. As of 2002, Lake County encompasses approximately 880 farms with a total land area of 144,037 acres.

AGRICULTURAL SOILS

The National Resource Conservation Service (NRCS) has surveyed and mapped the various soil types and series in the Lakeport area and identified the following soil types:

- Clear Lake Clay (Drained/cool)
- Cole Variant Clay Loam
- Manzanita Loam (two to twenty-five percent slopes)
- Still Gravelly Loam
- Still Loam (Stratified Substratum).

The Clear Lake series consists of very deep, poorly drained soils that formed in fine textured alluvium derived from sandstone and shale. Clear Lake soils are found in basins and in swales of drainageways with slopes of 0 to 2 percent. These soils are used for: (1) growing many row crops such as tomatoes, beans and sugar beets, (2) cultivating dry farmed grain, (3) irrigated and dry farmed pasture, or (4) rangeland. Native vegetation on these soils is grasses and forbs.

The Cole series consists of very deep, somewhat poorly drained soils that formed in alluvium from mixed sources. Cole soils are found on river terraces, basins, flood plains, or on alluvial fans with slopes of 0 to 5 percent. These soils are used primarily for production of orchards, vineyards, truck crops, and irrigated pasture, while uncultivated areas have oak-grass vegetation with some shrubs and forbs.

The Manzanita series consists of very deep well drained soils formed in alluvium from mixed rock sources. Manzanita soils are found on terraces and have slopes of 2 to 25 percent. This soil is primarily used for walnut orchards, wine grape vineyards, home site developments, hay and pasture, and livestock grazing. Natural vegetation on these soils is annual grasses and forbs with scattered blue oak and manzanita.

The Still series consists of deep, well drained soils that formed in alluvial material from sedimentary rocks. Still soils are found on flood plains and alluvial fans and have slopes of 0 to 30 percent. These soils are used for cultivated alfalfa, sugar beets, and dry farmed grain. Natural vegetation on these soils is primarily annual grasses with scattered oaks.

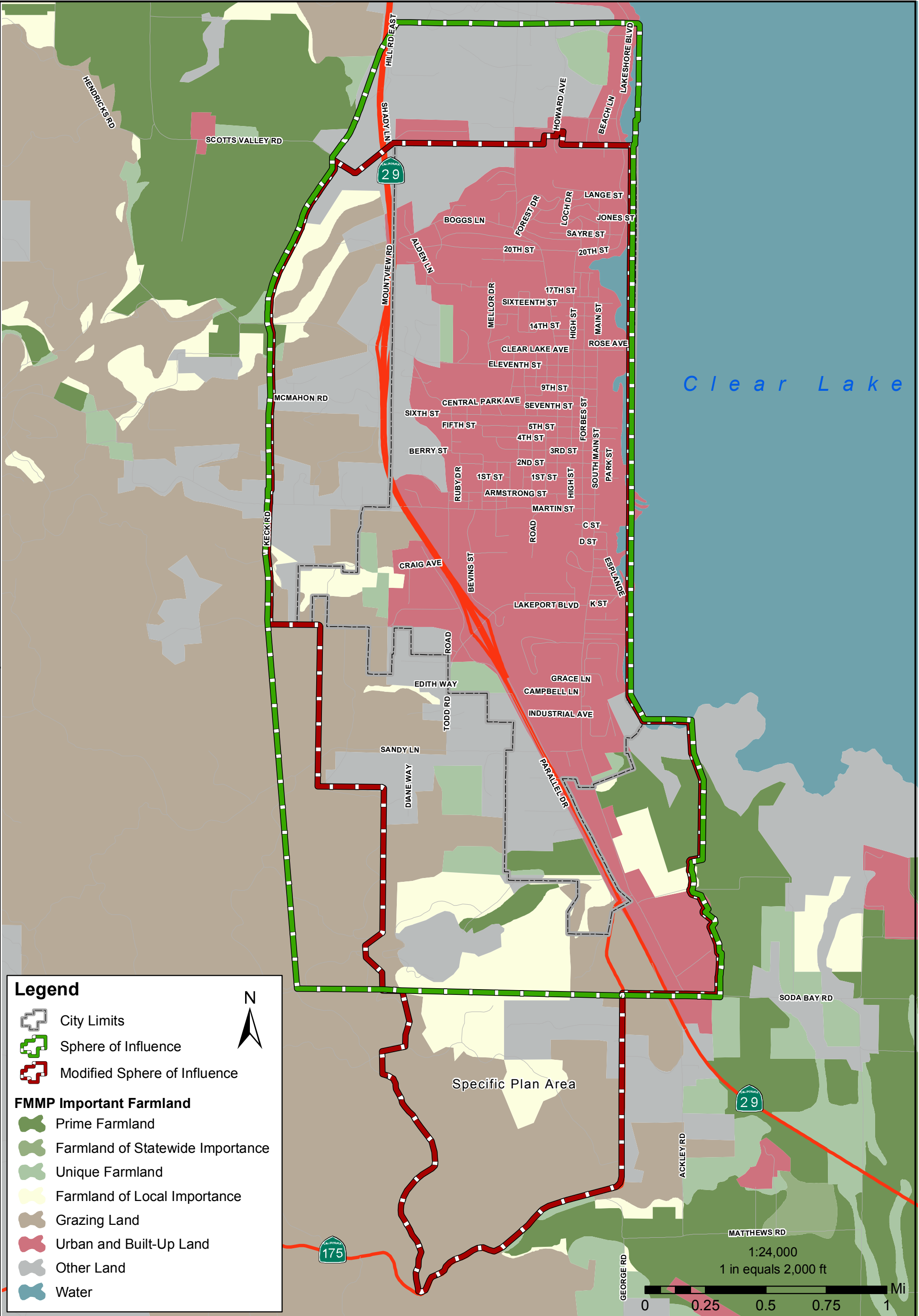
IMPORTANT FARMLANDS

The Farmland Mapping and Monitoring Program is a farmland classification system that is administered by the California Department of Conservation. The system classifies agricultural land according to its soil quality and irrigation status. The best quality agricultural land is called “Prime Farmland” which is land that has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed according to current farming methods.

Other classifications of Important Farmland include “Farmland of Statewide Importance” and “Unique Farmland.” Farmland of Statewide Importance is land other than prime farmland that has a good combination of physical and chemical characteristics for production of food, feed, forage, fiber and oilseed crops available for these uses (the land could be cropland, pasture, rangeland, forest land or other land, but not urban built-up land or water areas). It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed (including water management), according to modern farming methods. Unique Farmland is land other than prime that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to produce a sustained high quality and/or high yields of a specific crop when treated and managed according to modern farming methods. Examples of such crops are citrus, olives, cranberries, fruit and vegetables.

To be classified as Important Farmland, the land must have been used for production of irrigated crops at least sometime during the two cycles prior to the mapping date. The 2005 Lake County Soil Survey indicates that 48,480 acres of the county are classified as Important Farmland, 15,547 acres of which are considered Prime Farmland. Between 2000 and 2002 the county experienced a net loss of 135 acres of Important Farmland to urban or built up land uses, 36 acres of which were classified Prime Farmland.

There are no lands designated as Farmlands of Statewide Importance within the city limits of Lakeport; however, Lakeport has some soil types which are classified Unique Farmland and Prime Farmland. Additionally Prime Farmland exists in the city’s SOI and vicinity through Scotts Valley and south of Clear Lake. [Figure 3.2-1](#) depicts the distribution of Important





LAKEPORT GENERAL PLAN EIR
IMPORTANT FARMLAND CLASSIFICATION

Figure 3.2-1

Farmland in the Planning Area. These soils do not have any major limitations for normal building activities.

LAND USE DESIGNATIONS, ZONING, AND WILLIAMSON ACT

There is currently no land within the existing Sphere of Influence (SOI) that is designated or zoned for agricultural use or that is currently under a Williamson Act contract. However, a portion of the area within the proposed expanded SOI is currently designated and zoned by Lake County for agricultural use.

GENERAL PLAN UPDATE

The General Plan update proposes to expand the Sphere of Influence to include an approximately 600-acre “Specific Plan Area” (see [Figure 2-2](#)). The Specific Plan Area would be developed as residential, including cooperative ownership properties to serve the vacation market, plus very limited commercial. Based on the recommended density range of 1-4 units per acre, the Specific Plan Area could result in between 600 and 2,400 residential units at build-out.

The updated General Plan proposes the deletion of existing General Plan Policy 20 and Program 20.1. No other changes to policies or programs related to agriculture resources are proposed.

Regulatory Setting

FEDERAL

There are no specific federal regulations applicable to agriculture resources.

STATE

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

LOCAL

City of Lakeport Updated General Plan

Conservation Element and Open Space and Parks Element

These General Plan policies are currently adopted policies and would be included in the General Plan update.

Policy C 7.1: Annexation of Agricultural Lands: Discourage the annexation of productive prime agricultural lands for urban uses.

Policy C 7.2: Wastewater for Irrigation: Continue to expand the use of wastewater for irrigation of agricultural uses, parkland, highway medians and other appropriate areas.

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.

Lake County Right-to-Farm Ordinance

Lake County Code Section 3-40 is the county's right-to-farm ordinance which states that farming practices, when carried out according to normal procedures, shall not be considered a nuisance. The purpose of this ordinance is to protect agricultural land and operations from encroaching urban land uses. This could impact any development at the periphery of the city.

3.2.2 THRESHOLDS OF SIGNIFICANCE

Impacts to agriculture resources will be assessed based on the following thresholds of significant. The project will be considered to have a significant impact on the environment if it will:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- Conflict with existing zoning for agricultural use.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

The project was found in the Initial Study ([Appendix A](#)) to have no impact on the following potential impact and will not be discussed further in this EIR:

- Conflict with an existing Williamson Act contract.

3.2.3 IMPACTS AND MITIGATION MEASURES

Impact #3.2-1: Conversion and loss of Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use.

Discussion/Conclusion: Adoption of the Plan Update will result in existing agricultural areas being re-designated for residential, commercial and public land uses. Such re-designation may result in the conversion of Prime Farmland to urban uses. The Plan Update could result in the loss of approximately 471 acres of farmland outside the city limits according to the 2004 Farmland Mapping and Monitoring Program Map (Figure 3.2-1), of which 92 acres are Prime Farmland, within the proposed SOI and outside the city limits of Lakeport by 2030.

Implementation of the policies proposed in the General Plan would ensure that increased demand for additional land associated with an increase in population would minimize the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide importance (Farmland) to Non-agricultural use; however, the conversion of Prime Farmland is considered a *potentially significant* impact.

Mitigation Measures

Implementation of the following mitigation measures and the Objectives, Policies, and Programs of the General Plan will reduce the impact to farmland conversion; however, the impact of the conversion of Farmland to non-agricultural uses is *significant and unavoidable*.

Mitigation Measure #3.2-1a:

The City will encourage property owners outside the City limits but within the SOI to maintain their land in agricultural production until the land is converted to urban uses. The City will also work cooperatively with land trusts and other non-profit organizations to preserve agricultural land in the region. This may include the use of conservation easements. Infill development will be preferred and encouraged over fringe development. Sequential and contiguous development is also preferred and encouraged over leap-frog development.

Mitigation Measure #3.2-1b:

Prior to recording final maps for any development project, any project impacting Prime Farmland, Unique Farmland or Farmland of Statewide importance shall preserve land of equal or better quality in terms of agricultural value at a minimum ratio of 1:1 and shall protect the land for agricultural use through permanent land use restrictions such as an agricultural conservation easements. An organization such as the Lake County Land Trust shall be used to facilitate the establishment of the conservation easement. The purpose of the conservation easement shall be to assure that the land remains available for farming. The land shall be available as closely as possible to the plan area, to the satisfaction of the City of Lakeport Community Development Department. The proposed conservation easement for the property shall be submitted to the city or county for review and approval.

Impact #3.2-2: Conflict with existing zoning for agricultural use.

Discussion/Conclusion: The General Plan Update proposes to add an approximately 600 acre area to the City's Sphere of Influence. Approximately 65 acres of this land is currently zoned by the county "APZ" or Agricultural Preserve District. The General Plan Update proposed to designate this land "Specific Plan Area" for future development. Subsequent to the approval of the updated General Plan, the City's Zoning Ordinance will be updated consistent with the updated General Plan. As a result, these 65 agriculturally zoned acres will be rezoned and will

therefore be in compliance with the City's Zoning Ordinance. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

3.3 Air Quality

This section of the Draft Program Environmental Impact Report (Draft EIR) addresses the air quality impacts which would be associated with the implementation of the City of Lakeport General Plan Update.

During the Notice of Preparation (NOP) period, one comment was received regarding impacts on air quality. This comment letter was submitted by the Lake County Air Quality Management District.

3.3.1 SETTING

Environmental Setting

CLIMATE

Lakeport lays within the Lake County Air Basin and the Lake County Air Quality Management District, immediately east of the north coastal ranges, the Mayacamas Mountains, on the shore of Clear Lake. Summers are typically warm and dry, with an average annual high temperature of 94 degrees Fahrenheit. Winters are cool and wet, with an average annual low temperature of 30 degrees Fahrenheit. The average annual rainfall is 28.31 inches, with 95 percent of this total falling between October and April.

The prevailing wind is westerly, with occasional strong gusty winds in winter. During autumn and winter, nighttime radiational cooling between storm periods often leads to formation of inversions and ground fog, especially in canyon basins near Lakeport.

Inversions occur in conjunction with masses of very stable air, which tend to not move vertically and can become trapped in the lower and sheltered areas. Considerable air stagnation can occur if the inversion condition continues for several days. The inversion may persist until the onset of a Pacific storm. More intense heating at the surface in spring will generally initiate convection and good ventilation. In summer, region wide elevated inversions may be present, restricting the layer in which mixing and dilution of surface air may occur.

CRITERIA POLLUTANTS AND OTHER AIR EMISSIONS

The United States Environmental Protection Agency (EPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). [Table 3.3-1](#) presents a summary list of each criteria pollutant and a brief description of each criteria pollutant follows.

**Table 3.3-1
Criteria Pollutants**

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen). Often called photochemical smog	Eye irritation Respiratory function impairment	Combustion sources such as factories and automobiles, and evaporation of solvents and fuels
Carbon Monoxide	An odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels	Impairment of oxygen transport in the bloodstream Aggravation of cardiovascular disease Fatigue, headache, confusion, dizziness Can be fatal in the case of very high concentrations	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion	Increased risk of acute and chronic respiratory disease	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants
Sulfur Dioxide	A colorless gas with a pungent, irritating odor	Aggravation of chronic obstruction lung disease Increased risk of acute and chronic respiratory disease	Diesel vehicle exhaust, oil-powered power plants, and industrial processes
Suspended Particulate Matter (PM10)	Solid and liquid particles of dust, soot, aerosols, and other matter that are small enough to remain suspended in the air for a long period of time	Aggravation of chronic disease and heart/lung disease symptoms	Combustion, automobiles, field burning, factories, and unpaved roads. Also a result of photochemical processes
Lead	A metal that occurs both naturally in the environment and in manufactured products	Organ damage Reproductive Disorders Osteoporosis Brain and nerve impairment	Lead-based paint, contaminated soil, dust, and drinking water

Pollutant	Characteristics	Health Effects	Major Sources
		Hearth and blood disease/impairment	

Source: California Air Resources Board, 2005.

Ozone (O₃)

Ozone is a photochemical oxidant and the major component of smog. While O₃ in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O₃ at ground level are a major health and environmental concern. O₃ is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O₃ levels occur typically during the warmer times of the year. Both VOCs and NO_x are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents.

The reactivity of O₃ causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O₃ not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O₃ for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Major ozone precursors include mobile sources such as cars, light-duty, and heavy duty trucks; and stationary emission sources such as industrial facilities, home furnaces, wood burning appliances, and waste disposal and treatment facilities.

Carbon Monoxide (CO)

Carbon Monoxide is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. When CO enters the bloodstream, it reduces the delivery of oxygen to the body's organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks.

Nitrogen Dioxide (NO₂)

Nitrogen Dioxide is a brownish, highly reactive gas that is present in all urban atmospheres. NO₂ can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O₃) and acid rain, and may affect both terrestrial and aquatic ecosystems.

The major mechanism for the formation of NO₂ in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO). NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O₃. NO_x forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur Dioxide (SO₂)

Sulfur Dioxide affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO₂ is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO₂ results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Particulate Matter

Particulate Matter includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO₂ and VOCs are also considered particulate matter.

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO₂) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death. The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also soils and damages materials, and is a major cause of visibility impairment.

Lead (Pb)

Lead exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and in subsequent heart disease.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. Unlike criteria pollutants, no safe levels of exposure to TACs can be established. There are many different types of TACs, with varying degrees of toxicity.

Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage and death.

Naturally Occurring Asbestos (NOA)

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board (CARB) in 1986. All types of asbestos are hazardous and may cause lung disease and cancer.

Serpentine, a metamorphic rock composed of serpentine minerals, may contain chrysotile asbestos, especially near fault zones. Ultramafic rock, a rock closely related to serpentine, may also contain asbestos minerals. Asbestos can be released from serpentine and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards.

Serpentine soils, which are derived from Serpentine, are one of Lake County's most prominent soil types. According to a publication of the Department of Conservation Division of Mines and Geology titled, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*, there are several locations in Lake County that are likely to contain naturally occurring asbestos including locations in and around Lakeport.

Sensitive Receptors

“Sensitive Receptors” are defined as facilities where sensitive population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools, playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics.

ATTAINMENT STATUS AND REGIONAL AIR QUALITY PLANS

Federal and state air quality laws require identification of areas not meeting the ambient air quality standards. These areas must develop regional air quality plans to eventually attain the standards. Under both federal and state Clean Air Act, the Lake County Air Basin is in attainment for all ambient air quality standards; therefore, the District has not been required to develop any regional air quality plans.

Air Quality Monitoring

There are four air quality monitoring stations maintained within the Lake County Air Basin. The location of each of these stations is illustrated in [Figure 3.3-1](#). The Lakeport-Lakeport Blvd. station is the only station located within the City of Lakeport measuring both ozone and

particulate matter. Three other monitoring stations are located in the southern portion of the county. Table 3.3-2 and 3.3-3 show a summary of the trends of ozone and particulate matter levels in the air basin from 1989 to 2005. The data shown includes annual maximum concentrations, the number of days that the state or federal air quality standards were exceeded, and other annual statistics for these pollutants. The monitoring stations may not be representative of all parts of the basin, as air quality is highly variable.

Table 3.3-2
Ozone Trends and Summary – Lake County Air Basin

Year	Days > Standard							EPDC	Year Coverage
	1-Hour		8-Hour Nat'l	Maximum	3-Year 4 th High	Maximum	3-Year Average 4 th High		
	State	Nat'l							
2005	0	0	0	0.070	0.070	0.066	0.061	0.076	-
2004	0	0	0	0.080	0.080	0.066	0.065	0.081	97
2003	0	0	0	0.080	0.080	0.065	0.064	0.080	100
2002	0	0	0	0.090	0.080	0.077	0.064	0.081	100
2001	0	0	0	0.070	0.080	0.065	0.063	0.080	100
2000	0	0	0	0.080	0.080	0.073	0.062	0.083	100
1999	0	0	0	0.090	0.080	0.072	0.061	0.087	98
1998	0	0	0	0.080	0.080	0.076	0.057	0.076	99
1997	0	0	0	0.080	0.080	0.065	0.058	0.076	97
1996	0	0	0	0.090	0.080	0.070	0.060	0.082	97
1995	0	0	0	0.070	0.080	0.063	0.061	0.082	98
1994	0	0	0	0.090	0.080	0.075	*	0.083	100
1993	0	0	0	0.080	0.080	0.072	*	0.077	97
1992	0	0	0	0.080	0.080	0.057	*	0.077	51
1991	0	0	0	0.080	0.080	0.066	0.055	0.075	96
1990	0	0	0	0.090	0.080	0.063	0.054	0.074	97
1989	0	0	0	0.060	0.080	0.053	0.058	0.083	97

Source: California Air Resources Board, 2005

Table 3.3-3
PM₁₀ Trends Summary – Lake County Air Basin

Year	Days > Standard		Annual Average		3-Year Average		High 24-Hr Average		EPDC	Year Coverage
	Nat'l	State	Nat'l	State	Nat'l	State	Nat'l	State		
2005	*	0.0	*	9.7	*	10	*	20.0	27.2	-
2004	*	0.0	*	10.0	*	13	*	22.4	*	100
2003	*	0.0	*	10.0	*	13	*	32.0	*	100
2002	*	11.5	*	13.1	*	13	*	84.7	*	100
2001	*	0.0	7.6	10.2	*	11	21.0	22.5	*	100
2000	0.0	0.0	10.8	10.6	*	11	22.0	21.0	*	100
1999	*	*	12.5	*	*	*	43.0	40.0	*	92
1998	0.0	*	7.8	*	9	*	35.0	34.0	*	92
1997	0.0	0.0	8.6	8.6	10	11	18.0	18.0	*	96
1996	0.0	0.0	10.2	10.2	11	11	26.0	26.0	*	100

Year	Days > Standard		Annual Average		3-Year Average		High 24-Hr Average		EPDC	Year Coverage
	Nat'l	State	Nat'l	State	Nat'l	State	Nat'l	State		
1995	0.0	0.0	10.7	10.8	11	11	30.0	30.0	*	100
1994	0.0	0.0	10.9	11.0	11	12	21.0	21.0	*	100
1993	0.0	0.0	11.3	11.3	12	12	30.0	30.0	*	100
1992	0.0	0.0	11.8	11.9	12	12	22.0	22.0	*	98
1991	0.0	*	12.6	*	12	13	31.0	31.0	*	97
1990	0.0	*	11.4	*	*	13	30.0	30.0	*	73
1989	0.0	0.0	12.9	12.9	*	13	29.0	29.0	*	95

Source: California Air Resources Board, 2005

Regional Air Emissions

The California Air Resources Board (CARB) recently published the 2005 estimates of the Annual Average Emissions in Lake County. [Table 3.3-4](#) provides the emission estimates for stationary, area-wide, and mobile sources, as well as the cumulative air emissions in the county.

Table 3.3-4
2005 Estimated Annual Average Emissions for Lake County

STATIONARY SOURCES	TOG	ROG	CO	NOX	SOX	PM	PM ₁₀	PM _{2.5}
Fuel Combustion								
Electric Utilities	5.35	0.26	0.00	0.02	0.00	0.21	0.2	0.12
Manufacturing and Industrial	0.02	0.02	0.04	0.17	0.02	0.02	0.01	0.01
Food and Agricultural Processing	0.26	0.22	8.83	0.00	0.06	0.01	0.01	0.01
Service and Commercial	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Other (Fuel Combustion)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Fuel Combustion	5.63	0.50	8.87	0.20	0.08	0.24	0.22	0.14
Waste Disposal								
Sewage Treatment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landfills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Waste Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaning and Surface Coatings								
Laundering	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Degreasing	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Coatings and Related Process Solvents	0.46	0.43	0.00	0.00	0.00	0.00	0.00	0.00
Adhesives and Sealants	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Total Cleaning and Surface Coatings	0.64	0.57	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Production and Marketing								
Petroleum Marketing	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Processes								
Food and Agriculture	0.04	0.04	0.00	0.00	0.12	0.00	0.00	0.00
Mineral Processes	0.01	0.01	0.03	0.15	0.04	1.25	0.72	0.32
Other (Industrial Processes)	0.00	0.00	0.01	0.03	0.01	0.12	0.11	0.08

STATIONARY SOURCES	TOG	ROG	CO	NOX	SOX	PM	PM₁₀	PM_{2.5}
Total Industrial Processes	0.05	0.05	0.04	0.18	0.18	1.36	0.83	0.40
Total Stationary Sources	6.60	1.40	8.91	0.37	0.26	1.60	1.05	0.54
AREA-WIDE SOURCES								
Solvent Evaporation								
Consumer Products	0.56	0.49	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coatings and Related Process Solvents	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00
Pesticides/Fertilizers	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Paving/Roofing	0.6	0.60	0.00	0.00	0.00	0.00	0.00	0.00
Total Solvent Evaporation	1.44	1.36	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Processes								
Residential Fuel Combustion	1.41	0.62	8.79	0.22	0.10	1.43	1.34	1.29
Farming Operations	1.65	0.13	0.00	0.00	0.00	1.07	0.49	0.11
Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.22	0.11	0.02
Paved Road Dust	0.00	0.00	0.00	0.00	0.00	2.52	1.15	0.19
Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	10.99	6.53	1.38
Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.16	0.10	0.02
Fires	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Managed Burning and Disposal	1.27	0.56	4.23	0.22	0.04	0.77	0.75	0.71
Cooking	0.01	0.01	0.00	0.00	0.00	0.04	0.03	0.02
Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Miscellaneous Processes	4.34	1.32	13.04	0.44	0.14	17.21	10.50	3.75
Total Area-Wide Sources	5.78	2.68	13.04	0.44	0.14	17.21	10.50	3.75
MOBILE SOURCES								
On-Road Motor Vehicles								
Light Duty Passenger (LDA)	1.35	1.25	9.56	0.88	0.00	0.03	0.03	0.02
Light Duty Trucks – 1 (LDT1)	1.08	1.01	9.29	0.80	0.00	0.02	0.02	0.01
Light Duty Trucks – 2 (LDT2)	0.50	0.46	4.32	0.48	0.00	0.01	0.01	0.01
Medium Duty Trucks (MDV)	0.29	0.27	2.44	0.31	0.00	0.01	0.01	0.00
Light Heavy Duty Gas Trucks – 1 (LHDV1)	0.16	0.15	0.88	0.07	0.00	0.00	0.00	0.00
Light Heavy Duty Gas Trucks -2 (LHDV2)	0.01	0.01	0.09	0.01	0.00	0.00	0.00	0.00
Medium Heavy Duty Gas Trucks (MHDV)	0.20	0.18	1.24	0.07	0.00	0.00	0.00	0.00
Heavy Heavy Duty Gas Trucks (HHDV)	0.14	0.13	1.74	0.16	0.00	0.00	0.00	0.00
Light Heavy Duty Diesel Trucks – 1 (LHDV1)	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00
Light Heavy Duty Diesel Trucks – 2 (LHDV2)	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.00
Medium Heavy Duty Diesel Trucks (MHDV)	0.01	0.01	0.04	0.19	0.00	0.01	0.01	0.01
Heavy Heavy Duty Diesel Trucks	0.03	0.03	0.14	0.55	0.01	0.01	0.01	0.01

STATIONARY SOURCES	TOG	ROG	CO	NOX	SOX	PM	PM₁₀	PM_{2.5}
(HHDV)								
Motorcycles (MCY)	0.09	0.08	0.59	0.02	0.00	0.00	0.00	0.00
Heavy Duty Diesel Urban Buses (UB)	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.00
Heavy Duty Gas Urban Buses (UB)	0.02	0.02	0.27	0.04	0.00	0.00	0.00	0.00
School Buses (SB)	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Motor Homes (MH)	0.08	0.07	1.74	0.14	0.00	0.00	0.00	0.00
Total On-Road Motor Vehicles	3.97	3.67	32.40	3.89	0.02	0.10	0.09	0.07
Other Mobile Sources								
Aircraft	0.01	0.01	0.27	0.00	0.00	0.00	0.00	0.00
Ships and Commercial Boats	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Recreational Boats	2.90	2.68	21.47	1.02	0.02	0.25	0.23	0.17
Off-Road Recreational Vehicles	0.02	0.02	0.41	0.01	0.00	0.00	0.00	0.00
Off-Road Equipment	0.31	0.28	2.56	0.77	0.00	0.05	0.05	0.04
Farm Equipment	0.13	0.11	0.83	0.84	0.01	0.06	0.06	0.05
Fuel Storage and Handling	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Total Other Mobile Sources	3.46	3.19	25.54	2.64	0.02	0.36	0.34	0.27
Total Mobile Sources	7.43	6.86	57.94	6.53	0.04	0.46	0.43	0.34
Grand Total for Lake County	19.81	10.94	79.89	7.34	0.44	19.27	11.98	4.62

Source: California Air Resources Board, 2005.

General Plan Update

The updated General Plan proposes the consolidation of Policies 26 and 27 both regarding the protection of sensitive receptors. These policies are now identified as Policy C 3.2 in the *Regulatory Setting* below. None of the Programs associated with these policies would be effected. The updated Plan also proposes the deletion of Policy 28 and it's associated Programs (28.1 and 28.2) because the Zoning Ordinance has been revised and enforcement procedures have been established according to these policies. Additionally, the Plan proposes the deletion of Policy 29 as it is no longer relevant.

GLOBAL WARMING

Existing Air Quality – Greenhouse Gases and Links to Global Climate Change

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.

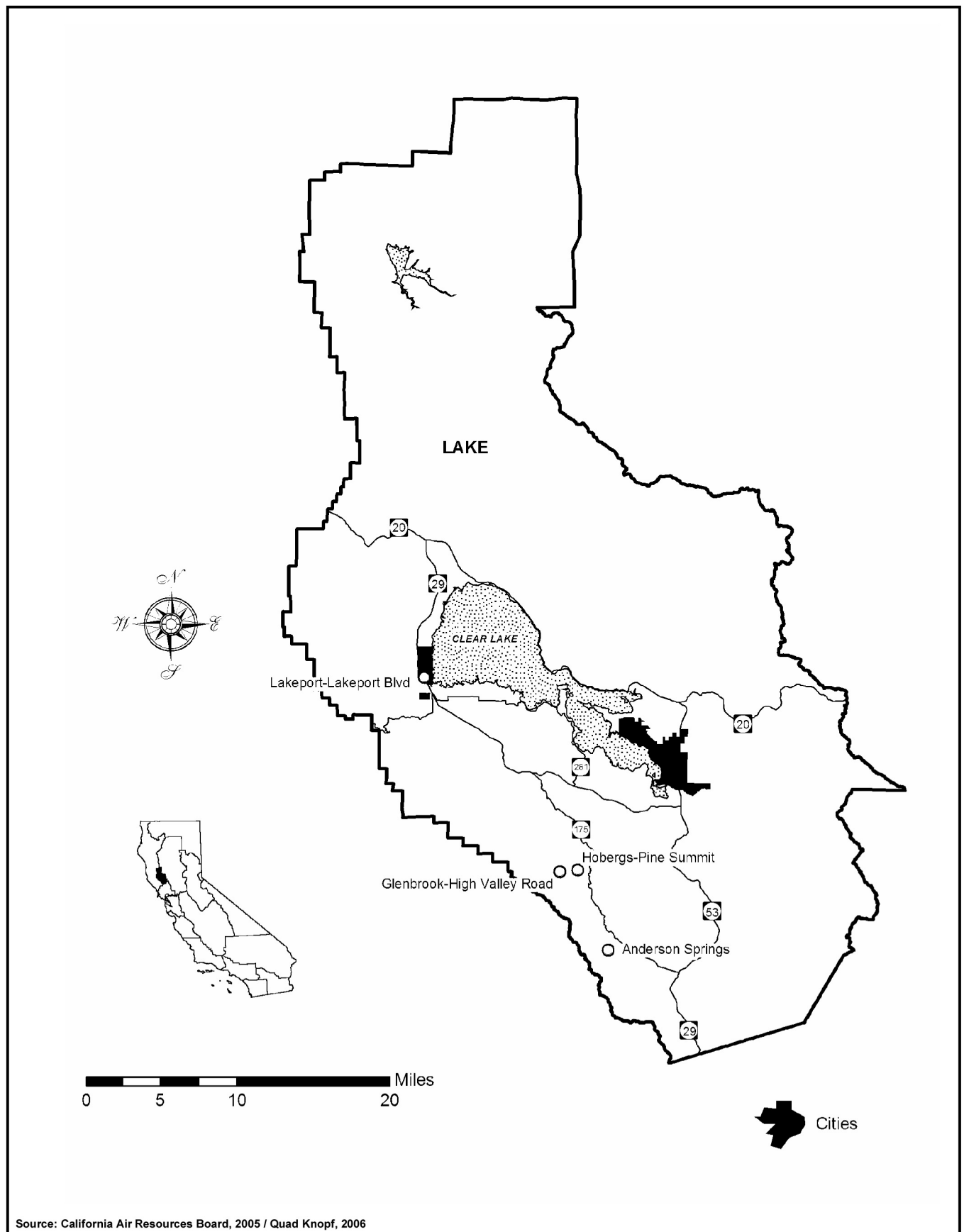
As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California is the 12th to 16th largest emitter of CO₂ in the world and produced 492 million gross metric tons of carbon dioxide equivalents in 2004 (California Energy Commission 2006a). Carbon dioxide equivalents 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 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. Examples of these conditions are also described below.

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.

Regulatory Setting

FEDERAL AND STATE

Federal Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: national ambient air quality standards for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The Environmental Protection Agency (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set National Ambient Air Quality Standards (NAAQS) for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

The FCAA recognizes the importance for each state to locally carry out the Clean Air Act, as special consideration of local industries; geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A State Implementation Plan (SIP) is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. The CARB is the state agency that is responsible for preparing the California SIP.

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out in statute the state's air quality goals, planning and regulatory strategies, and performance. The CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

Ambient Air Quality Standards

National ambient air quality standards are determined by the Environmental Protection Agency. The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards.

Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM₁₀) and lead. In addition, California has created standards for pollutants that are not covered by federal standards including sulfates and hydrogen sulfide. The federal and state primary standards for major pollutants are shown in [Table 3.3-5](#) below.

Table 3.3-5
Federal and State Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	California Standard
Ozone	1-Hour	0.12 ppm	0.09 ppm
	8-Hour	0.08 ppm	---
Carbon Monoxide	1-Hour	35.0 ppm	20.0 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide	1-Hour	---	0.25 ppm
	Annual	0.053 ppm	---
Sulfur Dioxide	1-Hour	---	0.25 ppm
	24-Hour	0.14 ppm	0.04 ppm
	Annual	0.03 ppm	---
Suspended Particulates	24-Hour	150 µg/m ³	50 µg/m ³
	Annual	50 µg/m ³	30 µg/m ³
Sulfates	24-Hour	---	25 µg/m ³

Pollutant	Averaging Time	Federal Primary Standard	California Standard
Lead	3-Month Average	1.5 $\mu\text{g}/\text{m}^3$	---
	30-Day Average	---	1.5 $\mu\text{g}/\text{m}^3$
Hydrogen Sulfide	1-Hour	---	0.03 ppm
Ppm = Parts Per Million $\mu\text{g}/\text{m}^3$ = Micrograms per Cubic Meter			

Source: California Air Resource Board, 2005

State Implementation Plan

The State Implementation Plan (SIP) is the blueprint for meeting federal air quality standards by the applicable deadlines set in the Federal Clean Air Act. California's SIP is a compilation of region-specific plans that detail how each area will meet the air quality standards. The plan includes an estimate of the emission reductions needed to meet each air quality standard based on air monitoring results, data on emission sources, and complex air quality modeling. It reflects the benefits of the pollution control program adopted by air agencies at all levels, and may also include commitments to implement new strategies. Together, these elements must reduce emissions by an amount sufficient to meet the air quality standard in each region. Once the local element of the plan is adopted by the air district(s) and other responsible local agencies, it is sent to the CARB for adoption and then formally submitted to the Environmental Protection Agency for approval as a revision to the California SIP.

National Emissions Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 61, Subpart M)

The NESHAPs are emissions standards set by the U.S. EPA for an air pollutant not covered by National Ambient Air Quality Standards that may cause an increase in fatalities or in serious, irreversible, or incapacitating illness. The standards for a particular source category require the maximum degree of emission reduction that the EPA determines to be achievable, which is known as the Maximum Achievable Control Technology (MACT).

LOCAL

Lake County Air Quality Management District Rules and Regulations

The Lake County Air Quality Management District (LCAQMD) has adopted Rules and Regulations in order to achieve and maintain local, state and federal ambient air quality standards within the County. These Rules and Regulations include prohibitions and standards of specific emissions as well as permit and enforcement procedures. These Rules and Regulations were most recently updated in August 2006.

City of Lakeport Updated General Plan

The Updated General Plan consolidated policies and deleted policies that were no longer relevant. No new policies were proposed, so these can be considered adopted policy.

Conservation Element

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 Control 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 identified in [Figure 3.3-2](#) are adequately mitigated. Discourage land uses producing adverse air quality impacts from locating near sensitive receptors.

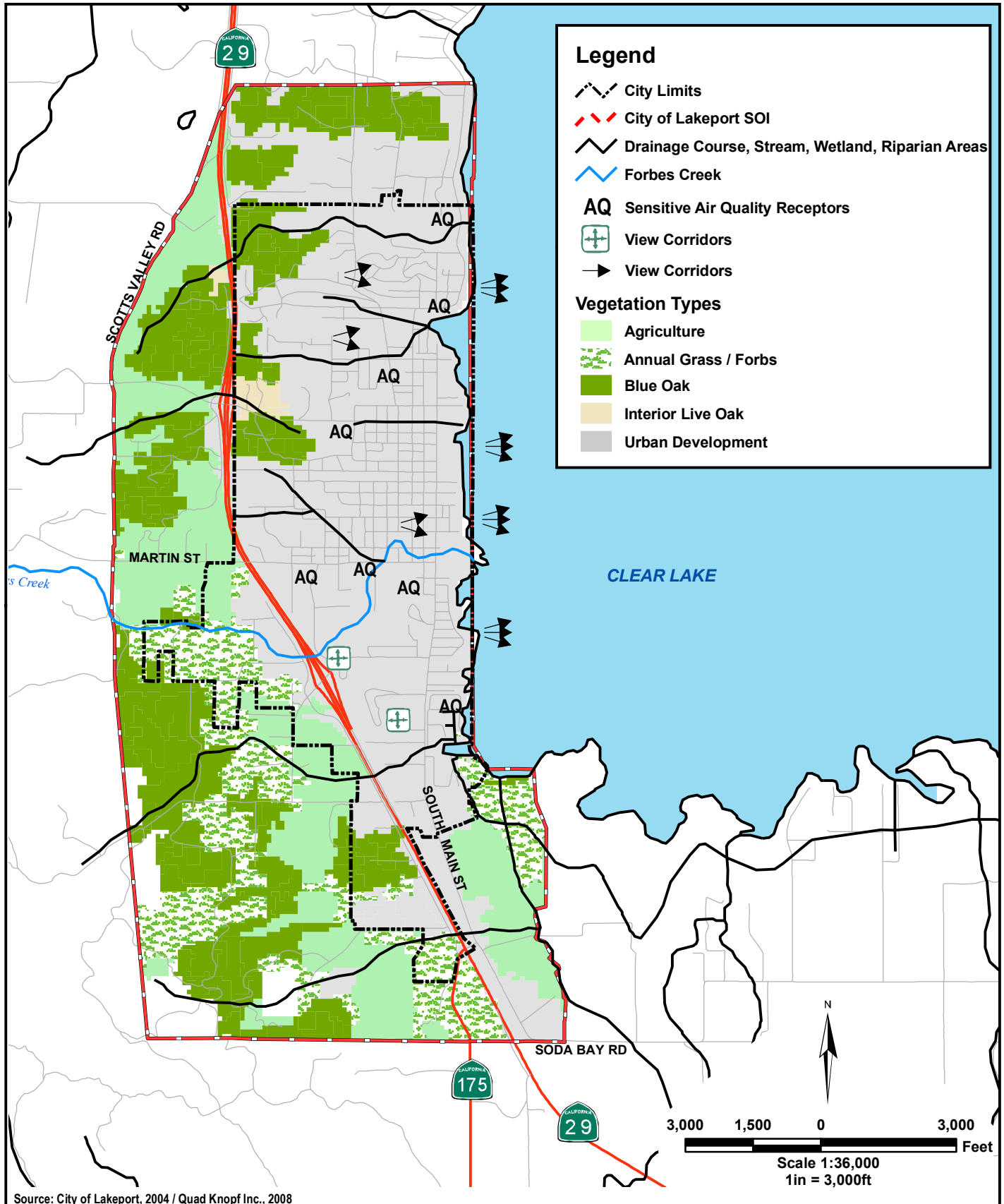
Program C 3.2-a: Require air pollution point sources such as manufacturing or handling of air pollutants to locate at a sufficient distance from residential areas and sensitive receptors to significantly reduce air quality impacts of such land uses.

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.

GLOBAL WARMING

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 required that the California Air Resources Board (CARB) 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 CARB 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 CARB 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 CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB 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.

City of Lakeport Updated General Plan

The proposed General Plan Update contains the following objectives, policies, and programs that will support reduction of GHG emissions:

Transportation Element Policies and Programs:

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.

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 34.1: Design Guidelines for Public Transit. Establish design guidelines for residential and commercial development to facilitate future public transit service.

Policy T 36.1: Public Transit. Continue operation of public transit and cooperate with the Area Planning Council to continue to implement a regional public transit system.

Conservation Element Objectives, Policies and Programs:

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 Control 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.

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-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 6.2: 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.

3.3.2 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on the environment if it will:

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- 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);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

The City of Lakeport prepared an Initial Study for the proposed project in October 2005 (see [Appendix A](#)). The study concluded that the project would have no impact on the following potential impact and will not be discussed further in this Draft EIR:

- Conflict with or obstruct implementation of the applicable air quality plan.

No air district in California, including the Lake County Air Pollution Control District, has identified a significance threshold for GHG emissions or a methodology for analyzing air quality impacts related to greenhouse gas emissions. The State has identified 1990 emission levels as a goal through adoption of AB 32. To meet this goal, California would need to generate lower levels of GHG emissions than current levels. However, no standards have yet been adopted quantifying 1990 emission targets. It is recognized that for most projects there is no simple metric available to determine if a single project would help or hinder meeting the AB 32 emission goals. In addition, at this time AB 32 only applies to stationary source emissions. Consumption of fossil fuels in the transportation sector accounted for over 40% of the total GHG emissions in California in 2004. Current standards for reducing vehicle emissions considered under AB 1493 call for “the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles,” and do not provide a quantified target for GHG emissions reductions for vehicles.

Given the challenges associated with determining a significance criteria for GHG emissions when the issue must be viewed on a global scale, a quantitative significance criteria is not proposed for this Plan update. For this analysis, a project’s incremental contribution to global climate change would be considered significant due to the size or nature of the project and

whether the Lakeport General Plan Update would generate a substantial increase in GHG emissions relative to existing conditions.

3.3.3 IMPACTS AND MITIGATION MEASURES

Impact #3.3-1: Construction Emissions of ROG, NO_x, and PM.

Discussion/Conclusion: The General Plan Update proposes to add an approximately 600 acre area to the city's Sphere of Influence which will allow for future development of the site. In addition, there are several other areas of the city that have not yet been developed. Implementation of the proposed General Plan Update will not directly result in construction-related emissions; however, those construction activities related to the future development of these areas will result in the emission of ozone precursors and particulate matter from the use of construction equipment and soil disturbances.

All future development in the city will be guided by the policies contained in the updated General Plan. General Plan Programs C 3.1-a and C 3.1-b require that all development proposals be reviewed to identify potential air quality impacts prior to approval and Program C 3.1-d requires a dust emission control plan for all construction projects. The LCAQMD Rules and Regulations also contain standards for particulate matter emissions. Additionally, all future development projects will undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. The policies and programs contained in the updated General Plan serve to mitigate this impact to a level of *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.3-2: Operational Emissions of ROG, NO_x, CO and PM.

Discussion/Conclusion: The General Plan Update proposes to add an approximately 600 acre area to the city's Sphere of Influence which will allow for future development of the site. In addition, there are several other areas of the city that have not yet been developed. Development of these areas will result in the addition of new residents to the City and an increase in vehicle trips on local roadways. Implementation of the proposed General Plan Update will not directly result in operational (vehicle) emissions; however, this increase in vehicle use in the City will result in the emission of ozone precursors, carbon monoxide and particulate matter.

All future development in the city will be guided by the policies contained in the updated General Plan. General Plan Programs C 3.1-a and C 3.1-b require that all development proposals be reviewed to identify potential air quality impacts prior to approval. Additionally, all future development projects will undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. The policies and programs contained in the updated General Plan serve to mitigate this impact to a level of *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.3-3: Toxic Air Emissions.

Discussion/Conclusion: The General Plan Update proposes to add an approximately 600 acre area to the city's Sphere of Influence which will allow for future development of the site. In addition, there are several other areas of the City that have not yet been developed. Portions of these areas that are designated commercial or industrial may be development for uses that will emit toxic air emissions. These uses may include landfills, generators, incinerators, combustors, manufacturing plants, refineries, smelters, and other facilities.

All future development in the city will be guided by the policies contained in the updated General Plan. General Plan Program C 3.1-c requires the Fire District to review all proposed development projects which may handle, store or transport potential air pollutant sources. Additionally, Policy C 3.2 and Programs C 3.2-a and C 3.2-b are intended to protect sensitive receptors from sources of air pollutants. Additionally, all future development projects will undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. The policies and programs contained in the updated General Plan serve to mitigate this impact to a level of *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.3-4: Potential impact to global climate change.

Discussion/Conclusion: The Project will have a cumulative impact of global climate change due to the increase of population and vehicles in the area. The CO₂ emissions created from the Project through the vehicle miles traveled (VMTs), as mentioned in the section above will contribute to GHG's locally, regionally, and globally.

The Project's Mitigating Factors

Broadly speaking, climate change mitigation and adaptation strategies fall into three categories: (1) transportation sector strategies; (2) electricity sector strategies, including renewable energy and energy efficiency; and (3) all other adaptation strategies, such as carbon sequestration, participation in emissions trading markets and research and public education (California Energy Commission 2003). The Lakeport General Plan Update incorporates objectives, policies, and programs that minimize the human and spatial environmental footprint in the proposed 600 acre addition, including transportation and electricity impacts. Implementation of these measures will help reduce potential GHG emissions resulting from the development of the Project.

The state's primary source of GHG emissions is the consumption of fossil energy (California Energy Commission 2003). The proposed General Plan Update has several components included in the project's goals and policies that would reduce consumption of fossil energy within the Project area, and thereby reduce potential GHG emissions. These components are consistent with "smart growth" principles developed and promoted by local and regional communities worldwide.

"Smart Growth" Factors

The proposed General Plan Update has several components that will promote smart growth development scenarios, which will help to reduce the possible amounts of GHG's. Many of these are mentioned in the Objectives, Policies, and Programs section in the previous pages. The project will make use of alternative modes of transportation that produce less greenhouse gas emissions than vehicular travel, or none at all. Also, the proposed development is designed to encourage people to walk, ride bicycles, and make use of public transportation. The project area's overall design and land use plan creates a compact development pattern that offers a wide variety of density typologies. In addition, the project will include goals 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.

Traffic Factors

Implementation of the Specific Plan's transportation and circulation goals, policies, and mitigation measures will also help reduce potential GHG emissions by providing a multi-modal transportation linkage throughout the area. Alternative modes of transportation such as pedestrian trails and pathways, bikeways, and public transit routes will reduce the overall fuel consumption and GHG emissions. These transportation mitigation measures will improve in vehicle efficiency and reduce overall GHG emissions that would have been present if the project did not provide these mitigation measures.

Electricity Factors

In addition to targeting GHG emissions through the transportation sector, the proposed Project contains several goals and policies that will reduce energy consumption and in return reduce GHG emissions. Policies include encouraging the use of domestic and commercial solar energy uses to conserve fossil fuels and improve air quality, and a variety of sustainable building practices. Where feasible developers will facilitate the use of green building standards in both private and public projects, promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code, and integration of building materials and methods that are safer for the environment.

Other

The maintenance of good air quality requires a balance of regulating major and minor point sources of air pollution with effective regulations within the Planning process. Lakeport has already taken steps in the right direction to monitor the air pollution of new projects. 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 proposed plan contains numerous policies described above that will reduce the impact on global climate change. Even with implementation of the above described measures, however, the Project will likely result in a substantial amount of GHG emissions. This is a ***potentially significant impact***.

Mitigation Measures

Implementation of the following mitigation measure will serve to reduce the impact to a ***less than significant*** level.

Mitigation Measure #3.3-4:

To reduce greenhouse gas emissions and thus reduce air quality impacts, the following objectives, policies, and programs shall be added into the General Plan Update:

Land Use Element:

- *Encourage public and private construction of LEED (Leadership in Energy and Environmental Design) certified (or equivalent) buildings.*

Conservation Element:

- *Continue to maintain and update energy conservation programs and information provided to the public.*
- *Work with utility providers to provide free energy audits for the public.*
- *The project level applicants and City shall jointly develop a tree planting informational packet to help project area residents understand their options for planting trees that can absorb carbon dioxide.*
- *Preserve and replace onsite trees (that are removed due to development) as a means of providing carbon storage.*
- *Recognize and promote energy saving measures beyond Title 24 requirements for residential and commercial projects.*

Transportation Element:

- *Require vehicle-reduction measures through carpooling, public transit incentives, and linkages of electric shuttle service to public transit as well as local and regional pedestrian and bike trails during the project review stages.*

- *Prioritized parking within commercial and retail areas shall be given to electric vehicles, hybrid vehicles, and alternative fuel vehicles.*
- *All non-residential projects shall provide bicycle lockers and/or racks.*
- *Create conditions of approval for projects to limit idling time for commercial vehicles, including delivery and construction vehicles.*

Other mitigation measures:

- *Where feasible, include in new buildings facilities to support the use of low/zero carbon fueled vehicles, such as the charging of electric vehicles from green electricity sources*
- *Incorporate energy efficient bulbs and appliances for traffic lights, street lights, and other electrical uses.*
- *Encourage large businesses to develop commute trip reduction plans that encourage employees who commute alone to consider alternative transportation modes.*

Impact #3.3-5: Odorous Emissions

Discussion/Conclusion: The General Plan Update proposes to add an approximately 600 acre area to the city's Sphere of Influence which will allow for future development of the site. In addition, there are several other areas of the City that have not yet been developed. These areas may be developed for uses that will emit significant objectionable odors. These uses may include landfills, wastewater treatment facilities, refineries, painting/coating operations, or food processing facilities.

All future development in the city will be guided by the policies contained in the updated General Plan. Policy C 3.2 and Programs C 3.2-a and C 3.2-b are intended to protect sensitive receptors from air quality impacts including odors. Additionally, all future development projects will undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. The policies and programs contained in the updated General Plan serve to mitigate this impact to a level of *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.3-6: Naturally Occurring Asbestos.

Discussion/Conclusion: The General Plan Update proposes to add an approximately 600 acre area to the city's Sphere of Influence which will allow for future development of the site. In addition, there are several other areas of the city that have not yet been developed. Construction

activities in these areas could cause deposits of naturally occurring asbestos fibers to be disturbed and become airborne potentially resulting in a health hazard.

The LCAQMD Rules and Regulations contain an asbestos emissions control measures; however, this measure does not consider natural sources of asbestos. The General Plan Update does not contain any policies that directly relate to naturally occurring asbestos; however, Program C 3.1-a and C 3.1-b require that all development proposals be reviewed by the City and the LCAQMD to identify potential air quality impacts prior to approval. Additionally, all future development projects will undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. The policies and programs contain in the updated General Plan serve to mitigate this impact but not to a level of insignificance. Therefore, this impact is *potentially significant*.

Mitigation Measures

Implementation of the following mitigation measure will reduce this impact to a level of *less than significant*.

Mitigation Measure #3.3-6:

The following policy and program shall be added to the updated Lakeport General Plan Conservation Element:

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.*

3.4 Biological Resources

This section of the Draft Program Environmental Impact Report (Draft EIR) addresses the effects that the adoption of the updated General Plan in the City of Lakeport may have on special-status plants, animals and sensitive habitats. Mitigation measures have been recommended to reduce the identified impacts to a less-than-significant level and a discussion of applicable laws, ordinances, regulations and standards is provided.

During the NOP period, two comments were received regarding potential impacts on biological resources. One comment was received from the Department of Fish and Game. A second comment was received from the California State Lands Commission regarding the fact that the State of California granted, in trust, the submerged lands of Clear Lake to Lake County for the purposes of navigation, commerce, fisheries, protection of wildlife habitats, conservation of wildlife and fish resources, ecology, open space and open access to the public, public recreation, and other such uses which prove beneficial on a statewide basis.

3.4.1 SETTING

Environmental Setting

ECOREGION

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 (CWHR 2006). 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.

PROJECT LOCATION

The site encompasses approximately three square miles acres located in west-central Lake County, California ([Figure 2-1](#)). The plan area is located on the Lakeport and Highland Springs 7.5-minute USGS quadrangles. Coordinates to the approximate center of the plan area are: 39° 01' 44" N and 122° 55' 20" W. Elevation on plan area ranges from approximately 1400 feet to 1440 feet above mean sea level. Land uses on the plan area consist primarily of urban and agricultural uses.

EXISTING HABITAT TYPES

Shoreline

The Clear Lake shoreline is 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 and egrets (Family Ardeidae), grebes (Family Podicipedidae), ospreys (*Pandion haliaetus*) and fur-bearing mammals. Large populations of catfish (Family

Ictaluridae), crappies (*Pomoxis* sp.), largemouth bass (*Micropterus salmoides*), carp (*Cyprinus carpio*) and hitch (*Lavinia exilicauda*) are found in Clear Lake along the shores. It has been estimated that 72 percent of the wetland habitat located along the Clear Lake shoreline has been lost to urban and agricultural development.

Much of the sediments 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.

Riparian

Riparian areas occur along the banks or edges of rivers or creeks, and typically include tree species such as willows (*Salix* sp.), maple (*Acer* sp.), cottonwood (*Populus* sp.), and alder (*Alnus* sp.), with an understory of shrubs and vines. Riparian areas provide cover and nesting habitat for a variety of birds. They generally act as movement corridors 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.

Oak Woodlands

Oak woodlands occur in inland valleys and foothills usually with a hard pan or rocky soil between four and 20 feet in depth. Some of the dominant plants in oak woodlands include blue oak (*Quercus douglasii*), coast live oak (*Quercus agrifolia*), interior live oak (*Quercus wislizenii*), and foothill pine (*Pinus sabiniana*), with manzanita (*Arctostaphylos* sp.), coffeeberry (*Rhamnus californica*), gooseberry (*Ribes* sp.), and toyon (*Heteromeles arbutifolia*) to a less extent. Annual goldfields (*Lasthenia* sp.), poppies (*Eschscholzia* sp.), lupines (*Lupinus* sp.), and other forbs are commonly found during spring in this plant community.

Oak woodlands support many large mammals including blacktail deer (*Odocoileus hemionus*), mountain lion (*Felis concolor*), black bear (*Ursus americanus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*) and grey fox (*Urocyon cinereoargenteus*). Small mammals include the Western grey squirrel (*Sciurus griseus*), California ground squirrel (*Citellus beecheyi*), and a variety of mice. Birds include turkey vultures (*Cathartes aura*), hawks, kites, and eagles (Family Accipitridae), owls (Families Tytonidae and Strigidae), quail (Family Odontophoridae), mourning dove (*Zenaida macroura*), mockingbird (*Mimus* sp.), western scrub jay (*Aphelocoma californica*), western meadow lark (*Sturnella neglecta*), finches (Family Fringillidae), and sparrows (Family Emberizidae).

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 (*Ceanothus* sp.), manzanita, chamise (*Adenostoma fasciculatum*), scrub oak (*Quercus berberidifolia*), and birchleaf mountain-mahogany (*Cercocarpus betuloides*). 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 (Family Geomyidae), deer mouse (*Peromyscus maniculatus*), and California ground squirrel, among others. Small mammals are the main food source for raptors such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), and barn owl (*Tyto alba*), and for large mammals such as coyote, raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis marsupialis*). Common birds found in agricultural land include western scrub jay, American crow (*Corvus brachyrhynchos*), house finch (*Carpodacus mexicanus*), killdeer (*Charadrius vociferous*), and European starling (*Sturnus vulgaris*) 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 (*Brassica* sp.), filarees (*Erodium* sp.), clovers (*Trifolium* sp.), wild oats (*Avena* sp.), bromes (*Bromus* sp.), foxtail barley (*Hordeum jubatum*), ryegrass (*Lolium* sp.), and fiddleneck (*Amsinckia* sp.) 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 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.

SPECIAL-STATUS SPECIES AND SENSITIVE NATURAL COMMUNITIES

The following discussion is based on a background search of special-status species and sensitive natural communities that are documented in the California Natural Diversity Database (CNDDB) ([Appendix B](#)), U.S. Fish and Wildlife (USFWS) endangered species list ([Appendix C](#)), and plant species documented in the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Plants of California ([Appendix D](#)).

The background search focused on the documented occurrences within the Lakeport and Highland Springs USGS 7.5-minute quadrangles. The CNDDB search contains 50 special-status species and communities. The CNPS search contains 10 special-status plant species, all but one identified in the CNDDB search. The USFWS list contains 12 special-status species. A total of 63 special-status species and communities were identified. For a complete list of species, refer to [Appendices B-D](#).

Below is a list of the special-status species that have the highest potential of occurring within the City's Sphere of Influence/Specific Plan Area. However, this does not preclude other special-status species not described below from occurring there. [Figure 3.4-1](#) shows the location of documented special-status species and communities documented in the CNDDDB within a one-mile radius of the City of Lakeport Sphere of Influence.

PLANTS

The CNPS classifies sensitive plants by ratings. List 1B species are plants categorized as rare, threatened, or endangered in California and elsewhere. List 2 plants are rare, threatened or endangered in California, but more common elsewhere. List 3 and 4 plants are species that need additional information.

Bent-flowered fiddleneck (Amsinckia lunaris)

The bent-flowered fiddleneck is listed as CNPS 1B. This species is an annual herb in the Borage family (Boraginaceae). It flowers between March and June and produces yellow flowers with red markings. Bent-flowered fiddleneck occurs within coastal bluff scrub, cismontane woodland, and valley and foothill woodland between the elevation of 10 – 1,640 feet.

Dimorphic snapdragon (Antirrhinum subcordatum)

The dimorphic snapdragon is listed as CNPS 4. This species is an annual herb associated with chaparral and lower montane coniferous forest habitats and ranges from between the elevation of 580 – 2,500 feet. The plant is often found serpentine substrate.

Small-flowered calycadenia (Calycadenia micrantha)

The small-flowered calycadenia is listed as CNPS 3. This species occurs within chaparral, valley and foothill grassland, meadows and seeps, and lower montane coniferous forest between the elevation of 16 – 5,000 feet. The plant is found on rocky talus or scree and in sparsely vegetated areas. It is also occasionally found on roadsides and sometimes on serpentine.

Bristly sedge (Carex comosa)

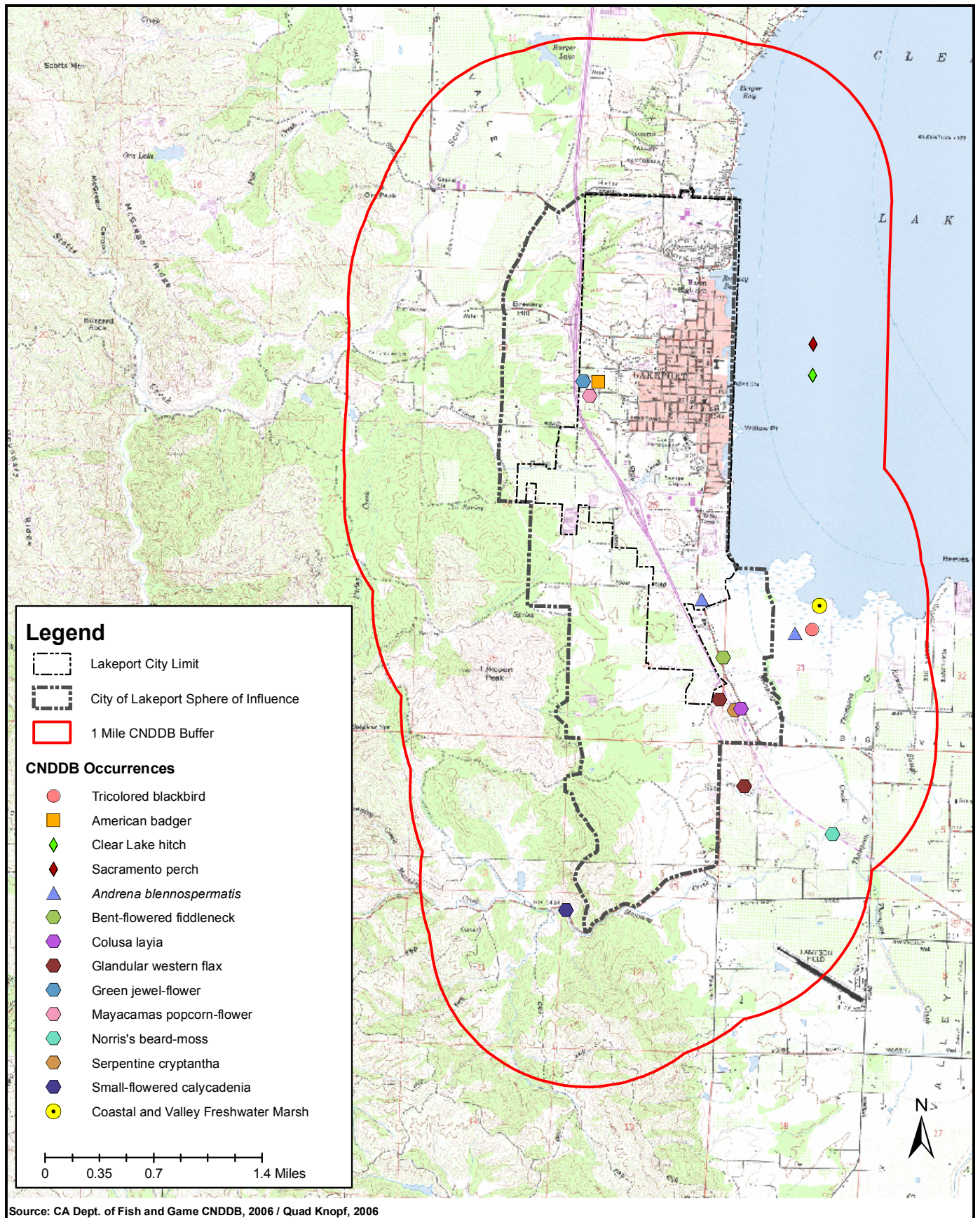
Bristly sedge is listed as CNPS 2. It is a perennial herb that occurs in marshes and swamps generally along lake margins. This species typically blooms between May and September.

Serpentine cryptantha (Cryptantha clevelandii var. dissita)

Serpentine cryptantha is listed as CNPS 1B. The species is found on serpentine outcrops in chaparral between 1,100 – 2,400 feet.

Norris's beard-moss (Didymodon norrisii)

Norris's beard-moss is listed as CNPS 2. It is a moss that occurs in cismontane woodland and lower montane coniferous forests and grows on rocks in areas that are intermittently wet.



Glandular western flax (Hesperolinon adenophyllum)

Glandular western flax is listed as CNPS 1B. It is an annual herb that occurs in chaparral, valley and foothill grasslands, often on serpentine. This species typically blooms between May and August.

Colusa layia (Layia septentrionalis)

Colusa layia is listed as CNPS 1B. This species occurs within chaparral, cismontane woodland, and valley and foothill grassland between 475 – 3,600 feet. It is found in scattered colonies in fields and grassy slopes in sandy or serpentine soil.

Mayacamas popcorn-flower (Plagiobothrys lithocaryus)

Mayacamas popcorn-flower is listed as CNPS 1A. This species occurs within meadows, valley and foothill grassland, cismontane woodland, and chaparral between 935 – 1,500 feet. It is found on moist sites.

Green jewel flower (Streptanthus bewri var. hesperidis)

Green jewel flower is listed as CNPS 1B. This species occurs within chaparral and cismontane woodland between 425 – 2,500 feet. It is found in openings in chaparral or woodland on serpentine, rocky sites.

WILDLIFE

Tricolored blackbird (Agelaius tricolor)

The tricolored blackbird is a California species of concern and a federal species of special concern. It is also protected under the Migratory Bird Treaty Act (MBTA). It is common locally throughout the Central Valley and in coastal districts from Sonoma County southward. The tricolored blackbird roosts in large flocks and breeds near fresh water, preferably in emergent wetland, with tall, dense cattails or tules, thickets of willow, blackberry, wild rose, and tall herbs. They forage on the ground in croplands, grassy fields, flooded land, and along edges of ponds looking for insects.

Great blue heron (Ardea herodias)

The great blue heron is a federal species of special concern and is protected under the MBTA. The great blue heron inhabits areas near sources of water, including rivers, lake edges, marshes, saltwater seacoasts, and swamps. They usually nest in trees or bushes that stand near water, breeding at elevations of up to 5,000 feet. Great blue herons typically breed from March to May in the northern part of their range. They are mainly active in the mornings and at dusk. Great blue herons' diet consists of mainly fish, but also includes frogs, salamanders, lizards, snakes, birds, shrimps, crabs, crayfish, dragonflies, grasshoppers, and many other aquatic insects.

Bald eagle (Haliaeetus leucocephalus)

The bald eagle is a federally threatened species and is protected under the MBTA. It is seen most often on sea coasts or near rivers and lakes in open areas. They feed mainly on fish during breeding season, especially salmon, regularly on carrion, and on roadkill in winter. They feed on small mammals, especially rabbits, waterfowl and seabirds. Nests are found in the fork of tall trees, which are approximately 90 feet in height, or on cliffs.

Fisher (Martes pennanti)

The fisher is a California species of concern and it is a federal candidate. The fisher occurs in mixed hardwood forests. It is active day and night and is found both on ground and in trees. It feeds primarily on small mammals, birds, carrion, fruits, and fern tips. It is one of few predators that feed on porcupines. The fisher dens in hollow trees or on the ground. Its home range is approximately 10 square miles with a greater range for males. Young are born in late March or early April.

American badger (Taxidea taxus)

The American badger is a California species of concern. This species is most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. The species requires sufficient food, friable soils and open, uncultivated ground. It preys on burrowing rodents and dig burrows.

Northwestern pond turtle (Actinemys marmorata marmorata)

The northwestern pond turtle is a California species of concern and a federal species of special concern. Northwestern pond turtles can be found in ponds and small lakes with abundant vegetation as well as in marshes, slow moving streams, reservoirs, and occasionally brackish water. They are associated with permanent or nearly permanent water in a wide variety of habitat types. Pond turtles require basking sites such as partially submerged logs, rocks, mats or floating vegetation, or open mud banks. Breeding takes place April to August. Western pond turtles are omnivorous and feed on pond lilies, beetles and a variety of aquatic invertebrates as well as fishes, frogs, and carrion.

Osprey (Pandion haliaetus)

The osprey is a California species of concern and a federal species of special concern. It is also protected under the MBTA. They are seen along rivers, lakes, and coasts. Osprey nest near fresh or salt water eating mostly fish along with rodents, birds, small vertebrates, and crustaceans. The species will hover over water, dive down, and then plunge feet first to catch prey. They build bulky nests in deciduous and coniferous trees ranging between 60-100 feet tall, near or over water, and on sheds, poles, docks, and platforms.

California red-legged frog (Rana aurora draytonii)

The California red-legged frog is a California species of concern and is federally threatened. The California red-legged frog requires ponds in humid forests, woodlands, grasslands, and streamsides, especially where cattails or other plants provide cover. The species frequents

marshes, streams, lakes, reservoirs, ponds, and other, usually permanent, sources of water. It is most common in the lowlands and foothills. It is generally found in or near water, but disperses after rains and may appear in damp woods and meadows far from water. Its breeding period is short, often lasting only one to two weeks usually between January and April, depending on locality. When it is not breeding, it may be found in damp woods.

Foothill yellow-legged frog (Rana boylei)

The foothill yellow-legged frog is a California species of concern. The foothill yellow-legged frog requires streams or rivers of woodland, chaparral, and forest. The species is found near water, especially near riffles where there are rocks and sunny banks. It takes refuge among stones, silt, or vegetation. It breeds mid-March to early June, after high water of streams subside.

Northern spotted owl (Strix occidentalis caurina)

The northern spotted owl is federally threatened and it is protected under the MBTA. The northern spotted owl is distributed throughout the northwest mountains of California, Oregon, Washington and southwest British Columbia. This species prefers mature old-growth forests. It especially likes densely wooded areas which have large trees with a multi-layered canopy enclosure. The northern spotted owl nests in old-growth forests, preferably in the darkest part of the woods, in tall trees, tree cavities or old nests. Early nesters lay eggs in March, but the majority of nesting occurs in April. The owl eats rats, white-footed mice, deer mice, birds, red tree mice, small bats, moths, crickets, large beetles and flying squirrels.

RAPTORS

Nesting raptors (birds of prey) and raptor nests are protected under the Migratory Bird Treaty Act (MBTA) and by California Fish and Game Code. All six families of raptors occurring in North America are protected:

- Accipitridae (kites, hawks, and eagles)
- Cathartidae (New World vultures)
- Falconidae (falcons and caracaras)
- Pandionidae (ospreys)
- Strigidae (typical owls)
- Tytonidae (barn owls)

Protection includes not only the birds themselves but also extends to their nests, young, and eggs. Relative to many other animal taxa, raptors naturally exist at low population levels and are widely dispersed within their habitats. Disturbances related to construction activities causing nest abandonment and/or loss of reproductive effort may be considered a “take” and is potentially punishable by fines and/or imprisonment.

WILDLIFE MOVEMENTS CORRIDORS

Movements of wildlife generally fall into three basic categories: a) movements along corridors or habitat linkages associated with home range activities such as foraging, territory defense, and

breeding; b) dispersal movements—typically one-way movements (e.g., juvenile animals leaving their natal areas or individuals colonizing new areas), and; c) temporal migration movements—these movements are essentially dispersal actions which involve a return to the place of origin (e.g., deer moving from winter grounds to summer ranges and fawning areas).

The general plan area, and surrounding adjacent properties, contains no geographic features or topographic constrictions that would serve as habitat linkages or migration corridors. The project site itself contains no recognizable movement corridors.

WATERFOWL

Numerous water-loving bird species including ducks, geese, cranes grebes, and loons migrate through California each year along the Pacific Flyway. Suitable winter quarters for birds are found in California from the Sacramento Valley south to Salton Sea and in the tidal marshes near San Francisco Bay. The majority of the migratory birds in California are not documented in the CNDDDB as they may not be threatened or endangered, but they are protected under the MBTA. These bird species are known to migrate usually between September and April, depending on the specific species in the regional vicinity of the project site, but mostly within or along major waterways.

Regulatory Setting

FEDERAL

Federal Endangered Species Act

The FESA defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Once a species is listed it is fully protected from “take” unless a take permit is issued by the U.S. Fish and Wildlife Service (USFWS). “Take” is defined as the killing, capturing, or harassing of a species. Proposed endangered or threatened species are those species for which a proposed regulation, but not final rule, has been published in the Federal Register.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) is an international treaty among the United States, Canada, Mexico, Japan, and Russia for the conservation and management of bird species that may migrate through more than one country. The MBTA (50 C.F.R. Section 10) is enforced in the United States by the USFWS and covers 972 bird species. According to the provisions of the MBTA, it is unlawful to pursue, hunt, take, capture, or kill, or attempt to do the same to any species covered by the Act, including their nests, eggs, or young. Any disturbance that causes nest abandonment or loss of reproductive effort is considered a “take” and is potentially punishable by fines or imprisonment. Birds covered under the Act include all waterfowl,

shorebirds, gulls, wading birds, raptors, owls, hummingbirds, warblers, flycatchers, and most perching bird species.

Clean Water Act – Section 404

Section 404 of the Clean Water Act (CWA) regulates all discharges of dredged or fill material into water of the United States. The United States Army Corps of Engineers (USACE) is the agency responsible for administering the permit process for activities that affect “waters of the U.S.” Executive Order 11990 is a federal implementation policy, which is intended to result in no net loss of wetlands.

Clean Water Act – Section 401

As a requirement of the Section 404 permit, Section 401 of the CWA requires an applicant to first obtain a water quality certification from the Regional Water Quality Control Board (RWQCB). To obtain the water quality certification the RWQCB must indicate that the proposed fill would be consistent with the standards set forth by the state.

Wetlands and Other Waters

Areas meeting the regulatory definition of “waters of the United States” are subject to the jurisdiction of the USACE. The USACE, under provisions of Section 404 of the CWA (1972), has jurisdiction over “waters of the U.S.” This broad category of water bodies encompasses both wetland and nonwetland aquatic habitats, such as streams, rivers, lakes, ponds, bays, and oceans. These nonwetland waters are collectively referred to as “other waters.”

Areas not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially-irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water-filled depressions (33 CFR, Part 328).

“Waters of the U.S.” are protected at both federal and state levels. The USACE has primary federal responsibility for administering regulations that concern “waters of the U.S.” The USACE requires that a permit be obtained if a project proposes placing structures within, over, or under navigable waters and/or discharging dredged or fill material into “waters of the U.S.”

STATE

Fish and Game Code Sections 2050-2097 - California Endangered Species Act

The CESA protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance state-listed species and their habitats.

The CESA expanded upon the original Native Plant Protection Act (NPPA) and enhanced legal protection for plants. To be consistent with Federal regulations, CESA created the categories of

"threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code Sections 1900-1913 - California Native Plant Protection Act

In 1977 the State Legislature passed the NPPA in recognition of rare and endangered plants of the state. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants.

Public Resources Code Section 15380 - California Environmental Quality Act

The California Environmental Quality Act (CEQA) identifies that a species that is not listed on the federal or state endangered species list may be considered rare or endangered if the species meets certain criteria defined in subdivision (b) of Public Resources Code §15380. Under CEQA, public agencies must determine if a project would adversely affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e. candidate, or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency (e.g. USFWS or CDFG).

Fish and Game Code Sections 3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in California, generally called "raptors," are protected. The law indicates that it is unlawful to take, possess, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort of a raptor is considered a "take."

Fish and Game Code Sections 1601-1603 – Streambed Alteration

Under the California Fish and Game Code, the CDFG has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project developers must obtain a "Streambed Alteration Agreement" from the CDFG prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFG may impose conditions to limit and fully mitigate impacts on fish and wildlife resources.

LOCAL REGULATIONS

City of Lakeport Updated General Plan

A number of these policies are currently adopted as part of the existing General Plan; however, as noted above a number of policies have been added to the Plan to further strengthen protection of biological resources. Please note; in the policies and programs stated below, figure references are referring to figures in the General Plan.

Community Design Element

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.

Conservation Element

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: 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.

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 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.

Policy C 8.4: Water Quality. Continue to cooperate with the County, Lake County Flood Control and Water Conservation District (LCFCWCD) 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.

Open Space, Parks and Recreation Element

Policy OS 2.2: Wildlife Corridors. Ensure that adequate open space is provided to permit effective wildlife corridors for animal movement.

3.4.2 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The following impacts were found in the Initial Study ([Appendix A](#)) to be less than significant or have no impact and will not be discussed further in this EIR:

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.4.3 IMPACTS AND MITIGATION MEASURES

Impact #3.4-1: Substantial adverse impacts on candidate, special-status or sensitive species.

Discussion and Conclusion: There are numerous special-status species and one sensitive habitat within and around the expansion of the city’s Sphere of Influence, which includes approximately 600 acres designated as “Specific Plan Area” and made available for urban development. Although these changes will not in themselves lead to development, future development occurring under these proposed designations, such as projects located within the Specific Plan Area and the area west of downtown, could degrade the existing biological resources present. The city’s updated General Plan Policies C 1.1, C 1.2, & C 8.1 along with the implementing programs are intended to minimize potential impacts to biological resources such as plant and animal species and special habitat areas. All future development will undergo appropriate project-level environmental review under CEQA to fully analyze impacts on special-status species and implement mitigation measures to reduce those impacts. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.4-2: Substantial adverse affect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS.

Discussion and Conclusion: Adoption of the updated General Plan will not directly result in any development of impacts on riparian vegetation or other sensitive natural community within the project area. Future development will be guided by the policies and programs contained in the updated General Plan. The updated General Plan Policies C 1.2 and 1.3 require re-vegetation plans for projects that result in vegetation or tree removal. The Conservation, Open Space, and Parks Element of the existing General Plan includes requirements for development adjacent to watercourses, including enforcing setbacks from stream banks; requires developments within

and/or adjacent to riparian areas to clearly indicate the boundaries of watercourses, the slope and condition of stream banks, and if applicable, to prepare a biotic study. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.4-3: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Discussion and Conclusion: Adoption of the updated General Plan will not directly result in substantial adverse impacts to movement of native residents, migratory fish, or wildlife species. Future development will be guided by the policies and programs contained in the updated General Plan. Specifically, Policy OS 2.2 requires that adequate open space is provided to permit effective wildlife corridors for wildlife movement. In addition, development projects will undergo environmental review under CEQA and will be required to be consistent with the policies and programs in the Lakeport General Plan. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.4-4: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Discussion and Conclusion: Adoption of the updated General Plan will not directly result in any conflicts with local policies or ordinances protecting biological resources. Future development will be guided by policies and programs contained in the updated General Plan. The updated General Plan contains new policies for re-vegetation to be applied to projects involving vegetation removal. Additionally, Policy C 1.3 encourages planting native and drought-resistant trees in new developments, and in City-owned parks, and recreational facilities.

The hillsides within the Sphere of Influence are primarily dominated by blue oaks. Additional vegetation in the area consists of annual grass/forbs, chamise, and northern mixed chaparral. Adoption of the updated General Plan will not directly result in any conflicts with policies and ordinances which are in place to protect the City of Lakeport's biological resources. Future development in the Sphere of Influence (including the Specific Plan area) will be guided by these policies. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

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3.5 Cultural Resources

This section of the Draft Program Environmental Impact Report (Draft EIR) describes cultural resources which could be impacted by development within the City of Lakeport. Cultural resources are defined as prehistoric and historic archeological sites, architectural properties (e.g., buildings, bridges, and structures), and traditional properties with significance to Native Americans. This definition includes historic properties as defined by the National Historic Preservation Act (NHPA).

During the Notice of Preparation (NOP) period, no comments were received regarding the impact of the project on cultural resources.

3.5.1 SETTING

Environmental Setting

The purpose of this section is to identify known and potential cultural resources in the Lakeport area and to evaluate what constraints known archaeological resources might have on the development of the General Plan. Research was conducted to identify previously recorded resources in the Study Area and to collect a general background of the prehistory and history of the Lakeport vicinity. The background information collected in this phase will provide a basis for evaluation of the cultural and historical significance of individual resources of the area.

Research sources employed in this study include:

- California Office of Historic Preservation
- Northwest California Information Center of the California Historical Resources Information System
- National Register of Historic Places, including listed and eligible properties
- California Inventory of Historic Resources
- California Historical Landmarks
- California Points of Historic Interest
- Other registers (through Information Center)
- Historic maps
- Published texts

A cultural records search was conducted by the Northwest California Information Center (NCIC) at California State University, Sonoma for the Lakeport area on July 12, 2004. The search included the following resources: review of maps for the area; the National Register of Historic Places; the California Register of Historic Resources; the *California Inventory of Historic Resources* (1976); the *California Historic Landmarks* (1990); the *California Points of Historic Interest* (May 1992); the Historic Property Data File and several other pertinent sources available at the NCIC.

A review of information from the sources listed above revealed that the City of Lakeport contains 12 recorded Native American archaeological resources listed with the Historical Resources Information System:

- A large scatter of obsidian tools, flakes, groundstone and human remains.
- A midden site with artifacts and fire affected rocks
- Two obsidian scatters with fire affected rocks
- A midden site with numerous artifacts
- A Native American “prayer hill” with an obsidian scatter
- Two ethnographic village sites with midden soils
- Two obsidian scatters

The Northwest California Information Center at CSU Sonoma also searched for historical properties in the Lakeport area. The Historic Properties Directory (HPD), published by the California Office of Historic Preservation, lists several properties within the City of Lakeport. One of these properties (Old Lake County Courthouse) is listed as a State Historical Landmark (SHL No. 897) and is also listed in the National Register of Historic Places (NRHP). Several other properties in Lakeport appear to be eligible for listing in the NRHP and/or the California Register of Historical Resources (CRHR):

- Prather House on 1st Street (1912)
- Lake County Museum on 3rd Street (1936)
- Boggs Home and Boggs Mansion on Armstrong Street (1872)
- Dondero House on Brush Street (1890)
- Doctor Fern Home on Lakeshore Blvd (1885)
- First Gas Pump on Main Street (1915)
- Bank of Lake Building on Main Street (1930)
- Kelly College on Main Street (1876)
- Farmers Savings Bank on Main Street (1876)
- Old Lake County Courthouse on N. Main Street (1872)
- Levy Block on N. Main Street (1895)
- Lakeport Pavilion Site on N. Main Street (1882)
- Hotel Garrett on S. Main Street (1880)

A historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. There may be unidentified features in the Lakeport vicinity that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

GENERAL PLAN UPDATE

The updated General Plan proposes to delete Policy 61 and Program 61.1 as the Old Courthouse Building has been given historical status and is currently on the National Register of Historic Places.

Regulatory Setting

FEDERAL

The National Historic Preservation Act of 1966, as amended, and its implementing regulation, 36 CFR 800

An act to establish a program for the preservation of additional historic properties throughout the nation. Among its numerous features, the Act authorized the Secretary of the Interior to maintain a National Register of Historic Places and gave the Advisory Council the authority to issue regulations instructing federal agencies on how to implement Section 106 of the Act.

National Environmental Policy Act of 1969

Declares that it is the policy of the federal government to preserve important historic, cultural, and natural aspects of the Nation's heritage. Federal agencies must prepare environmental impact statements prior to making decisions about projects, which may significantly affect the quality of the human environment.

Archaeological Resources Protection Act of 1979

Regulates the taking of archaeological resources on federal lands by setting a broad policy that archaeological resources are important for the nation and should be protected. It establishes a requirement for the excavation or removal of archaeological resources from public or Indian lands with special permits. Violations of the law include civil and criminal penalties of fines and imprisonment.

American Indian Religious Freedom Act of 1978

An act setting forth a policy of protecting and preserving the rights of Native Americans to Freedom of Religion.

Native American Graves Protection and Repatriation Act of 1990

This law addresses the rights of lineal descendants, Indian tribes, and Native Hawaiian organizations to Native American human remains, funerary objects, sacred objects, and other cultural items.

STATE

California Environmental Quality Act of 1970

CEQA establishes statutory requirements for the formal review and analysis of discretionary projects in California. CEQA applies to discretionary projects causing a substantial adverse change in the significance of an historical or archaeological resource with a significant effect on the environment. CEQA Guidelines Section 15064.5, "Determining the Significance of Impacts on Historical and Unique Archeological Resources," provides guidance concerning potential impacts to cultural resources.

California Public Resources Code Sections 5020, 5024, 5079 and 5097

Various sections of the State PRC provide protection for cultural resources, historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological sites, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, especially those situated on public lands.

LOCAL

Lake County Ordinance

Lake County has passed its own ordinance regarding cultural resources (Section 4-5 of the County's Building Regulations). Lake County's ordinance helps protect cultural resources and clarify the procedures for dealing with cultural resources for both the developer and the landowner.

City of Lakeport Updated General Plan

The following policies were slightly revised during the General Plan Update to reflect more recent information, but are very similar to existing General Plan Policy.

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.

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.

3.5.2 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment if it will:

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

The following impact was found in the Initial Study ([Appendix A](#)) to be less than significant and will not be discussed further in this EIR:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

Cultural Resources Eligible for the California Register Evaluation Criteria

The California Public Resources Code Section 5024.1 and Title 14 California Code of Regulations Section 4850 et seq. created the California Register of Historic Resources. In order to be eligible for inclusion on the California Register, a cultural resource must be at least 50 years old, possess integrity, including physical, stratigraphic, location, setting, and ambience, and, meet one or more of four criteria (California Public Resources Code Section 5020.1(j) and 5024.1):

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values, and
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Unique Cultural Resources Evaluation Criteria

Those cultural resources not eligible for inclusion on the California Register must be considered under the definition of unique as defined by Sections 21083.2(l) and 21084.1 of the California Public Resources Code. The following criteria are considered for uniqueness:

- A. Is the site associated with an event or person of:
 1. recognized significance in California or American History, or
 2. recognized scientific importance in prehistory.

- B. Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable or archaeological research questions.
- C. Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- D. Is at least 100 years old and possesses substantial stratigraphic integrity; or
- E. Involves important research questions that historical research has shown can be answered only with archaeological methods.

3.5.3 IMPACTS AND MITIGATION MEASURES

Impact #3.5-1: Future development of the Specific Plan area could disturb or destroy buried/previously unidentified cultural resources (archaeological, paleontological, or human remains) within the project site.

Discussion/Conclusion: Adoption of the updated General Plan will not directly result in actions which would potentially disturb or destroy buried cultural resources. However, future development of the Specific Plan area may result in earthmoving activities which have the potential to unearth previously undiscovered cultural resources.

Impacts on cultural resources can result either directly or indirectly from pre-construction activities and construction of a proposed project. Direct impacts are those which result from the immediate disturbance of resources from vegetation removal, vehicle travel over the surface, earthmoving activities, excavation, or alteration of the setting of a resource. Indirect impacts are those which result from increased erosion due to site clearance and preparation, or from inadvertent damage or outright vandalism to exposed resource materials which could occur due to improved accessibility.

Concordant with the mandates of Section 7050.5 of the California Health and Safety Code, if human remains are discovered during the construction phase of a development, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendant. The descendant will then recommend to the landowner the appropriate method for the disposition of the remains and any associated grave goods.

There is no indication that subsurface prehistoric cultural deposits in the Specific Plan area are likely to exist, or to have survived past uses of the land; however, the possibility cannot be totally eliminated based on a records search and surface inspection. Proposed new development will be guided by policies in the General Plan. The Conservation, Open Space and Parks Element and the Community Design Element of the proposed general plan contains policies and programs designed to protect historical and cultural resources. In addition, proposed new

development will be subject to environmental review under CEQA, including analysis of impacts to cultural resources. These policies reduce the potential impact; however, not to a level of insignificance. This impact is *potentially significant*.

Mitigation Measures

The following mitigation measure shall be added to the General Plan and will serve to reduce impacts on cultural resources to a *less than significant* level.

Mitigation Measures #3.5-1:

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 should conduct archival and/or field research to determine the structure's historical value. Relocation of historic structures (if necessary) should be implemented where practical.*

Program PR 1.10-c: *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 shall be consulted if human remains are encountered.*

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3.6 Geology and Soils

This section describes the existing geological setting and geologic hazards in the vicinity of the plan area, and identifies any specific geological impacts that are likely to result from implementation of the project along with feasible mitigation measures to address those impacts.

During the Notice of Preparation (NOP) period no comments were received regarding geology and soils.

3.6.1 SETTING

Environmental Setting

REGIONAL GEOLOGY AND SOILS

The City of Lakeport is located in the northern portion of the Coast Range geomorphic province, which extends from Point Arguello in the south, along the California coast to the Oregon border, ranging from 20 to 80 miles in width. The province is bound on the south by the Transverse Range geomorphic province, on the east by the Great Valley geomorphic province, on the north by the Klamath Range geomorphic province, and on the west by the Pacific Ocean.

The Coast Range geomorphic province is characterized by northwest trending mountain ranges, broad basins, and elongated valleys. In the Coast Range, older, consolidated rocks are characteristically exposed in the mountains but are buried beneath younger, unconsolidated alluvial fan and fluvial sediments in the valleys and lowlands.

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.

FAULTS AND SEISMICITY

A fault, or a fracture in the crust of the earth along which rocks on one side have moved relative to those on the other side, are an indication of past seismic activity. It is assumed that those that have been active recently are the most likely to be active in the future, although even inactive faults may not be “dead.” “Potentially Active” faults are those that have been active during the past two million years or during the Quaternary Period. “Active” faults are those that have been active within the past 11,000 years. Earthquakes originate as movement or slippage occurring along an active fault. These movements generate shock waves that result in ground shaking.

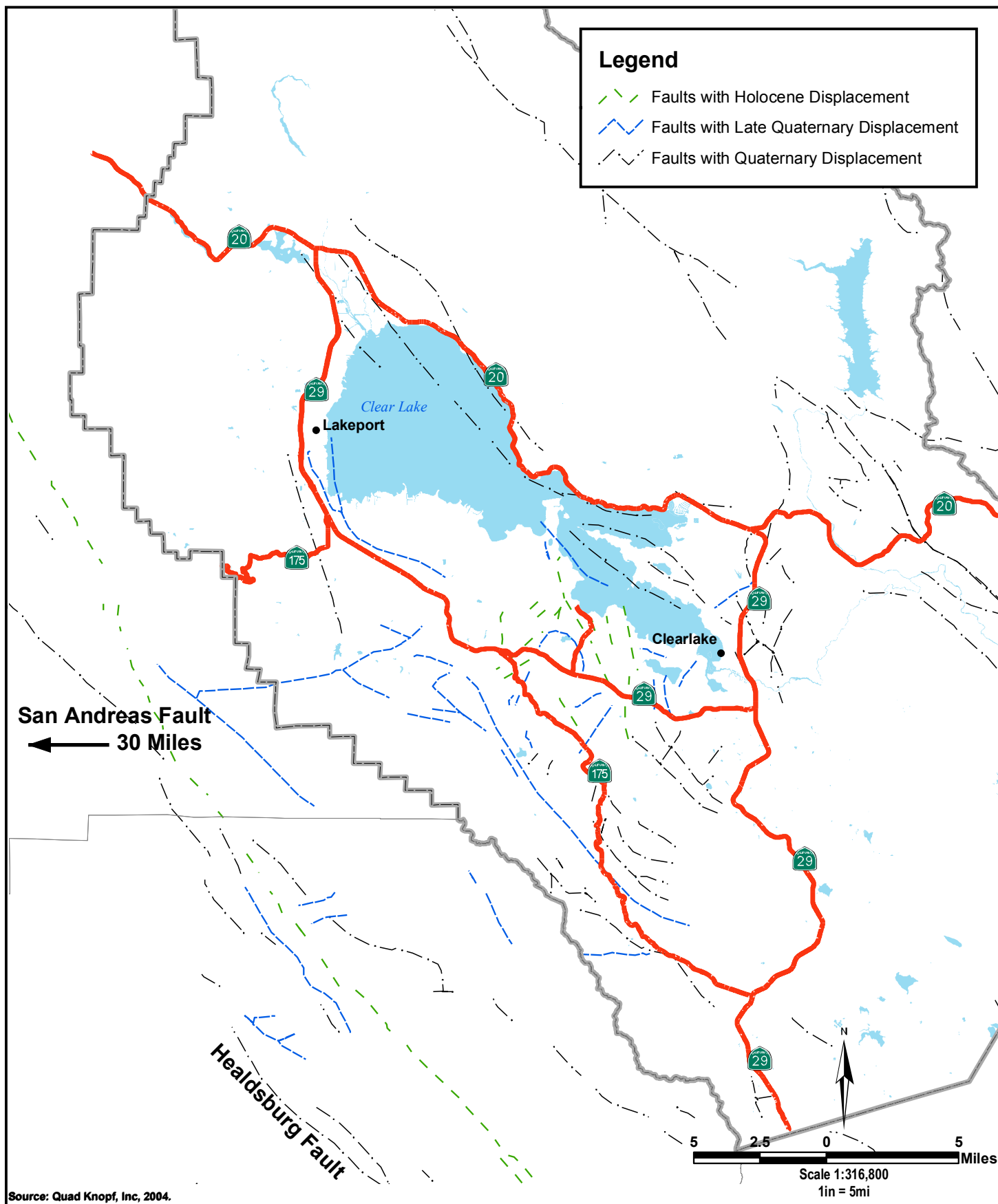
Lakeport is located in a highly active earthquake area and the potential exists for a significant seismic event in the future. Immediately east of the city, between the city and Clear Lake, there is a potentially active rupture zone. Potentially active rupture zones are faults which have been active 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 (see [Figure 3.6-1](#)). 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.

The 2001 Fault-Rupture Hazard Zones maps prepared by the California Geological Survey pursuant to the Alquist-Priolo Earthquake Fault Zoning Act also identifies areas in the northern section of the county. The fault zone runs diagonally in a southeast to northwest direction through the Potato Hill, Lake Pillsbury and Sanhedrin topographic quad maps. 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.

Despite the numerous faults in Lake County, future damage in Lakeport due to earthquake will more probably stem from an event on one of the major faults, such as the San Andreas. This is



true because, while more distant, these major faults are likelier to have a greater frequency and intensity of seismic events. Additionally, although no major earthquakes have occurred on faults within Lake County during the last 200 years, the county is still classified as “Seismic Zone 4” for building code purposes, indicating it is a highly active earthquake area with potential for significant events.

SEISMIC HAZARDS

Groundshaking

The most serious direct earthquake hazard is the damage or collapse of buildings and other structures caused by groundshaking. Groundshaking is the vibration which radiates from the epicenter of an earthquake. Damage to structures from groundshaking is caused by the transmission of earthquake vibration from the ground into the structure. The intensity of the vibration or shaking and its potential impact on buildings and other urban development is determined by several factors:

- The nature of the underlying materials, including rock and soil;
- The structural characteristics of a building;
- The quality of workmanship and materials used in its construction;
- The location of the epicenter and the magnitude of the earthquake; and
- The duration and character of the ground motion.

Peak ground acceleration (pga) is a measure of the ground motion severity experienced at a site due to an earthquake. A pga of 0.3g means that the maximum horizontal acceleration is 30 percent of the earth’s gravity with a 10 percent probability of being exceeded within the next 50 years. According to the California Geological Survey’s Seismic Shaking Hazards Map, the peak ground acceleration (pga) in Lake County ranges from 0.2g to 0.6g while the City of Lakeport’s pga ranges from 0.3g to 0.4g percent. Groundshaking can cause such indirect effects as ground failure, seiche, and dam 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.

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.

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.

Seiche and Dam Failure

Seiches are earthquake-generated waves within enclosed or restricted bodies of water. Major and even moderate earthquakes, miles away can produce oscillations or waves in local bodies of water which could overtop and damage levees and cause water to inundate surrounding areas.

A significant earthquake has the potential to cause a seiche in Clear Lake. 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 foot contour elevation. The risks associated with seiche is 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 the spillout 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.

Expansive Soils

Expansive soils are those soils that shrink and swell in response to changes in moisture content potentially causing serious damage to overlying structures. The predominant soils in the Lakeport area in general have high shrink-swell potential.

Subsidence

Subsidence of the land surface can result from extraction of groundwater, gas, oil, and geothermal energy. Hydrocompaction, peat oxidation, and fault rupture are also potential causes of subsidence. Groundwater withdrawal subsidence is the most extensive type in California; however, this type of subsidence has been observed only in valley areas underlain by alluvium.

Subsidence can cause a change in gradients affecting the carrying capacities of canals, drains, and sewers. Compaction of sediments at depth has caused extensive damage to water swells in areas where subsidence has been substantial. The magnitude of subsidence depends primarily on the following five facts:

- The magnitude of water level decline
- The thickness of the alluvium tapped by wells
- The individual and combined thicknesses and compressibility of the silt and clay layers within vertical sections tapped by wells
- The lengths of time during which water level declines are maintained
- The number of occurrences of heavy withdrawals of water in any single area

The imported materials used as fill in the lakefront areas of downtown Lakeport tend to be poorly consolidated and subject to subsidence.

GENERAL PLAN UPDATE

The updated General Plan proposes to delete Policy 7.2 because the City has implemented this policy by revising the Zoning Ordinance to require methods to reduce cut and fill in hillside areas.

The updated General Plan also proposes to include Program C 8.3-b to read “Consider adoption of a Hillside Protection Ordinance in the Zoning Ordinance that includes specific performance criteria for the protection of hillside area.” In addition, new policies have been added to require the use of Best Management Practices.

Regulatory Setting

FEDERAL

There are no specific federal regulations applicable to geology and soils.

STATE

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed in 1972 in an effort to reduce the potential human safety risks associated with surface faults by preventing the construction of buildings used for human occupancy on the surface trace of active faults. The law only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, passed in 1990, mandates the California Department of Conservation to identify and map “seismic hazard zones.” These zones are defined as those areas that are subject to strong earthquake shaking, liquefaction, landsliding, or earthquake-induced ground failure. The act also mandates cities and counties to use these maps to regulate development within identified seismic hazard areas.

California Building Code

The California Building Code (CBC) incorporates data regarding the response of structures to seismic events as a basis for structural design. The CBC considers primary lateral seismic forces and general soil types. The objective of the CBC is to protect the life safety of building occupants and the public. The CBC provisions are enforced by the City through the building permit process during which plans for proposed structures are examined for compliance with the applicable provisions of the CBC. In large earthquakes, compliance with provisions of the CBC would reduce the risk of complete structural failure, although structural damage may be expected. All new construction is to comply with the current version of the CBC.

LOCAL

City Code Section 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.

City Code Section 17.20.040 – Erosion Control Measures

After a determination is made that erosion control is needed, the property owner shall be required to complete some or all of the following measures to stop, reduce, or minimize the erosion problem. The specific extent of erosion control measures shall be determined by the Community

Development Director and implemented within a specific time frame as set forth in a written notice to said owner.

General Erosion Control: All property owners within the city shall generally use the following measures to minimize erosion within the city:

1. Keep soil disturbance to a minimum land area for a minimum length of time.
2. Maintain low slope angles and short slope lengths.
3. Revegetate disturbed soil areas with grass seeds and/or plants.
4. Fertilize and irrigate revegetation areas.
5. Perform slope stabilization and erosion control measures in areas adjacent to streams, creeks, ponds, and Clear Lake.
6. Where necessary, use mechanical stabilization techniques to control erosion and sedimentation.
7. Check erosion control measures periodically to monitor their effectiveness.
8. Complete grading and erosion control only during the dry season.
9. Comply with the grading requirements of the California building Code and associated Codes.

City Code Section 17.20.050 – Erosion Control in Development Projects

Development projects constructed in areas with slopes, or that involve significant exposure of bare soils, may be required to prepare and submit an engineered erosion control plan as part of the development review process or prior to the issuance of a building permit for the project. Where cuts and fills exceed 15 feet in height; where there is a possibility of land slides; where soil erodibility factors are high, such as those with loose, sandy, or silty soils; or where the proposed project is within 100 feet of Clear Lake, creeks, or seasonal streams, a professionally prepared engineering plan may be required. A determination of the specific type of plan shall be made as part of the environmental review process associated with the development project.

City of Lakeport Updated General Plan

These policies are contained in the updated General Plan and derived and expanded upon from the existing adopted General Plan.

Land Use Element

Policy LU 7.4: Best Management Practices. Implement the most recent and most appropriate stormwater Best Management Practices (BMPs) on new development and redevelopment.

Conservation Element

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 adoption of a Hillside Protection Ordinance in the Zoning Ordinance that includes specific performance criteria for the protection of hillside areas.

Safety Element

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

3.6.2 THRESHOLDS OF SIGNIFICANCE

Based on criteria set forth in Appendix G of the State CEQA Guidelines, the project will have a significant effect on the environment if it will:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
 - Strong seismic ground shaking
 - Seismic-related ground failure, including liquefaction
 - Landslides
- Result in substantial soil erosion or the loss of topsoil
- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, later spreading, subsidence, liquefaction or collapse
- Be located on expansive soil as defined in Table 18-1B of the Uniform Building Code (1994) creating substantial risks to life or property
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

3.6.3 IMPACTS AND MITIGATION MEASURES

Impact #3.6-1: Expose people or structures to potential substantial adverse effects from fault rupture and seismic-related ground failure.

Discussion/Conclusion: The City of Lakeport is located in a highly active seismic area and there is potential for fault rupture and seismic-related ground failure throughout the planning area.

The updated General Plan proposes to add an approximately 600-acre area to the city's Sphere of Influence allowing for its future development. Future development of this area and other areas within the city will be guided by the policies contained in the updated General Plan. Specifically, Policy S 1.1 and its associated programs will reduce the risk of damage resulting from seismic hazards by requiring geotechnical reports, compliance with the State Alquist-Priolo Act, and the implementation of mitigation measures as recommended in the geotechnical report for all development projects. Additionally, Policy S 1.2 discourages the construction of high

density residential, other critical, high occupancy or essential services buildings in high risk zones.

All future development will also undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.6-2: Result in substantial soil erosion or soil instability.

Discussion/Conclusion: The city is located in a mountainous area with slopes ranging from 0.5 percent to 100 percent. There is the potential for soil erosion and slope instability resulting from development of hilly areas if improper techniques are utilized.

The updated General Plan proposes to add an approximately 600-acre area to the city's Sphere of Influence allowing for its future development. Future development of this area and other areas 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 minimize 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, Policy C 8.3 further reduces soil erosion potential by requiring grading permits for all new construction, where applicable.

All future development will also undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.6-3: Result in potential structural damage due to expansive soils.

Discussion/Conclusion: As discussed above, in general the predominant soils in the Lakeport area have high shrink-swell potential.

The updated General Plan proposes to add an approximately 600-acre area to the city's Sphere of Influence allowing for its future development. Future development of this area and other areas within the city will be guided by the policies contained in the updated General Plan and other local regulations. The new General Plan policies require that a geotechnical report be prepared by a state registered geologist for all development proposals on sites located in seismically

hazardous areas, including those areas that contain expansive soils, as well as for all critical structures regardless of location. Additionally, the city requires measures to mitigate potential geologic safety hazards and professional inspection of foundations and excavation earthwork and other geotechnical aspects of site development during construction.

All future development will also undergo appropriate project-level environmental review under CEQA to fully analyze this impact and, if necessary, reduce it through the implementation of mitigation measures. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

3.7 Hydrology/Water Quality

This section of the Draft Program Environmental Impact Report (Draft EIR) addresses impacts of the project on hydrology and water quality that could result from adoption and implementation of the Lakeport General Plan Update. It also discusses the potential impacts on the City of Lakeport's infrastructure for water supply, wastewater treatment, storm drainage, and solid waste disposal.

During the NOP period, comments were received from the Central Valley Regional Water Quality Control Board regarding potential impacts to groundwater and waste discharge requirements associated with stormwater runoff. A comment was also received from the California State Lands Commission regarding the fact that the State of California granted, in trust, the submerged lands of Clear Lake to Lake County for the purposes of navigation, commerce, fisheries, protection of wildlife habitats, conservation of wildlife and fish resources, ecology, open space and open access to the public, public recreation, and other such uses which prove beneficial on a statewide basis.

3.7.1 SETTING

Environmental Setting

STORM DRAINAGE

The City of Lakeport has a long history of flooding (City of Lakeport Floodplain Mitigation Plan, 2003). Those portions of the city adjacent Clear Lake and the areas adjoining the principal water tributaries to the lake have experienced frequent inundation and are identified by the Federal Emergency Management Agency (FEMA) as 100-year flood zones ([see Figure 3.7-1, FEMA Map](#)). 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 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 northwest 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.

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.

Municipal separate storm sewer systems serving a population of less than 100,000 and located in an urbanized area or designated by the permitting authority (the local regional water quality control board) are covered by the Storm Water National Pollutant Discharge Elimination System (NPDES) Phase II Rule. The City is required to submit its application for a Phase II permit that must include a Storm Water Management Program/Plan addressing the six minimum control measures as follows:

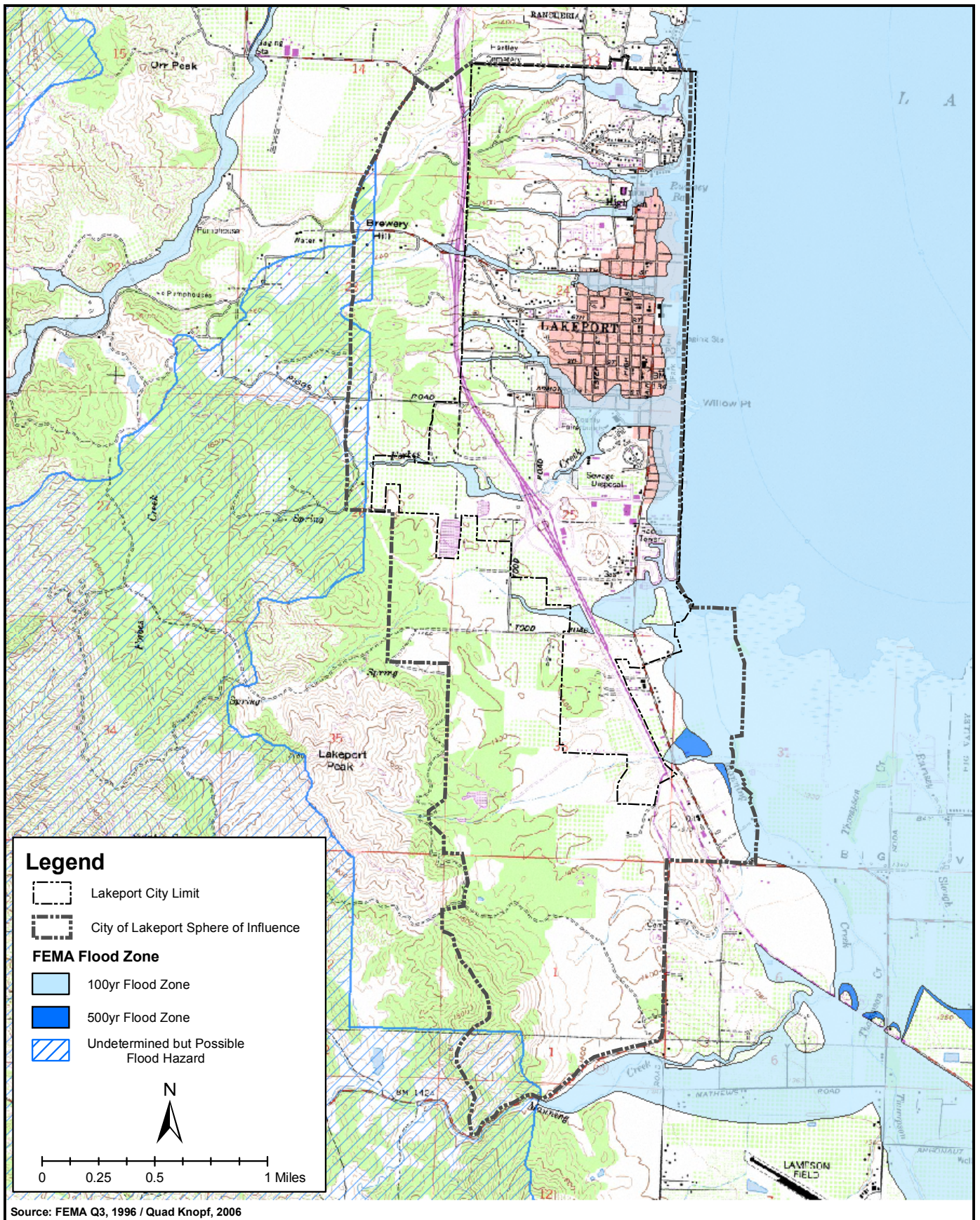
1. Public education and outreach on storm water impacts.
2. Public involvement/participation
3. Illicit discharge detection and elimination
4. Construction site storm water runoff control
5. Post-construction storm water management in new development and redevelopment
6. Pollution prevention/good housekeeping for municipal operations.

The City is responsible for preparing a storm water management program that specifies Best Management Practices (BMPs) for the six minimum control measures. While the regulations do not necessarily require Phase II permits to address industrial discharges, it should be anticipated that the Regional Board will place this responsibility upon the City.

FLOODPLAIN MITIGATION PLAN

Lakeport adopted a Floodplain Mitigation Plan in September of 2003. The plan, which was prepared with the assistance of Winzler & Kelly (consulting engineers), contains the following goals, which are not currently listed in the General Plan:

- Continue to participate in the National Flood Insurance Program so that affordable insurance is available for Lakeport properties.
- Ensure that new construction or substantial improvements to any existing structure result in adequate protection from flood hazards.
- Ensure compliance with FEMA and local flood regulations.
- Ensure that encroachment into designated floodway does not result in any increase in flooding issues.
- Improve the City's storm drainage facilities to protect buildings and improvements from flood damage.
- Explore funding options for construction of drainage facilities.
- Reduce infrastructure flooding to improve access to properties during flood periods.



- Reduce sewer inflows and overflows during flood events.
- Improve water quality by reducing the threat of floodwater contamination and utilizing the natural and beneficial functions of floodplains and wetlands.
- Continue working with the Office of Emergency Services to update and maintain the emergency response plan.
- Improve aquatic and riparian habitat through wise floodplain management.

SEICHE

A seiche is a wave that oscillates in lakes, bays, or gulfs from a few minutes to a few hours as a result of seismic or atmospheric disturbances. No historic data exists to suggest that significant damage has occurred in the Lakeport area as the result of a seiche. Although the probability of a seiche is small, the conditions for seiche inundation do exist. A seiche on Clear Lake may be induced by a landslide or earthquake. Seiche is also discussed in Section 3.6 (Geology/Soils).

GENERAL PLAN UPDATE

The updated General Plan includes the following new policies concerning storm drainage infrastructure:

Policy LU 7.2: Master Plan Update. Update the Storm Drainage Master Plan.

Policy LU 7.4: Best Management Practices. Implement the most recent and most appropriate stormwater Best Management Practices (BMPs) on new development and redevelopment.

Regulatory Setting

FEDERAL

Clean Water Act (CWA)

The CWA administered through the Regulatory Program of the U.S. Army Corps of Engineers regulates the water quality of all discharges into waters of the U.S. including wetlands and intermittent stream channels. Section 401, Title 33, Section 1341 of the CWA sets forth water-quality certification requirements for “any applicant applying for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable water.”

Federal Emergency Management Agency (FEMA)

The National Flood Insurance Program (NFIP) is a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted, as a desired level of protection, an

expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years although such a flood may occur in any give year. The State Department of Water Resources occasionally audits local agencies to insure the proper implementation of FEMA floodplain management regulations.

STATE

Regional Water Quality Control Board Permitting

The National Pollution Discharge Elimination System (NPDES) program, under Section 402(p) of the Federal Clean Water Act, is administered locally by the Central Valley Regional Water Quality Control Board on behalf of the U.S. Environmental Protection Agency. The program is designed to reduce pollution from storm water discharge and may require a permit from parties discharging to lakes, streams and other water bodies. A construction activity permit would be required for future projects resulting in disturbance of more than one acre. The permit would require that the following measures be implemented during construction activities: eliminate or reduce non-storm water discharges to storm water systems and other waters of the nation, develop and implement a Storm Water Pollution Prevention Plan (SWPPP), and perform inspections of storm water control structures and pollution prevention measures.

LOCAL

City of Lakeport Updated General Plan

As noted previously, Policies LU 7.2 and LU 7.4 were added to the plan. The remaining policies have been modified to reflect existing conditions or are the same as in the currently adopted General Plan. Please note; in the policies and programs stated below, figure references are referring to figures in the General Plan.

Land Use Element

Policy LU 7.2: Master Plan Update. Update the Storm Drainage Master Plan.

Policy LU 7.4: Best Management Practices. Implement the most recent and most appropriate storm water Best Management Practices (BMPs) on new development and redevelopment.

Safety Element

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.

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 drainage basins listed 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.

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.

Program S 1.6-b: Implement the *City of Lakeport Floodplain Mitigation Plan* (2003).

Program S 1.6-c: Organize City-led stream clean up projects in coordination with community groups, volunteer organizations and citizens.

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.

Program S 1.8-b: Work with the Lake County Flood Control 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.

Program S 1.8-c: Continue to participate in the National Flood Insurance program.

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.

Program S 1.8-e: Update, as necessary, the Flood Damage Prevention Ordinance and the Storm Drainage Master Plan.

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.

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.

Program S 1.9-c: Continue to develop, update and implement a City Capital Improvement Program for drainage and work with the Lake County Flood Control 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.

Program S 1.9-d: Require, where necessary, construction of siltation retention ponds which are incorporated into the design of development projects.

Program S 1.9-e: Require that construction within the Seiche Zone as identified in [Figure 18](#) be designed to reduce wave impacts as determined by the City.

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 guidelines 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.

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.

Program S 2.1-c: Discourage construction during wet months to prevent siltation.

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.

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.

Flood Management Ordinance

The City of Lakeport has a Flood Damage Prevention Ordinance (FDPO) that specifies property protection activities which are conducted as part of the process for approving new construction or improvements to infrastructure. These activities include the following:

- *Enforcing minimum elevation requirements for all new and substantially improved properties in the floodplain.* The FDPO requires that all qualifying properties comply with minimum

elevation requirements based on the flood zone and that, upon completion of the structure, the elevation of the lowest floor including the basement be certified with an elevation certificate submitted to the City that requires a minimum of one foot above the base flood elevation.

- *Enforcing standards of construction for all new construction and substantially improved properties in the floodplain.* The FDPO requires all qualifying properties to be adequately anchored, constructed with materials resistant to flood damage, and constructed using methods and practices that minimize flood damage.
- *Enforcing standards for utilities.* The FDPO requires that all new and replacement water supply and sanitary sewage systems be designed to minimize or eliminate infiltration of floodwaters in the systems and discharge from the systems into floodwaters. The FDPO also requires that all new and replacement electrical panels and meters be installed one foot above the base flood elevation.

3.7.2 THRESHOLDS OF SIGNIFICANCE

Based on the significance criteria contained in Appendix G of the CEQA Guidelines, the construction and operation of the project is considered to have a significant adverse impact on the environment if it will:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- Inundation by seiche, tsunami, or mudflow.

The Initial Study determined that the following impacts were less than significant, and they will not be further discussed in this EIR:

- Violate any water quality standards or waste discharge requirements.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.

3.7.3 IMPACTS AND MITIGATION MEASURES

Impact #3.7-1: Depletion of groundwater or interference with recharge.

Discussion/Conclusion: The General Plan Update includes changes in land use designations and expansion of the city's Sphere of Influence. Although these changes will not in themselves directly result in development, future development occurring under these proposed designations, such as projects located within the Specific Plan Area, could potentially deplete existing groundwater sources or interfere with groundwater recharge. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. In addition, proposed new developments will be subject to environmental review under CEQA, including analysis of impacts to groundwater. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.7-2: Alteration of drainage patterns that could result in flooding.

Discussion/Conclusion: Future development activities, in accordance with the provisions of the updated General Plan, such as projects located within the Specific Plan Area and downtown, could potentially alter drainage patterns, leading to onsite or offsite flooding. The current General Plan contains a policy to control soil erosion "to prevent flooding and destruction of natural waterways, to maintain water quality and to reduce public costs of flood control and watercourse maintenance." This policy is included in the Conservation Element of the updated General Plan as Policy C 8.3. In addition to current General Plan policies, the updated General Plan adds a policy (LU 7.3) which requires implementation of the most recent and most appropriate storm water Best Management Practices (BMPs) on new development and redevelopment. In the case of stormwater runoff caused by new development, these BMPs

would include engineered and constructed systems, such as detention ponds, that would be designed to minimize onsite or offsite flooding. In addition, proposed new developments will be subject to environmental review under CEQA, including analysis of flooding impacts. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.7-3: Demand for new storm drainage.

Discussion/Conclusion: Future development activities, in accordance with the provisions of the updated General Plan, such as projects located within the Specific Plan Area and downtown, could potentially increase stormwater run-off beyond the capacity of the existing storm drainage system to handle. The current General Plan also contains a policy to “ensure that capacity of the storm drain systems is increased as a result of new development.” This policy is included in the updated General Plan as Policy LU 7.1. In addition to current General Plan policies, the updated General Plan adds a policy (LU 7.3) which requires implementation of the most recent and most appropriate stormwater Best Management Practices (BMPs) on new development and redevelopment. In the case of stormwater runoff caused by new development, these BMPs would include engineered and constructed systems, such as detention ponds, to minimize the impact on the City’s storm drain system. Implementation of these policies will reduce stormwater-related impacts of new development. Infrastructure requirements and financing for development in the Specific Plan Area will be addressed by the preparation of a Specific Plan. In addition, proposed new developments will be subject to environmental review under CEQA, including analysis of impacts to the existing storm drainage system. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.7-4: Placement of people and/or structures in 100-year flood zones as a result of new development.

Discussion/Conclusion: Adoption and implementation of the updated General Plan will not directly place people or structures in 100-year flood zones. Future development activities, in accordance with the provisions of the updated General Plan, such as projects located within the Specific Plan Area and downtown, could potentially take place in 100-year flood zones. The Specific Plan Area is located in an undetermined, but possible flood hazard area. All proposed development will be subject City’s Flood Damage Prevention Ordinance, which is designed to protect people and property from flooding related to new development. In addition, proposed new developments will be subject to environmental review under CEQA and be required to be consistent with the policies in the General Plan. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

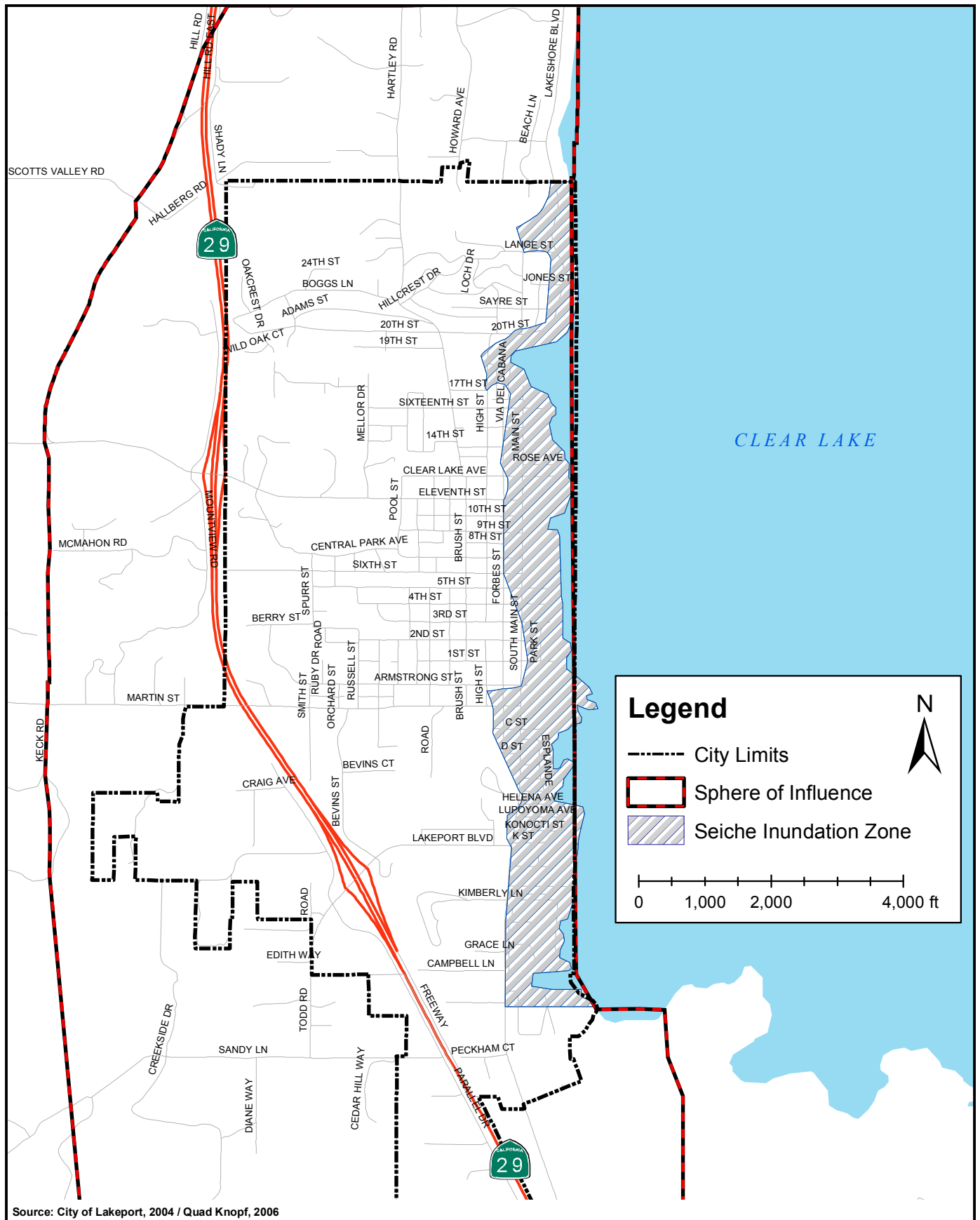
Impact #3.7-5: Inundation by seiche.

Discussion/Conclusion: Adoption and implementation of the updated General Plan will not directly place people or structures in areas at risk of seiche. Future development activities, in accordance with the provisions of the updated General Plan in the shoreline areas could potentially take place in areas that could be exposed to seiche (see [Figure 3.7-2](#)); however, proposed development will be subject to environmental review under CEQA, including analysis of seiche risk. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

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3.8 Land Use and Planning

This section of the Draft Program Environmental Impact Report (Draft EIR) provides a discussion of land use changes called for in the City of Lakeport General Plan Update, and assesses whether these changes will have an adverse affect on the environment. During the NOP period, comments were received from Robert and Mary Paiva and from Michael Santarelli regarding proposed changes to the city's Sphere of Influence (SOI).

3.8.1 SETTING

Environmental Setting

GENERAL PLAN UPDATE

The updated General Plan proposes the following changes to land use designations from the previous General Plan:

1. From Residential to Office. Bordered by 4th Street, Tunis Street, and 1st Street. Comprises 3.2 acres.
2. From Commercial to High Density Residential along South Smith Street.
3. From Major Retail to Office and Residential. Located on the east side of Highway 29, bisected by Central Park Avenue. Comprises 10 acres.
4. From Major Retail/Low Density Residential to Residential. Bordered by Sandy Lane, Todd Road, and Edith Way. Comprises 4.15 acres.
5. From Urban Reserve to Industrial. Located on the southeastern border of the current City of Lakeport's Sphere of Influence and the west side of Highway 29. Comprises 48 acres.
6. From Commercial to Residential along 20th Street to be consistent with underlying zoning.
7. Change the Industrial designation in the vicinity of Kimberly Lane to Major Retail.
8. The expanded Sphere of Influence is designated "Specific Plan Area." Comprises approximately 600 acres.
9. The current General Plan designation of "Low Density Residential" and "Medium Density Residential" are proposed to be combined into the classification "Residential."
10. Reflect the new city limit boundary line and change the Professional Office designation to Major Retail for approximately 30 acres located along Parallel Drive.

In addition, the General Plan update proposes to expand the Sphere of Influence to include an approximately 600-acre "Specific Plan Area" (see [Figure 2-2](#)). The Specific Plan Area would be developed as a residential, including cooperative ownership properties to serve the vacation

market, plus very limited commercial. Based on the recommended density range of 1-4 units per acre, the Specific Plan Area could accommodate between 600 and 2,400 residential units at build-out.

SPHERE OF INFLUENCE

The Sphere of Influence is defined in California Government Code Section 56076 as "a plan for the probable physical boundaries and service area of a local agency as determined by LAFCO." Annexations to the city must be located within the SOI and adjacent to existing city boundaries in order to be approved by 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 limit boundaries, 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 different. During the General Plan update, the implications of the post-Proposition 13 fiscal environment to the City of Lakeport can be seen as an opportunity to create a more predictable revenue-expenditure model. The Lakeport area's planned growth will, at some time, require annexation to the City. First, long range planning in the Lakeport SOI will occur with a vision shared by both parties and with a revenue stream that can be relied on for the duration of the agreement. Second, an agreement will permit both parties

to focus their limited resources to other matters; its absence will necessitate that the City and County coordinate their planning programs in a piecemeal fashion.

The Lake County-Cities Area Planning Council (LCCAPC) is designated as the Regional Transportation Planning Agency for the County by the State of California. The Council is made up of two members from the Lakeport City Council, two members from the Clearlake City Council, two members from the County Board of Supervisors, and two members at-large. The State requires that LCCAPC prepare the Regional Transportation Plan (RTP) to provide a comprehensive long-range view of transportation issues, opportunities and needs for Lake County. The RTP identifies goals, objectives and policies for future transportation improvements within its 20-year horizon. The plan addresses actions that must be taken and the funding needs and options available for successful implementation.

It is the responsibility of local, state, and federal governments to implement the RTP. Implementation in the City of Lakeport is accomplished through the Five Year Roadway Capital improvement program.

Regulatory Setting

FEDERAL

There are no specific federal regulations applicable to land use planning.

STATE

There are no specific state regulations applicable to land use planning.

LOCAL

City of Lakeport Updated General Plan

Policies addressing Human Services were added to the Plan. The remaining policies have been modified to reflect existing conditions or are the same as in the currently adopted General Plan.

Land Use Element

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

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.

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 as well as for office and hotel developments.

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.

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 local-serving offices to locate in and near Downtown.

Program LU 2.7-a: The City of Lakeport should undertake an evaluation of the zoning code to possibly eliminate offices as a permitted use in the C2 zone.

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.

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.

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 industrially designated areas.

Policy LU 3.3: Environmental Compatibility. Limit industrial 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 Industrial 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 “industrial streets” in order to accommodate industrial 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 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, 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 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.
- 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.

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).

The Housing Element of the Lakeport General Plan, which was adopted in December of 2003 and readopted in July of 2004, contains the following policies:

- Policy 1 Housing Rehabilitation: Pursue available funding for the preservation and rehabilitation of viable older housing to preserve neighborhood character and, where possible, retain a supply of low and moderate-income units.
- Policy 2 Displacement of Residential Units: Discourage the conversion of older residential uses to other 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 3 Housing Sharing: Encourage and facilitate house sharing programs for senior citizens and other groups identified as having special housing needs.
- Policy 4 Condominium Conversions: Continue to regulate the conversion of existing multiple family residential units to market rate condominiums. Limited equity cooperatives and other innovative housing proposals which are affordable to very-low to low income households are encouraged.
- Policy 5 Relocation/Non-conforming Mobile Home Parks: Residents displaced from mobile home parks converted to other uses shall be provided relocation assistance pursuant to State Law. It shall be the responsibility of the developer to provide relocation assistance.
- Policy 6 Pursue Available Funding Sources: Pursue county, state and federal programs and funding sources that provide housing opportunities for low and moderate-income households.
- Policy 7 Mixed Use: Encourage the development of residential uses in existing and new commercial areas where the viability of the commercial activities would not be adversely affected.
- Policy 8 Limited Equity Cooperatives: Encourage limited equity residential cooperatives and other non-profit enterprises such as sweat-equity projects designed to provide affordable housing.
- Policy 9 Commercial and Office Projects: Consider impacts on housing demand in the Environmental Review process of commercial and office projects.

- Policy 10 Regional Housing Needs: Additional housing to meet the City's Regional Housing Need Allocations will be encouraged by a) actively encouraging the construction of multifamily housing and b) increasing the maximum residential density in four areas of the City indicated by Map 1.
- Policy 11 Second Dwelling Units: Continue to facilitate the construction of second dwelling units, pursuant to the City's Second Dwelling Unit Ordinance.
- Policy 2 Facilitate Additional Senior Housing: Facilitate senior housing projects developed with density bonuses and flexible parking, setback, lot coverage and other standards, as provided in the revised Zoning Ordinance, where found to be consistent with maintaining the character of the surrounding neighborhood.
- Policy 13 Housing for the Handicapped: Continue to facilitate housing for handicapped persons.
- Policy 14 Resale and Rental Controls on BMR Units: Require resale and rental controls on Below Market Rate (BMR) units.
- Policy 15 Large Families: Provide incentives for the construction of addition housing for large families requiring 3 or more bedroom units in multifamily dwellings.
- Policy 16 Monitor Conversion of Section 8 to Market Rate Units: Monitor Section 8 and other affordable BMR units that are scheduled to be converted to market rate units and develop programs preventing the loss of these affordable units.
- Policy 17 Emergency and Transitional Housing: Allow emergency and transitional shelter within the City as a permitted use in the C-1 and the C-2 Zoning District.
- Policy 18 Inter Agency Cooperation: Work with private, county, and state agencies to provide emergency housing for the homeless.
- Policy 19 Create Below Market Rate Units (BMRs): Require developers of residential developments a) make available a proportion of their units at rents or purchase provinces affordable to very-low or low income households; b) contribute in-lieu fees of comparable value; or c) propose alternative measures so that the equivalent of their BMR units will be available to, or affordable by, households with very-low and low incomes. (This policy may be implemented in conjunction with the Density Bonus policy below.)
- Policy 20 Density Bonus Incentives: Adopt a Density Bonus Ordinance to provide density bonuses and other incentives to projects which provide the required percentage total units affordable to very-low and low-income households and for units meeting the special housing needs identified in this Element as specified by State Law.

- Policy 21 Equal Housing Opportunity: Continue to facilitate non-discrimination in housing in Lakeport.
- Policy 22 Landlord-Tenant Disputes: Continue to refer landlord-tenant disputes to the Community Development Department.
- Policy 23 City Leadership: Provide active leadership in implementing the policies and programs contained in the Housing Element in a timely manner.
- Policy 24 Public Participation: Encourage and support public participation in the formulation and review of the City's housing and development policies.
- Policy 25 Redevelopment Agency: The Redevelopment Agency shall promote the implementation of the policies and goals of the Housing Element, through its unique powers.
- Policy 26 Annual Review of Housing Element Implementation: Planning Commission and City Council shall review annually progress in implementing the Housing Element including the progress in meeting its share of regional housing needs. A copy of the report shall be submitted to the Department of Housing and Community Development within 30 days after receipt by the City Council.

3.8.2 THRESHOLDS OF SIGNIFICANCE

A project is generally viewed as having an adverse impact on population if it has the potential to substantially alter the location, distribution, density or growth rate of the population of an area, thus increasing the likelihood of adverse environmental impacts. For the purposes of this EIR, and in consideration of Appendix G of the State CEQA Guidelines, a significant environmental impact would occur if the proposed General Plan Update will:

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the City of Lakeport General Plan) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The Initial Study found the following impacts to be less than significant, and they will not be discussed further in this EIR:

- Physically divide an established community.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

3.8.3 IMPACTS AND MITIGATION MEASURES

Impact #3.8-1: Changes in land use designations which may conflict with policies intended to avoid or mitigate an environmental effect.

Discussion/Conclusion: Proposed changes in land use designations for various vacant parcels that are part of the General Plan Update are summarized in Section 2.2. Although these changes will not in themselves lead to development, future development occurring under these proposed designations, such as projects located within the Specific Plan Area and downtown, could result in land-use conflicts with physical impacts on the environment; however, these projects will be subject to policies of the General Plan intended to avoid or minimize environmental effects as well as other local, state, and federal regulations. In addition, these projects will undergo separate review under the provisions of the California Environmental Quality Act (CEQA). This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

3.9 Noise

This section of the Draft Program Environmental Impact Report (Draft EIR) provides a discussion of the regulatory setting, a general description of existing noise sources and future noise that could be expected with build-out of the General Plan Update area. Following this discussion is an evaluation of the noise-related impacts on sensitive receptors and mitigation measures that could be used to reduce the impacts.

During the Notice of Preparation period, no comments were received regarding noise issues.

3.9.1 SETTING

Environmental Setting

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The decibel scale adjusted for A-weighting (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Over the audible range of pitch, the human ear is less sensitive to low frequencies and is more sensitive to midlevel and high-pitched sound.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time-varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise.

The Day-night Average Level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10 p.m. to 7 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variation in the noise environment.

NOISE SOURCES

The principal source of noise in Lakeport is vehicular traffic, boats and personal watercraft on Clear Lake, and the Lakeport Speedway at the County fairgrounds.

Vehicular Noise

Vehicular noise, including automobiles, trucks, buses, and motorcycles, is most prominent on Highway 29, Main Street, Lakeport Boulevard, 11th Street, and High Street. The Lakeport General Plan notes that 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.

Lakeport Speedway

The Lakeport Speedway is open for Saturday night races starting the second or third weekend in April and running through the weekend before Labor Day. It also hosts two Fall events—one in mid-September and on the third Sunday of October (pers. comm., Nadine Strauss, Speedway Manager, North State Racing Association, July 15, 2005).

Noise sources at the races include the race cars, the public address system, crowd noise, and spectator traffic. Given the fact that background noise levels are generally low at night (when the races take place), it is anticipated that the sound activity at the race track could be annoying to a great number of people in the vicinity of the track; however, it has been the experience of the City that residents are relatively conditioned to this activity and expect it as part of living in Lakeport.

Noise from Watercraft

Noise generated by powerboats and personal watercraft is the other major source of noise in Lakeport. Boats with large, un-muffled outboard engines are a particular nuisance. High noise levels from boats are also experienced when a large number of boats power up at the same time, such as bass fishing tournaments. Watercraft noise is typically restricted to the hours of daylight.

Lampson Field

The nearest airport to the General Plan Area is Lampson Field located three miles south of the City proper and over two and a half miles south of the proposed modified Sphere of Influence. Given its location, no significant amount of noise is produced by Lampson Field.

SENSITIVE NOISE RECEPTORS

Sensitive receptors are people that are most affected by high noise levels. Young children and elders are typically considered sensitive receptors. Existing land uses located within the City of Lakeport that are sensitive to intrusive noise include hospitals, convalescent facilities, parks, and residential areas, schools, and libraries. Industrial and commercial land uses have the lowest concentrations of sensitive receptors at any given time when compared to the other types of land uses.

SPECIFIC PLAN AREA

The updated Lakeport General Plan includes a new land-use designation—Specific Plan Area for approximately 600 acres of City-owned property within the City’s proposed Sphere of Influence (see [Figure 2-2](#)). The proposed General Plan Update recommends for this area a mixed combination of residential development, including cooperative ownership properties to serve the vacation market, plus very limited commercial. Based on the recommended density range of 1-4 units per acre, the Specific Plan Area could see between 600 and 2,400 residential units at build-out.

Development of the Specific Plan Area will add both noise sources and receptors sensitive to noise. New noise sources could include temporary noise from operation of construction equipment during development and permanent traffic noise from developed areas. New sensitive receptors could include new residences, schools, libraries, child care facilities, elder care facilities, and parks.

PROPOSED ADDITIONAL GENERAL PLAN POLICIES

The following noise policy has been proposed in the General Plan Update:

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.

Regulatory Setting

FEDERAL

There are no specific federal regulations applicable to noise.

STATE

California law establishes minimum noise insulation standards for hotels, motels, dormitories, long-term care facilities, apartment houses and dwellings other than detached single-family dwellings. Interior noise levels may not exceed 45 dB CNEL (CNEL is a noise descriptor

similar to the Ldn or Ldn in any habitable room). Where exterior noise levels exceed 60 dB, CNEL, or Ldn, an acoustical analysis is required to show that the proposed design will limit exterior noise to the prescribed allowable interior level (State Building Code, Part 2, Title 24, CCR, Section 3501).

LOCAL

City of Lakeport Updated General Plan

As noted above, a policy was added to the General Plan to address the issue of soundwalls. The policies have been modified to reflect existing conditions or are the same as in the currently adopted General Plan. Please note that references to Table 16 in the policies below are referring to a table in the General Plan.

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.

Program N 1.1-b: Require a standard of Ldn 45 dB for indoor noise for all new residential development, including hotels and motels.

Program N 1.1-c: Use the 'Normally Acceptable' standard 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.

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.

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.

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.

Program N 2.1-b: Consider and carefully evaluate the noise impacts of all street, highway and other transportation projects.

Program N 2.1-c: Continue to seek State and Federal funding to construct noise barriers where impact of noise can be significantly reduced.

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 65 dB Ldn at the boundary of a residential area, whichever is the more restrictive standard.

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.

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.

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](#).

Program N 2.2-d: 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.

Program N 2.2-e: The City should work in a cooperative manner with the County and State to explore options for mitigating noise impacts from the Fairgrounds.

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.

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.

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.

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.]

Program N 3.2-b: Continue to enforce the existing Lakeport Noise Ordinance.

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.

3.9.2 THRESHOLDS OF SIGNIFICANCE

California Environmental Quality Act (CEQA) Guidelines define a significant impact of a project if it “increases substantially the ambient noise levels for adjoining areas.” Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

According to [Table 3.9-1](#), an increase in the traffic noise level of 1.5 dB or more would be significant where the ambient noise level exceeds 65 dB Ldn. The rationale for the [Table 3.9-1](#) criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant annoyance.

Table 3.9-1
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, Ldn	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

In addition, based on the significance criteria contained in Appendix G of the CEQA Guidelines, a project may have a significant adverse noise impact if it will result in any of the following impacts:

- Expose persons to or generate noise levels in excess of standards established in the *Lakeport General Plan* or noise ordinance, or applicable standards of other agencies.
- Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.
- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

3.9.3 IMPACTS AND MITIGATION MEASURES

Impact #3.9-1: Exposure of noise-sensitive land uses to construction noise, excessive ground-borne vibration or ground-borne noise levels.

Discussion/Conclusion: Adoption of the updated General Plan will not have direct impacts on noise levels. Future development activities, in accordance with the provisions of the updated General Plan, such as projects located within the Specific Plan Area and downtown, could potentially expose people living or working in the vicinity of this development to construction noise, excessive ground-borne vibration or ground-borne noise levels. However, these development projects will be subject to Noise and Land Use Compatibility Standards (see

Table 15 of the General Plan) and other policies in the General Plan designed to maintain or reduce existing noise levels. In addition, these projects will undergo separate review under the provisions of the California Environmental Quality Act (CEQA). This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.9-2: Exposure of noise-sensitive land uses to a substantial temporary, periodic or permanent increase in ambient noise levels.

Discussion/Conclusion: Adoption of the updated General Plan will not have direct impacts on noise levels. Future development activities, in accordance with the provisions of the updated General Plan, such as projects located within the Specific Plan Area and downtown, could potentially expose people living or working in the vicinity of this development to substantial temporary, periodic or permanent increase in ambient noise levels. However, these development projects will be subject to Noise and Land Use Compatibility Standards (see Table 3.9-1) and other policies in the General Plan designed to maintain or reduce existing noise levels. In addition, these projects will undergo separate review under the provisions of CEQA. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.9-3: For a project within the vicinity of a private airstrip, would the project expose people living or working in the General Plan area to excessive noise levels.

Discussion/Conclusion: The area included in the General Plan update is nearly 2.5 miles away from the closest airport facility; therefore, there is *no impact*.

Mitigation Measures

No mitigation measures are required.

3.10 Population and Housing

This section of the Draft Program Environmental Impact Report (Draft EIR) addresses the impact of adoption and implementation of the Lakeport General Plan Update on the city's population growth. No comments were received on this topic during the NOP period.

3.10.1 SETTING

Environmental Setting

POPULATION GROWTH AND DEMAND FOR LAND

According to the California State Department of Finance, Lakeport is projected to have approximately 6,859 residents in 2025 (see [Table 3.10-1](#)). This projection represents a slight increase in the growth rate over the 2000-2005 period. During this time frame, average annual growth was 1.33%. The projected growth rate for the 2005-2025 period will be approximately 1.445% annually. Household size would remain constant, at 2.36 persons per household. Based on this projection, the City would see an additional 1,709 residents over the next 20 years.

Table 3.10-1
Population and Household Projections, 2000 to 2025* – City of Lakeport

	2000*	2005*	2010*	2015*	2020*	2025*
Total Population*	4,820	5,145	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.

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 3.10-1](#)) and an analysis of vacant and under-utilized lands currently within the City limits ([Tables 3.10-2 and 3.10-3](#)). As of January 1, 2005, the population of Lakeport is estimated to be approximately 5,145 with no additional residential land needed, 11 acres of commercial land needed, and no 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. Some of the projected land need can be found in existing vacant infill land within the City.

Table 3.10-2
Vacant Commercial Land Inventory – City of Lakeport

Vacant Commercial Acres	61.03
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 3.10-3
Vacant Residential Land Inventory – City of Lakeport

Residential Designation	Acres
Low Density	85.02
Medium Density	6.44
High Density	10.54
Total	102

Source: City of Lakeport Planning Department

Table 3.10-4
Community Development Needs, 2005-2025* – City of Lakeport

Year	Population	Added Residential (Acres)	Added Commercial (Acres)	Added 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.

Much of the land needed to accommodate projected population growth is located within the current city limits. The updated General Plan recommends including approximately 600 acres of City-owned property as a proposed Specific Plan, containing a mixed combination of residential development, including cooperative ownership properties to serve the vacation market, plus very limited commercial. The Specific Plan Area could see approximately 1,200 residential units at build-out. Based on an average household size of 2.36, this build-out would add approximately 2,832 residents (see [Table 3.10-5](#)). It should be noted that any development of this site would exceed the projected 20-year population increase of 1,709.

Table 3.10-5
Population Projection for 600-Acre Specific Plan Area

Density – Residential Units Per Acre	Number of Units	Average Household Size	Number of Residents
One	600	2.36	1,416
Two	1200	2.36	2,832
Three	1800	2.36	4,248
Four	2,400	2.36	5,664

Source: Quad Knopf, Inc.

Regulatory Setting

FEDERAL AND STATE

There are no specific federal or state regulations applicable to population and housing.

LOCAL

City of Lakeport Updated General Plan

Housing Element

The plan update did not include any changes to the Housing Element that was adopted in July 2004.

- Policy 1 Housing Rehabilitation: Pursue available funding for the preservation and rehabilitation of viable older housing to preserve neighborhood character and, where possible, retain a supply of low and moderate-income units.
- Policy 2 Displacement of Residential Units: Discourage the conversion of older residential uses to other 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 3 House Sharing: Encourage and facilitate house-sharing programs for senior citizens and other groups identified as having special housing needs.
- Policy 4 Condominium Conversions: Continue to regulate the conversion of existing multiple family residential units to market rate condominiums: Limited equity cooperatives and other innovative housing proposals which are affordable to very-low to low-income households are encouraged.
- Policy 5 Relocation of Non-conforming Mobile Home Parks: Residents displaced from mobile home parks converted to other uses shall be provided relocation assistance pursuant to State Law. It shall be the responsibility of the developer to provide relocation assistance.
- Policy 6 Pursue Available Funding Sources: Pursue county, state and federal programs and funding sources that provide housing opportunities for low and moderate-income households.
- Policy 7 Mixed Use: Encourage the development of residential uses in existing and new commercial areas where the viability of the commercial activities would not be adversely affected.
- Policy 8 Limited Equity Cooperatives: Encourage limited equity residential cooperatives and other Non-profit enterprises such as sweat-equity projects designed to provide affordable housing.
- Policy 9 Commercial and Office Projects: Consider impacts on housing demand in the Environmental Review process of commercial and office projects.

- Policy 10 Regional Housing Needs: Additional housing to meet the City's Regional Housing Need Allocations will be encouraged by a) actively encouraging and assisting the construction of multifamily housing and b) encouraging utilization of density bonuses in support of affordable housing.
- Policy 11 Second Dwelling Units: Continue to facilitate the construction of second dwelling units, pursuant to the City's Second Dwelling Unit Ordinance.
- Policy 12 Facilitate additional Senior Housing: Facilitate senior housing projects developed with density bonuses and flexible parking, setback, lot coverage and other standards, as provided in the revised Zoning Ordinance, where found to be consistent with maintaining the character of the surrounding neighborhood.
- Policy 13 Housing for the Handicapped: Continue to facilitate housing for handicapped persons.
- Policy 14 Resale and Rental Control on BMR Units: Require resale and rental controls on Below Market Rate [BMR] units.
- Policy 15 Large Families: Consider incentives for the construction of additional housing for large families requiring 3 or more bedroom units in multifamily dwellings.
- Policy 16 Monitor Conversion of Section 8 to Market Rate Units: Monitor Section 8 and other affordable Below Market Rate (BMR) units that are scheduled to be converted to market rate units and develop programs preventing the loss of these affordable units.
- Policy 17 Emergency and Transitional Housing: Consider amending the Zoning Ordinance to allow emergency and transitional shelter within the City as a permitted use in the C-1 and the C-2 Zoning District.
- Policy 18 Inter Agency Cooperation: Work with private, county, and state agencies to provide emergency housing for the homeless.
- Policy 19 Create Below Market Rate Units (BMR): Consider an ordinance to require developers of residential developments dedicate a proportion of their units at rents or purchase prices affordable to very-low or low income households; b) contribute in-lieu-fees of comparable value; or c) propose alternative measures so that the equivalent of their required BMR units will be available to, or affordable by, households with very-low and low incomes. (This policy may be implemented in conjunction with the Density Bonus policy below.)
- Policy 20 Density Bonus Incentives: Adopt a Density Bonus Ordinance to provide density bonuses and other incentives to projects which provide the required percentage total units affordable to very-low and low-income households and for units meeting the special housing needs identified in this Element as specified by State law.

- Policy 21 Equal Housing Opportunity: Continue to facilitate non-discrimination in housing in Lakeport.
- Policy 22 Landlord-Tenant Disputes: Continue to refer landlord-tenant disputes to the Community Development Department.
- Policy 23 City Leadership: Provide active leadership in implementing the policies and programs contained in the Housing Element in a timely manner.
- Policy 24 Public Participation: Encourage and support public participation in the formulation and review of the City's housing and development policies.
- Policy 25 Redevelopment Agency: Encourage the Redevelopment Agency to promote the implementation of the policies and goals of the Housing Element, through its unique powers.
- Policy 26 Annual Review of Housing Element Implementation: Planning Commission and City Council shall annually review progress in implementing the Housing Element including the progress in meeting its share of regional housing needs.

3.10.2 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on the environment if it will:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

The Initial Study determined that the following impacts were less than significant, and they will not be further discussed in this EIR:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

3.10.3 IMPACTS AND MITIGATION MEASURES

Impact #3.10-1: Development in the Specific Plan Area in accordance with the updated General Plan would increase the population in planning area.

Discussion/Conclusion: Adoption and implementation of the General Plan update will add approximately 600 acres of vacant land, designated as a Specific Plan Area, to the City of Lakeport's Sphere of Influence. Although the change in the Sphere of Influence and designation of the Specific Plan Area will not directly lead to development, future development in accordance with the updated general plan would add new residents to the city. Table 3.10-6 shows that a potential of 1,200 residential dwelling units could be constructed in the Specific Plan Area, assuming the maximum building intensity specified under this proposed designation. Based on the U.S. Census 2000 estimate of the household size in Lakeport of 2.36 persons, this future development would result in the addition of 5,664 residents to the area within the Sphere of Influence. The proposed project is therefore *growth inducing*, and this impact is *potentially significant*.

Table 3.10-6

Residential Build-Out Figures: Lakeport and Sphere of Influence

Area	Building Intensity (units/acre)	Vacant Land Area in Acres	Additional Dwellings (at 100% of max. density)	Additional Dwellings (at 75% of max. density)
<i>Within City Limits</i>				
Low Density Residential	7.3	68.4	499	374
Medium Density Residential	19.3	7.05	136	102
High Density Residential	29	16.61	481	361
Total Within City Limits	--	92.06	1,116	837
<i>Sphere of Influence</i>				
Specific Plan Area ¹	4	600 ²	--	2,400
Total Potential Residential Build-out	--	692.06	--	3,237

¹Building intensity equivalent to 75% of maximum density.
²Approximate acreage.

Source: Quad Knopf, Inc.

Mitigation Measures

The following mitigation measure will reduce this impact, but not to a less than significant level. This impact remains *significant and unavoidable*.

Mitigation Measure #3.10-1:

A specific plan shall be prepared for the 600 acre site designated as a specific plan area. This specific plan shall be completed in accordance with the provisions Section 65450 through 65457 of the California Government Code. The specific plan will identify the

location of all utilities and circulation systems and be prepared in accordance with the Lakeport General Plan. Prior to adoption of the specific plan, an environmental review shall be required pursuant to the California Environmental Quality Act.

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3.11 Public Services and Recreation

This section of the Draft Program Environmental Impact Report (Draft EIR) analyzes the potential demands on public services and recreation generated by implementation of the proposed general plan update, and makes a determination on the significance of this impact on the providers of these facilities and services. Public services included in this analysis are police enforcement, fire protection, schools, and parks and recreational facilities.

During the Notice of Preparation (NOP) period, two comments were received regarding impacts on public services. These comments were with regard to schools and were submitted by Mendocino College and Lakeport Unified School District.

3.11.1 SETTING

Environmental Setting

POLICE ENFORCEMENT

The Lakeport Police Department provides 24-hour police protection for the city, including patrol, traffic and parking enforcement, investigations, a school resource officer, special response team, narcotics task force and community crime prevention. The Department has 14 sworn officers, two full-time clerical staff, and two part-time clerical positions. The Department constructed and occupied a new station in 1998. The new 3,500 square foot facility provides adequate space for the foreseeable future. The City maintains a mutual aid agreement with the Lake County Sheriff's Department. Dispatch is coordinated through the Lake County Sheriff, including 911 calls.

According to the October 2003 Draft Municipal Services Review for the Lakeport local Agency Formation Commission (LAFCO), the Police Chief reports that the crime level in the community is low, and the ratio of sworn officers to resident population is relatively high when compared to cities of comparable size. The Department deploys one officer on patrol in the City at all times, with general coverage of the City, and no "beat" system.

Calls for police service rise in the summer when the number of residents increases. The annual summer increase in population poses substantial, but predictable and manageable, challenges for the Police Department.

The 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.

FIRE PROTECTION

The Lakeport Fire Protection District provides fire protection and emergency medical services for the City of Lakeport and surrounding areas with a total coverage area of 42.5 square miles. The district is the result of a merger in 2000 in which the district merged with the City of Lakeport's fire department, which was formed in 1956.

The district employs six paid firefighters and 18 volunteers. In 2002, the district responded to 93 fire calls, 939 emergency medical responses, and 416 miscellaneous calls. The average response time for Fire/EMS services within the District is 3 to 4 minutes. The average remote distance response time is eight minutes. There are some remote areas within the district in which these response times would be further extended, especially during winter months. The district provides its own ambulance service.

Fire flows within the district's service area are generally adequate. Some hydrants within the Finley service area experience poor flow rates and will need to be upgraded soon.

The primary fire station in Lakeport is located at 445 North Main Street, Lakeport. There is also a substation outside the city limits at 3600 Hill Road East, Lakeport.

SCHOOLS

K-12 educational services are provided by the Lakeport Unified School District (LUSD). The District encompasses five schools serving grades K through 12. The district currently has a total enrollment of approximately 1,792 students and employs 197 teachers, administrators and support staff. The district's current teacher-to-pupil ratio is 19.6 to one. Information about each school within the District is summarized in [Table 3.11-1](#) below.

Table 3.11-1
Summary of Schools in the Lakeport Unified School District

School / Address	Type / Grades	Total Enrollment	Average Class Size
Lakeport Elementary 150 Lange Street, Lakeport	Elementary K-3	507	19.2
Lakeport Alternative School 150 Lange Street, Lakeport	Alternative K-12	59	n/a
Terrace Heights School 250 Lange Street, Lakeport	Middle 4-8	680	26.8
Clear Lake High School 350 Lange Street, Lakeport	High 9-12	504	24.1
Natural High Continuation School 100 Lange Street	Continuation 9-12	42	42

Source: California Department of Education, Ed-Data 2003-2004

The district is currently undergoing a modernization project in which many of the classroom facilities are being modernized and upgraded. Two classrooms will be added at Terrace Heights

School. As of June 2004, Lakeport Unified School District staff has reported that the district is not over crowded and is well situated to absorb anticipated community growth.

Lakeport is within commuting distance of several higher education facilities including junior colleges, universities, and private institutes. These facilities include:

- Lakeport Campus of Mendocino College (0 miles)
- Clearlake Community College in Clearlake (25 miles away)
- Mendocino College located in Ukiah (36 miles away)
- Santa Rosa Junior College located in Santa Rosa (66 miles away)
- California State University, Sonoma located in Rohnert Park (74 miles away)
- Napa Valley College located in Napa (75 miles away)

PARKS AND RECREATIONAL FACILITIES

The City of Lakeport maintains a system of parks, recreation centers and open space for its citizens. In addition to City parks, recreational facilities are provided at the Highland Springs Reservoir, Lake County Fairgrounds, the County Park, Clearlake State Park and the Westshore swimming pool. Community use of school playing fields provides additional recreational facilities.

As shown in [Table 3.11-2](#) below, the City has approximately 63.5 acres of parkland not including recreational facilities located at public schools. Lakeport's park and recreational facilities include: parks, sports centers, park and retention basins, and undeveloped parks.

Table 3.11-2
City of Lakeport Parks and Recreational Facilities

Park	Size (acres)	Current Use
Lakefront Park	5.0	Picnicking, boat ramp
Library Park	3.5	Picnicking, play lot, gazebo, boat ramp, dock, and swimming
Westside Community Park	55	Athletic fields, playground (16.5 acres have been developed at this point, the remainder will be developed as funds become available)

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 the Lakeport Unified School District. Not including the school district's park acreage, there are approximately 12 acres of City-owned parkland per 1,000 residents.

According to the current Lakeport General Plan, a standard of five acres of developed parkland per 1,000 residents has been adopted, pursuant to the Quimby Act [Government Code § 66477 (a)-(f)]. Under the Quimby Act, cities may, by ordinance, require the dedication of land and/or impose a requirement for payment of an in-lieu fee for acquiring and developing parkland. While the City has acquired sufficient park lands to satisfy this requirement, 25 acres of parkland have been developed. Currently, Lakeport has a ratio of approximately 4.8 acres of developed parkland per 1,000 residents.

GENERAL PLAN UPDATE

The updated General Plan proposes the revision of Policy 21 to reference the California Building Code rather than the Uniform Building Code as well as the deletion of associated Programs 21.1 and 21.2. The updated Plan also proposed the deletion of Program 25.2 because a new, centrally located police building has been constructed in the City.

The following Policies and Programs related to parks and recreation have been proposed for deletion by the updated General Plan: Policies 44, 45, 47, 49, 50, 58, 59, 60, 63, 64, 65 and Programs 49.1, 50.1, 52.1, 59.1, 59.2, 59.3, 59.4, 63.1, 63.2, 63.3, 64.1. These Policies and Programs relate to specific planned park improvements, the organization of parks management and maintenance, and park criteria. As proposed by the updated General Plan, these issues and policies will be contained in a Parks Master Plan and parks will be managed by a Park and Recreation District according to new Policies PR 1.1 and PR 1.2 and Program PR 1.2-a.

Regulatory Setting

FEDERAL

There are no specific federal regulations applicable to public services and recreation.

STATE

AB 2926 School Impact Fees

As of January 1987, State law allows school districts to levy development fees directly on new residential, commercial, and industrial development. The current developer's fee for residential developments is \$2.97 per square foot of assessable space and \$0.47 per square foot of commercial space (as of 1/08).

Quimby Act

Section 66477 of this law enables dedication of land or payment of an in-lieu fee to provide park and recreation facilities to serve a subdivision. The amount of the exaction is limited by statute and must be based upon the policies and standards contained in an adopted general or specific plan.

LOCAL

City of Lakeport Updated General Plan

As noted above, a number of policies were replaced with new policies that reflect current conditions. Other policies are slightly modified or are the same as in the existing General Plan.

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.¹

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 Departments/Fire 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.

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.

¹ 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 3.10: 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 Departments 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 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.

Conservation, Open Space and Parks Element:

Policy PR 1.1: Parks Master Plan. Develop a City Parks Master Plan which identifies 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 geoseismic 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, 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, the Lake County Community College District and the Recreation and Park District [if and when established] 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.

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.

3.11.2 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on public services and recreation if it will:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratio, response times or other performance objectives for any of the public services (fire protection, police protection, schools, parks, other public facilities);
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;
- Include recreational facilities or requires the construction of expansion of recreational facilities which might have an adverse physical effect on the environment;

- Result in the loss of land previously proposed for recreational use.

3.11.3 IMPACTS AND MITIGATION MEASURES

Impact #3.11-1: Increased demand for law enforcement services in the plan area.

Discussion/Conclusion: Adoption of the General Plan will not directly result in an increased demand for law enforcement services in Lakeport; however, the General Plan update includes the addition of a 600 acre area to the city's Sphere of Influence thereby making it available for future development. This new development will result in an increased demand for services including staffing and equipment. All future development will undergo project-level environmental review to fully analyze this potential impact. Additionally, individual developers may be responsible for paying developer's fees to mitigate impacts on law enforcement services. Given that this is not a direct impact of the proposed General Plan and it will be further analyzed and mitigated before development occurs, this impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.11-2: Increased demand for fire protection services in the plan area.

Discussion/Conclusion: Adoption of the General Plan will not directly result in an increased demand for fire protection services in Lakeport; however, the General Plan update includes the addition of a 600 acre area to the City's Sphere of Influence thereby making it available for future development. This new development will result in an increased demand for services including staffing and equipment. All future development will undergo project-level environmental review to fully analyze this potential impact. Additionally, individual developers will be responsible for paying developer's fees to mitigate impacts on fire protection services. Given that this is not a direct impact of the proposed General Plan and it will be further analyzed and mitigated before development occurs, this impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.11-3: Impacts to local schools resulting from increased population and school enrollment in the plan area.

Discussion/Conclusion: Adoption of the General Plan will not directly result in increased school enrollment and associated impacts to local schools; however, the General Plan update includes the addition of a 600 acre area to the City's Sphere of Influence thereby making it available for future development. This new development will result in an increased local population and school enrollment. All future development will undergo appropriate project-level environmental review to fully analyze this potential impact. Additionally, individual developers will be responsible for paying school impact fees, pursuant to Education Code Section 17620, to

mitigate such impacts on local schools. Since Proposition 1A was passed by the voters and SB 50 was passed by the State Legislature in 1996, school fees generated by new development have been deemed legally sufficient mitigation of any impacts based on generation of students on school facilities, provided school impact fees are collected pursuant to State law. Given that this is not a direct impact of the proposed General Plan and it will be further analyzed and mitigated before development occurs, this impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.11-4: Increased demand on parks and recreational facilities resulting from increased population in the plan area.

Discussion/Conclusion: Adoption of the General Plan will not directly result in increased population and associated demand on parks and recreational facilities. However, the General Plan update includes the addition of a 600 acre area to the City's Sphere of Influence thereby making it available for future development. This new development will result in an increased population and demand on parks and other recreational facilities. All such future development will undergo appropriate project-level environmental review to fully analyze this potential impact. Additionally, individual developers will be responsible for the payment of developer's fees or the dedication of land to mitigate impacts on parks and recreation. Given that this is not a direct impact of the proposed project and it will be further analyzed and mitigated before development occurs, this impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

3.12 Transportation/Traffic

This section of the Draft Program Environmental Impact Report (Draft EIR) discusses the existing transportation, traffic and circulation conditions in the City of Lakeport and provides an evaluation of the effects of the proposed general plan update on these conditions. The following discussion presents the existing conditions, impacts and required mitigation measures for the proposed general plan. The analysis that provides the basis for this section was prepared by KDAnderson in August 2006 (see [Appendix E](#)).

During the Notice of Preparation (NOP) period no comments were received regarding transportation/traffic.

3.12.1 SETTING

Traffic

EXISTING ROADWAY NETWORK AND TRAFFIC FLOW

The City of Lakeport's existing roadway network is illustrated in [Figure 3.12-1](#). 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.

[Table 3.12-1](#) below contains definitions taken from the existing City's General Plan of the major categories of streets including freeways, arterials, collectors, and local streets. [Table 3.12-2](#) classifies each major roadway located in Lakeport into one of these categories.

Table 3.12-1

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.

Street Type	Definition
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.

Source: City of Lakeport, *Lakeport General Plan*, 1992

Table 3.12-2

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 Street			•	
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			•	
Hill Road West		•		
Howard Avenue			•	
Industrial Avenue			•	
Kimberly Drive			•	
Lakeport Boulevard		•		
Lakeshore Drive		•		
Lange Street			•	
Larrecou Lane			•	
Loch Drive			•	
Main Street		•		
Martin Street		•		
McMahan Road			•	
Mellor Drive			•	
Mountview Road			•	
Page Drive			•	
Parallel Drive		•		

Name of Roadway	Freeway	Arterial	Collector	Local
Park Street				•
Pool Street			•	
Rainbow Road			•	
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			•	

Source: City of Lakeport, *Lakeport General Plan*, 1992

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 Main 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 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 the follow locations as indicated in [Figure 3.12-1](#):

- Eleventh Street
- Lakeport Boulevard
- 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 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 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.

Levels of Service and Traffic Volume

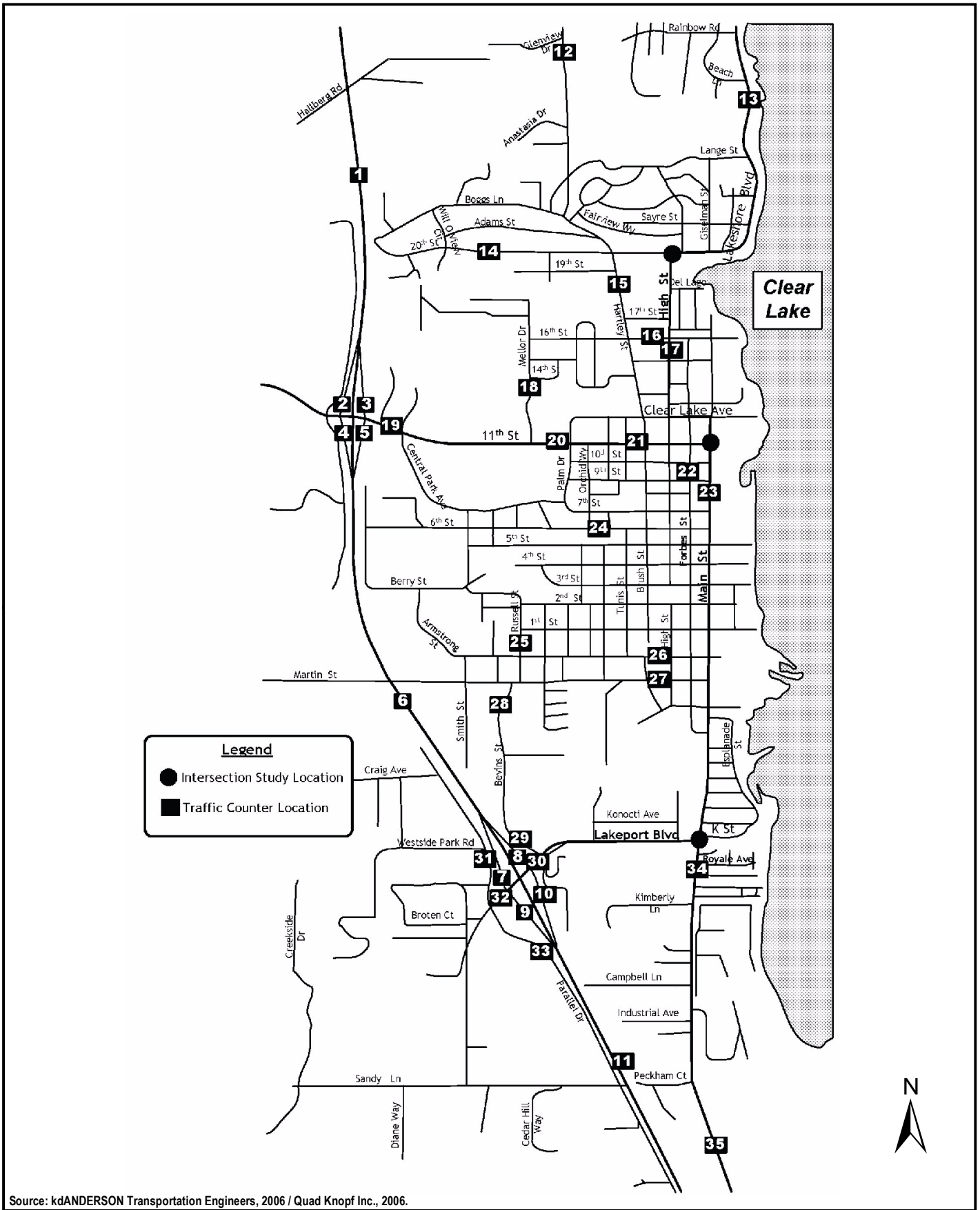
To describe current traffic conditions and put current traffic volumes into perspective, existing traffic volumes and future forecasts were compared to Level of Service thresholds employed by applicable planning agencies. “Level of Service” is a qualitative measure of traffic operating conditions whereby a letter grade, “A” through “F,” corresponding to progressively worsening traffic operating conditions, is assigned to an intersection or roadway segment. The current City of Lakeport General Plan EIR indicates that LOS “C” is the applicable design standard. [Table 3.12-3](#) below explains in more detail the Level of Service Concept.

Table 3.12-3
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+

Source: City of Lakeport, *Lakeport General Plan*, 1992.

Levels of Service thresholds were developed based on review of the current General Plan and other recent traffic studies completed in Lakeport. No readily identifiable thresholds have been used which equate daily traffic volumes with general planning level Levels of Service. Thus thresholds previously developed by the Florida Department of Transportation (FDOT) and employed by many California planning agencies were used to identify Levels of Service on city streets.



LAKEPORT GENERAL PLAN EIR TRAFFIC STUDY LOCATIONS AND CURRENT ROAD NETWORK

Figure 3.12-1

The FDOT materials accompanying the Corridor Management Plan (CMP) suggest that the presence of a raised median could increase Level of Service thresholds by about five percent. While the presence of wide 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 3.12-4](#).

Table 3.12-4
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, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

Level of Service thresholds have also been identified for State Route 29 using the procedures contained in the 2000 Highway Capacity Manual (HCM) assuming a 60/40 percent peak hour split and 10 percent of the Average Daily Traffic (ADT) in the peak hour.

Current Traffic Conditions. As part of this study, new traffic counts were made at locations on major roads in Lakeport in order to supplement data available from Caltrans for state highways and from other recent studies. This sample of current traffic volumes is intended to look at those roads which already carry major traffic volumes and which are expected to carry high traffic volumes in the future. These new counts were conducted in January 2005. Count locations are presented in [Figure 3.12-1](#), while these counts are presented in [Table 3.12-5](#). As noted, the current daily traffic volume on most of these roads fall within the Level of Service “C” standard, indicating that current traffic conditions in the community are good.

Table 3.12-5
January 2005 Daily Traffic Volumes and Levels of Service

Road	Location from	To	Count #	Year 2005		
				Class 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

Road	Location from	To	Count #	Year 2005		
				Class Lanes	Daily Volume (1/05)	LOS
	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 Drive	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	8 th Street	9 th Street	22	Art 3	3,840	C
Main Street	7 th Street	9 th Street	23	Art 2	9,200	C
Sixth Street	Manzanita	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	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, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

Current Peak Hour Levels of Service. 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. These locations were identified by City staff based on local knowledge of locations where improvements may soon be warranted. Traffic counts for these calculations were also collected in January 2005. Levels of Service were calculated using the methodologies presented in the 2000 HCM, and the results are presented in [Table 3.12-6](#). 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 and do not currently require signalization based on Level of Service (as shown in the table below); however, the existing volume of traffic at the Main Street/Lakeport Blvd intersection does currently satisfies Caltrans’ criteria (Warrant No. 11) for requiring signalization.

Table 3.12-6
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 ¹
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
¹ Although LOS peak hour is an acceptable level of service that would not require signalization, the actual volume of traffic would satisfy Caltrans criteria for signalization.						

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, 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 3.12-7](#), peak month volumes are about 6 to 12 percent higher than the annual average.

Table 3.12-7
January 2005 Daily Traffic Volumes and Levels of Service

Road	Location from	To	Daily Traffic 2005	
			Average Annual Volume	Peak Month
State Highway				
SR 29	Park Way	11 th Street	12,700	13,900
	11 th Street	Lakeport Blvd	14,600	15,900
	Lakeport Blvd	SR 175	13,100	14,000
	SR 175	South	12,500	12,900
SR 175	Hopland	SR 29	820	920

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

Historic Growth Trends

Data available from the previous General Plan Update can be useful for gaining perspective on traffic conditions in Lakeport. [Table 3.12-8](#) compares recent traffic counts with 1991 data presented in the prior General Plan Update Draft EIR. As shown, where comparable data is available, annualized growth rates have not been appreciably large.

Table 3.12-8
Historic Traffic Volume Growth Trends

Road	Location from	To	Daily Volume			
			April 1991	2003	January 2005	Annual % Increase
State Highway						
SR 29	Park Way	11 th Street	9,264	11,700	12,700	1.3%
	11 th Street	Lakeport Blvd	9,068	14,000	14,600	2.0%
	Lakeport Blvd	SR 175	10,965	12,600	13,100	0.7%
	SR 175	South	9,066	12,000	12,500	1.4%
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	>0.0%
16 th Street	Hartley Street	High Street			870	
High Street	15 th Street	16 th Street	9,275		8,200	>0.0%
Mellor Drive	14 th Street	11 th Street			1,050	
11 th Street	SR 29	Central Park Ave	11,000		11,020	0.0%
11 th Street	Mellor Drive	Pool Street			11,030	
11 th Street	Tunis Street	Brush Street	9,000		9,100	0.0%
Forbes Street	8 th Street	9 th Street			3,840	
Main Street	7 th Street	9 th Street	13,000		9,200	>0.0%
Sixth Street	Orchid Way	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	>0.0%
Bevins Street	Bevins Court	Martin Street	2,654		3,480	1.1%
Bevins Street	Lakeport Blvd	Bevins Court			4,290	
Lakeport Blvd	SR 29	Bevins Street	10,000		11,925	0.7%
Parallel Drive	north	Lakeport Blvd			3,500	
Lakeport	Parallel Dr	SR 29			11,940	
Parallel Drive	Lakeport Blvd	Sandy Lane			1,320	
Main Street	Royale Ave	Kimberly Lane	9,500		9,900	0.2%
Main Street	Lakeport Blvd	Martin Street			7,940	

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

Trip Generation Methodology, Assumptions and Results

To evaluate the impacts of implementing the General Plan Update it was necessary to identify and quantify the land use expected to develop over the life of the General Plan, identify the amount of vehicular traffic accompanying that development, assign traffic to the planned circulation system and determine resulting Levels of Service.

The amount of new residential and non-residential land use that could be developed under the new General Plan has been identified based on an inventory of vacant property within the

General Plan area. The land use quantities assumed for this study are presented in [Table 3.12-9](#). As shown, development under the proposed General Plan would yield more than 2,700 new dwellings, more than 473 new hotel rooms, 700 RV spaces along with nearly 1.0 million square feet of new commercial space.

Table 3.12-9
New Land Use Developed Under the Lakeport General Plan

Land Use Designation	Acres	Yield
Residential		
Urban Reserves	155.38 acres	100 new du's
Low Density Residential	350.8 acres	1,063 new du's
Medium Density Residential	7.05 acres	49 new du's
High Density Residential	19.84 acres	298 new du's
Specific Plan Area	600 acres	1,200 new du's
Resort Residential	41.61 acres	473 new hotel rooms / 700 RV spaces
Total	1,174.68 acres	2,710 new du's, 473 new hotel rooms and 700 RV spaces
Non-Residential		
Central Business District	0.14 acres	3,700 sf
Civic / Public	170.80 acres	25,700 sf of building and 168 acres parks
Industrial	4.15 acres	45,500 sf
Office	7.44 acres	194,200 sf
Light Retail	0.54 acres	5,900 sf
Major Retail	73 acres	803,400 sf
Golf Course	150 acres	18 holes and restaurant
Total	406.87	1,078,400 sf

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

Traffic engineers describe the amount of vehicular activity associated with development proposals in terms of vehicle “trip ends.” The rate at which various land uses generate new “trips” is typically determined through observation of similar uses and by compiling data from many nationally recognized sources of trip generation rates. The most widely accepted source is the Institute of Transportation Engineers (ITE) publication *Trip Generation*, 7th Edition.

[Table 3.12-10](#) identifies trip generation rates that would be applicable for the broad land use categories identified in the Lakeport General Plan.

Table 3.12-10
Trip Generation Rates

Land Use Designation	Description	Unit	Trips Per Unit		
			Daily	A.M. Peak Hour	P.M. Peak Hour
Residential					
Urban Reserves	Single Family Residential	Dwelling	9.60	0.75	1.01
Low Density Residential	Single Family Residential	Dwelling	9.60	0.75	1.01
Medium Density Residential	Single Family Residential	Dwelling	9.60	0.75	1.01

Land Use Designation	Description	Unit	Trips Per Unit		
			Daily	A.M. Peak Hour	P.M. Peak Hour
High Density Residential	Townhouse / Condo	Dwelling	5.90	0.44	0.52
Specific Plan Area	Single Family Residential	Dwelling	9.60	0.75	1.01
Resort Residential	Resort Hotel	Rooms	5.80	0.31	0.42
Non-Residential					
Central Business District	General Office Building	1,000 sf	11.00	1.55	1.49
Civic / Public	170.80 acres				
Industrial	Industrial Park	1,000 sf	7.00	0.84	0.86
Office	General Office Building	1,000 sf	11.00	1.55	1.49
Light Retail	Specialty Retail	1,000 sf	44.00	2.71	2.71
Major Retail	Regional Shopping Center (i.e., 150 to 200 ksf)	1,000 sf	37.30	0.83	3.47
Civic / Public	Regional Park	Acre	4.60	0.20	0.20
	Civic Center	1,000 sf	28.00	2.21	2.85
Golf Course	150 acres	Holes	36.00	2.22	2.74

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

This land use data and trip generation rates have been used to make estimates of daily and peak hour vehicular trip generation resulting from development under the proposed General Plan. As shown in [Table 3.12-11](#), build out of the proposed General Plan could generate 65,374 new daily automobile trips. Of that total, 3,380 new trips are expected during the a.m. peak hour (7:00 to 9:00 a.m.) and 6,338 trips would be generated during the p.m. peak hour.

Table 3.12-11
Trip Generation Forecast

mp Generation Forecast

Land Use Designation	Quantity	Trips		
		Daily	A.m. Peak Hour	P.m. Peak Hour
Residential				
Urban Reserve	100 dwelling units	960	75	101
Low Density residential	1,063 dwelling units	10,205	797	1,074
Medium Density Residential	49 dwelling units	470	37	50
High Density residential	298 dwelling units	1,758	121	155
Specific Plan Area	1,200 dwelling units	11,520	900	1,212
Resort Residential	473 hotel rooms	2,743	147	199
	700 RV Spaces	2,590	140	259
Sub-Total Residential		30,246	2,227	3,050
Non-Residential				
Central Business District	3.7 ksf	41	6	6
Industrial	45.5 ksf	319	38	39
Office	194.2 ksf	2,136	301	289
Light Retail	5.9 ksf	565	16	16

Land Use Designation	Quantity	Trips		
		Daily	A.m. Peak Hour	P.m. Peak Hour
Major Retail	803.4 ksf	29,967	667	2,788
Civic / Public	168.4 acre	775	34	34
	25.65 ksf	718	57	73
Golf Course	18 holes	648	40	49
Sub-Total Non-Residential		35,128	1,153	3,288
Total Residential and Non-Residential		65,374	3,380	6,338

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

Travel Demand Forecasting. The volume of traffic anticipated on the Lakeport Circulation system is an important issue in updating the General Plan. Traffic engineers make use of computer based travel demand forecasting models to account for the interaction between land uses and forecast the volume of traffic on the regional street system.

For this analysis the TRAFFIX trip assignment model was employed. This model identifies the trip-generation contribution from individual traffic analysis zones and superimposes that traffic onto current background traffic volume to develop future traffic conditions. This process is sufficient where it is possible to isolate the effects of new residential and non-residential traffic. In this case, a portion of the new retail traffic will likely have origin-destination within the new residential areas being developed. This analysis assumes that new home-shopping trips will comprise approximately 20 percent of the total retail trip ends, and an applicable reduction to the retail trip generation. SR 29 will provide regional access to new development in Lakeport, and 40 percent of the trips generated by new residences are assumed to be external to the community via the highway. Additional information regarding the directional distribution of new trips is included in the model worksheets as part of the traffic report contained in [Appendix E](#).

Daily Traffic Volume Forecasts. [Table 3.12-12](#) identifies the incremental increase in traffic expected on City streets and State highways in Lakeport resulting from build out of the General Plan Update. [Tables 3.12-13](#) and [3.12-14](#) identify the increase in traffic and resulting Level of Service at the three intersections addressed in the traffic study.

Table 3.12-12

Daily Traffic Volumes and Levels of Service – Existing Plus General Plan Build Out

Road	Location from	To	Count #	Year 2005			General Plan Build Out				
				Lanes	Daily Volume (12/04)	LOS	Daily Volume			With Improvements	
							Lakeport Growth Increment	Total	LOS	Lanes	LOS
State Highway											
SR 29	Park Way	11 th Street	1	Free 4	12,700	A	11,680	24,380	B	4	B
	Southbound off	To 11 th Street	2	1	2,100	C	660	2,760	C	1	C
	Northbound on	From 11 th Street	3	1	1,900	C	530	2,430	C	1	C
	Southbound on	From 11 th Street	4	1	3,000	C	2,160	5,160	C	1	C
	Northbound off	To 11 th Street	5	1	3,300	C	2,080	5,380	C	1	C
	11 th Street	Lakeport Blvd	6	Free 4	14,600	A	14,730	29,330	C	4	C
	Southbound off	To Lakeport	7	1	3,200	C	5,470	8,670	D	2	C
	Northbound on	From Lakeport	8	1	3,500	C	5,470	8,970	D	2	C
	Southbound on	From Lakeport	9	1	3,000	C	2,880	5,880	C	1	C
	Northbound off	To Lakeport	10	1	3,000	C	2,910	5,910	C	1	C
	Lakeport Blvd	SR 175	11	Art 4	13,100	A	9,580	22,680	C	Art 4	C
SR 175	South		Art 4	12,500	A	13,480	25,980	D	4- freeway	B	
SR 175	SR 29	Parallel Dr		2	820	C	7,430	8,250	C	2	C
	Parallel Dr	Specific Plan Area		2	820	C	3,620	4,440	C	2	C
	Specific Plan			2	820	C	1,610	2,430	C	2	C
City Streets											
Hartley Street	Anastasia Drive	20 th Street	12	Col 2	670	C	910	1,580	C	2	C
Lakeshore Blvd	Lange Street	Beach Drive	13	Art 2	4,930	C	4,470	9,400	C	2	C
20 th Street	Will O View Circle		14	Col 2	420	C	1,900	2,320	C	2	C
Hartley Street	19 th Street	17 th Street	15	Col 2	2,020	C	2,180	4,200	C	2	C
16 th Street	Hartley Street	High Street	16	Col 2	870	C	810	1,680	C	2	C
High Street	15 th Street	16 th Street	17	Art 2	8,200	D	5,800	14,000	D	Art 4	C
Mellor Drive	14 th Street	11 th Street	18	Col 2	1,050	C	2,240	3,290	C	2	C

Road	Location from	To	Count #	Year 2005			General Plan Build Out				
							Daily Volume			With Improvements	
				Lanes	Daily Volume (12/04)	LOS	Lakeport Growth Increment	Total	LOS	Lanes	LOS
11 th Street	SR 29	Central Park Ave	19	Art 2	11,020	C	5,000	16,020	E	Art 4	C
11 th Street	Mellor Drive	Poole Street	20	Art 2	11,030	C	2,100	13,130	D	Art 2	D
11 th Street	Tunis Street	Brush Street	21	Art 2	9,100	C	1,520	10,620	C	2	C
Forbes Street	8 th Street	9 th Street	22	Art 2	3,840	C	1,630	5,470	C	2	C
Main Street	7 th Street	9 th Street	23	Art 2	9,200	C	4,890	14,090	E	Art 4	B
Sixth Street	Manzanita	Brush Street	24	Col 2	510	C	1,060	1,570	C	2	C
Russell Street	Armstrong Street		25	Col 2	850	C	1,500	2,350	C	2	C
Martin Street	Brush Street	High Street	27	Art 2	2,740	C	1,680	4,420	C	2	C
Bevins Street	Bevins Court	Martin Street	28	Col 2	3,480	C	3,520	7,000	C	2	C
Bevins Street	Lakeport Blvd	Bevins Court	29	Col 2	4,290	C	4,810	9,100	C-D	2	C-D
Lakeport Blvd	SR 29	Bevins Street	30	Art 2	11,925	D	12,250	24,175	F	Art 4	C
Parallel Drive	north	Lakeport Blvd	31	Col 2	3,500	C	3,110	6,610	C	2	C
Lakeport	Parallel Drive	SR 29	32	Art 2	11,940	D	15,930	27,870	F	Art 4	D
Parallel Drive	Lakeport Blvd	Sandy Lane	33	Col 2	1,320	C	9,150	10,470	D	Art 2	C
Main Street	Royale Avenue	Kimberly Lane	34	Art 2	9,900	C	7,350	17,250	F	Art 4	C
Main Street	Lakeport Blvd	Martin Street	35	Art 2	7,940	C	8,600	16,540	F	Art 4	C
Todd Road	Sandy Lane	Parallel Drive		Art 2	<1,000	C	1,300	2,300	C	2	C
Parallel Drive	Todd Rd	Woodward Drive		Col 2	1,320	C	4,110	5,430	C	2	C

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007

Table 3.12-13**A.M. Peak Hour Intersection Levels of Service at General Plan Build Out**

Intersection			Control	Existing		GP Buildout with No Improvements		Signal Warranted?	With GP Improvements	
				Avg Delay	LOS	Avg Delay	LOS		Avg Delay	LOS
1	Main Street	Lakeport Blvd	All-Way Stop	11.0 sec	B	19.2 sec	C	Yes	20 sec	C
2	Main Street	11 th Street	EB Stop	11.5 sec	B	13.5 sec	B	No	-	-
3	High Street	20 th Street	EB Stop	17.2 sec	C	36 sec	E	Yes	5.4 sec	A

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

Table 3.12-14**P.M. Peak Hour Intersection Levels of Service at General Plan Build Out**

Intersection			Control	Existing		GP Buildout with No Improvements		Signal Warranted?	With GP Improvements	
				Avg Delay	LOS	Avg Delay	LOS		Avg Delay	LOS
1	Main Street	Lakeport Blvd	All-Way Stop	16.0 sec	B	117.2 sec	F	Yes	20.1 sec	C
2	Main Street	11 th Street	EB Stop	12.0 sec	B	17.1 sec	C	No	-	-
3	High Street	20 th Street	EB Stop	12.1 sec	B	32.1 sec	D	No	4.8 sec	A

Source: KdAnderson Transportation Engineers, *City of Lakeport General Plan Update: Draft EIR Circulation Element*, May 2007.

BICYCLE AND PEDESTRIAN CIRCULATION***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 funding. The importance of a safe and comprehensive bikeways system is recognized and has been 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.

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.
- **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.

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. General Plan Policy requires 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 the existing and updated General Plans. In some areas of the city, the lack of sidewalks represents a potential safety hazard and General Plan Policy requires that sidewalks be installed at the time of development. Providing additional pedestrian paths in the Downtown District 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 7), 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.

General Plan Update

The updated General Plan proposes the deletion of the following Policies and Programs:

P.10 Encourage Infill Development: Encourage residential infill development on vacant and underdeveloped parcels by permitting increased densities in conformance with the General Plan, the Zoning and Subdivision Ordinances.

Program 13.2: Evaluate the use of computerized traffic signal coordination on major City streets.

Program 17.1: Revise the Lakeport Municipal Code to limit the construction of additional private roads within the City.

The updated General Plan also proposes the revision of Policy 17 which now states:

T 17.1 Private Roads Within City: Adopt standards for private roads within the City.

Regulatory Setting

FEDERAL AND STATE

There are no specific federal or state regulations applicable to public services and recreation.

LOCAL

Measure I. A ½ cent sales tax for road maintenance and other public improvements.

City of Lakeport Updated General Plan

The following policies serve to mitigate potential impacts:

Transportation Element

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 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.

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.

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.

Program T 7.1-b: Support efforts to obtain funding from Caltrans for improvements to the State Routes 29 and 175.

Program T 7.1-c: Continue coordination with the Lake County 'Area Plans' to improve transportation for Lakeport.

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.

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 12.1-a: Include the Roadway Classification system (Table 2-1) in the revised Zoning Ordinance.

Program T 12.1-b: Adopt and enforce a truck route plan for Lakeport that limits truck routes to arterial and collector streets.

Program T 12.1-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

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.

Program T 12.1-b: Revise the Zoning Ordinance to prevent new single family homes or garages fronting on arterial roads wherever possible.

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.

Program T 12.1-d: Require traffic studies for all high traffic generating uses.

Program T 12.1-e: Provide upgraded traffic control and information devices to improve circulation in areas with gaps in the roadway system.

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 adopt and implement an annual road maintenance program..

Program T 14.1-b: Consider weight limits for the City street system.

Program T 14.1-c: Continue to implement a pavement management system.

Program T 14.1-d: Develop maintenance standards for each roadway classification.

Program T 14.1-e: Coordinate long-term planning with utility companies prior to overlays.

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 16.1-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.

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 18.1-a: Require that all roads and streets be constructed to City standards prior to dedication and acceptance by the City.

Policy T 18.1: Traffic Mitigation Fees. Require new developments to pay for their fair share of planned roadway improvements.

Program T 19.1-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.)

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.

Program T 18.1-c: Review and revise as needed the Traffic Mitigation Fee Schedule every two years.

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.

Program T 18.1-e: Use the City Traffic Mitigation Fee Program to carry out projects as soon as sufficient funds are received.

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 annually review the CIP.

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.

Program T 21.1-b: Actively pursue grant funding to assist in the construction of additional bikeways.

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.

Program T 21.1-d: Publish and periodically update a map which identifies bikeways in the City and the Sphere of Influence.

Program T 21.1-e: Construct bikeways according to the standards established by Caltran's Planning and Design Criteria for Bikeways.

Program T 21.1-f: Incorporate Class 2 bikeways into new arterial and collector streets wherever feasible.

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.

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.

Policy T 23.1: Update Bikeways Plan. Update the Bikeways Plan within five years of adoption of the Transportation Element.

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.

Policy T 25.1: Improve Pedestrian Facilities. Create and maintain a safe and convenient pedestrian system.

Program T 26.1-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.

Program T 26.1-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.

Policy T 26.1: Sidewalks in New Street Improvements. Include sidewalks or pedestrian paths in all new street improvements.

Program T 27.1-a: Adopt standards for pedestrian facilities such as sidewalks, pedestrian paths, curbs, gutters, handicapped ramps in the revised Zoning and Subdivision Ordinances.

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 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.

Policy T 31.1: Dedication of Land for Pedestrian Facilities. Require dedication of land for pedestrian facilities in compliance with the Trail System Plan 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).

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.

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.

Policy T 34.1: Design Guidelines for Public Transit. Establish design guidelines for residential and commercial development to facilitate future public transit service.

Program T 34.1-a: 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.

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 36.1-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.

Policy T 36.1: Public Transit. Encourage the continuation of public transit and cooperate with the Area Planning Council to continue to implement a regional public transit system.

Policy T 37.1: Speed Zones. Periodically review and adjust speed zones in accordance with the requirements of the California Vehicle Code.

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.

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.

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.

Program T 39.1-c: Develop safe route to school plans in cooperation with the 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.

Program T 40.1-b: Evaluate the feasibility of installing additional pedestrian crossings wherever necessary.

Program T 40.1-c: Develop and promote a school safety and education program in collaboration with the School District.

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.

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.

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.

3.12.2 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on transportation/traffic if it will:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicles trips, the volume to capacity ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;

The following impacts were found in the Initial Study (Appendix A) to be less than significant and will not be discussed further in this EIR:

- Result in a change in the air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity.

3.12.3 IMPACTS AND MITIGATION MEASURES

Impact #3.12-1: Buildout of the Lakeport General Plan will increase the traffic volume on State Route 29 and will result in Levels of Service in excess of the City's LOS D standard on non-freeway sections.

Discussion/Conclusion: The volume of traffic forecast at buildout for SR 29 is in the range of 25,000 to 28,000 vehicles per day through Lakeport at buildout of the General Plan. Lakeport residents and visitors will use the highway to reach regional destinations and for intra-city travel. The forecasted traffic volumes require elimination of at-grade intersections and the development of a grade separation at the SR 175/SR 29 intersection. Development of the interchange will require widening of SR 175 approaches and potential relocation of adjoining closely spaced intersections. The need for an interchange was noted in the current General Plan, confirmed in this update and identified in the General Plan Circulation Diagram.

Grade separation at the SR 29/SR 175 intersection was identified in the General Plan Update on the list of Recommended Roadway Improvements. General Plan Policy T 1.1 requires the City to utilize this list of Recommended Roadway Improvements to develop the City's Five Year Roadway Capital Improvement Program. The improvements included in this program are considered the most important and cost effective improvements and will be actively planned for construction by the City.

The City will have to coordinate with Lake County and Caltrans to ensure the timely delivery of the interchange. General Plan Policy T 7.1 requires the City to cooperate with other jurisdictions to develop and implement regional solutions to traffic problems.

Additionally, General Plan Policy T 19.1 requires that all new development within the city pays its fair share of planned roadway improvements such as the SR 29 / SR 175 grade separation. Program T 19.1-a suggests the adoption and implementation of a City-Wide Traffic Mitigation Fee (TMF) program to better coordinate the payment of this fair share.

This improvement has been recognized as an important and cost effective traffic improvement for the City of Lakeport. General Plan policy will ensure that this improvement becomes part of the City's Five Year Roadway Capital Improvement Program, that the City coordinates with the County and Caltrans on its implementation, and that a funding source is created for its construction. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.12-2: Buildout of the Lakeport General Plan will increase traffic on existing SR 29 interchanges and result in the need to upgrade these facilities.

Discussion/Conclusion: The volume of traffic forecast at the SR 29/Lakeport Blvd interchange is indicative of conditions in excess of available capacity on ramps and on mainline Lakeport Blvd across the freeway. Interchange improvements to provide additional capacity are likely to be needed. However, additional analysis of design requirements through preparation of a Caltrans Project Study Report (PSR) is needed before a definitive improvement project can be identified. As the extent of needed improvements is closely linked to decisions regarding the scope of commercial development near the interchange and regarding circulation decisions of the Specific Plan area, the City of Lakeport should pursue completion of a PSR when more definitive information regarding area development becomes available.

General Plan Policy T 19.1 requires that all new development within the city pays its fair share of planned roadway improvements such as the SR 29 interchange. Program T 19.1-a suggests the adoption and implementation of a City-Wide Traffic Mitigation Fee (TMF) program to better coordinate the payment of this fair share.

These improvements have been recognized as important and cost effective traffic improvements for the City of Lakeport. General Plan policy will ensure that this improvement becomes part of the City's Five Year Roadway Capital Improvement Program and that a funding source is created for its construction. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.12-3: Buildout of the Lakeport General Plan will result in LOS D, E or F conditions on various City streets.

Discussion/Conclusion: The following roadway segments are projected to operate at Levels of Service in excess of LOS C:

- **High Street** from 15th Street to 16th Street (2 lanes LOS D)
- **11th Street** from SR 29 to Poole Street (2 lanes LOS E to LOS D)
- **Main Street** from 7th Street to Kimberly Lane (2 lanes LOS F)
- **Lakeport Blvd** from Parallel Drive to Bevins Street (2 lanes LOS F)
- **Parallel Drive** from Lakeport Blvd to Sandy lane (2 lanes LOS D)

The Circulation Element of the Lakeport General Plan suggests that these streets will be widened and otherwise improved as development occurs. In the case of Parallel Drive, re-designation of the route as an Arterial and construction to that standard would be applicable. General Plan Policy T 1.1 requires the City to implement the City's Five Year Roadway Capital Improvement Program. The improvements included in this program are considered the most important and cost effective improvements and will be actively planned for construction by the City. The City will need to update its traffic impact/road fee program to include the costs associated with improvements in those locations where fronting development is not expected to fully fund needed improvements.

The extent of street improvements in the south Lakeport area is closely linked to decisions regarding the layout of the street system serving the Specific Plan area. The locations of connections to the existing street system will have a tangible effect on the volume of traffic occurring on streets in this area. The General Plan Update analysis assumes connections to the Specific Plan area via an extension of Todd Road and a connection to SR 175. A comprehensive traffic study supplementing the GPU EIR will be needed when the Specific Plan area moves forward. Section 65451 of the state *Planning and Zoning Laws Guidelines* requires that the Specific Plan fully describe the distribution, location, and extent of the major components of public and private transportation proposed to be located within the Plan Area. Therefore, the Specific Plan will identify needed roadway improvements in the south area of the City; the environmental effects of which will be evaluated in the Specific Plan EIR.

General Plan Policy T 18.1 requires that all new development within the city pays its fair share of planned roadway improvements such as the improvements proposed for these roadway segments. Program T 18.1-a suggests the adoption and implementation of a City-Wide Traffic Mitigation Fee (TMF) program to better coordinate the payment of this fair share.

The portion of High Street identified above as projected to experience LOS D, E or F conditions at General Plan build out is not identified in the recommended roadway improvements. The improvement identified in the traffic study to mitigate this impact is to widen High Street between 15th and 16th Streets to four lanes. The city does not believe that widening one block of High Street is feasible given the existing configuration and right-of-way; therefore, this impact is *significant and unavoidable*.

Mitigation Measures

No feasible mitigation measures are available.

Impact #3.12-4: Buildout of the Lakeport General Plan will add traffic to the inter-regional roadway system, including streets and highways in Lake County outside of the City's Sphere of Influence.

Discussion/Conclusion: New development in Lakeport will add traffic to the roadways linking the community with SR 29 and to the street network that links the city with other Lake County communities. The addition of new Lakeport traffic will contribute to the need to maintain these roads and to provide future capacity at locations that are beyond the limits of this analysis.

While the inter-regional street and highway system is not the sole responsibility of the City of Lakeport, the City should investigate mechanisms for City development to participate on a “fair share” basis in the costs of maintaining and improving roads outside of the City limits. The City, Lake County and Caltrans should work towards creating a mechanism to address impacts to roads of regional importance.

General Plan Policy T 7.1 requires the city to cooperate with other jurisdictions to develop and implement regional solutions to traffic problems. General Plan Policy T 19.1 requires that all

new development within the city pays its fair share of planned roadway improvements inside and outside the city. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.12-5: Buildout of the Lakeport General Plan could result in peak hour Levels of Service in excess of LOS C at intersections in Lakeport.

Discussion/Conclusion: As noted in [Tables 3.12-13](#) and [3.12-14](#), projected traffic volume increases will deliver peak hour Levels of Service in excess of the City's LOS C Standard at two of the three intersections addressed in this study. Improvements to each intersection will be needed, including signalization.

It is also possible to identify future signalized intersections based on the daily traffic volume warrant thresholds contained in the Manual of Uniform Traffic Control Devices (MUTCD). At a planning level, intersections with daily volumes on all legs totaling more than 24,000 ADT with at least 3,000 ADT on each leg can be assumed to eventually warrant signalization. Other locations may justify traffic signals based on spacing along major streets.

The following is a list of the locations of traffic signals that are projected to be needed at General Plan Build Out:

- Lakeshore Blvd. / 20th Street
- 11th Street / SB SR 29 Ramps
- 11th Street / NB SR 29 Ramps
- 11th Street / Forbes Street
- 11th Street / Main Street
- Martin Street / Russell Street
- Martin Street / Main Street
- Lakeport Blvd. / SB SR 29 Ramps
- Lakeport Blvd. / NB SR 29 Ramps
- Lakeport Blvd. / Bevins Street
- Lakeport Blvd. / Main Street
- Todd Road / Sandy Lane
- SR 29 / SR 175 / Main Street

As shown, the two existing traffic signals (located outside of the city) could be joined by 13 new signals over the life of the General Plan.

The General Plan Recommended Roadway and Intersection Improvements list includes a list of intersections that are recommended for signalization. All but five of the intersections identified above as requiring signalization are included on this list. General Plan Policy T 1.1 requires the City to utilize this list of Recommend Roadway Improvements to develop the City's Five Year

Roadway Capital Improvement Program. The improvements included in this program are considered the most important and cost effective improvements and will be actively planned for construction by the City. Because the General Plan has not identified all of the intersections requiring signalization, this impact is *potentially significant*.

Mitigation Measures

Implementation of the following mitigation measure will reduce this impact to a *less-than-significant* level.

Mitigation Measure #3.12-5:

Signalization of the following five intersections shall be included as improvement projects in the City's Five Year Roadway Capital Improvement Program:

- *Lakeshore Blvd. / 20th Street*
- *Martin Street / Russell Street*
- *Todd Road / Sandy Lane*
- *SR 29 / SR 175 / Main Street*
- *Lakeport Blvd. / Main Street*
- *11th Street / Main Street*
- *11th Street / Forbes Street*

Alternatives to signalization that result in a LOS "C," such as the installation of roundabouts shall be considered and shall constitute adequate mitigation for this impact.

Impact #3.12-6: Adoption and implementation of the Lakeport General Plan Update could result in inadequate bicycle and pedestrian facilities.

Discussion/Conclusion: The existing bicycle and pedestrian circulation system in the City is incomplete and poorly maintained. The General Plan Update contains numerous policies encouraging the completion, improvement and regular maintenance of these existing facilities. Proposed new development will be guided by policies contained in the General Plan that require the dedication of land for the construction of bicycle and pedestrian facilities. In addition, proposed new developments will be subject to environmental review under CEQA, including analysis of impacts on bicycle and pedestrian facilities. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

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3.13 Utility Service Systems

This section of the Draft Program Environmental Impact Report (Draft EIR) discusses potential impacts to utility service systems in the Planning Area from implementation of the proposed City of Lakeport's General Plan Update. The utilities and service systems considered in this analysis are water, wastewater, storm drainage, solid waste, electricity, natural gas, telecommunications, and cellular service. During the NOP period, a comment regarding the City's wastewater collection, treatment and disposal system was received from the California Regional Water Quality Control Board, Central Valley Region. This comment letter can be found in [Appendix A](#) of this document.

3.13.1 SETTING

Environmental Setting

WATER

According to the *City of Lakeport Water System Master Plan*, the City of Lakeport obtains its water from two sources: groundwater sources and water from Clear Lake treated at the City's water treatment plant.

Groundwater Water Facilities/Wells

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 property. These wells are continuously monitored and treated to meet or exceed State and Federal requirements. The large majority of the City's water production is from these wells and production varies from about 700 to 900 acre-feet per year. These wells are the most economical source of water for the City. Under ideal conditions the combined pumping capacity of the four wells is about 2,000 gallons per minute (gpm), equivalent to 2.9 million gallons per day (mgd). The wells have limitations such as potential turbidity problems during periods of high runoff and production problems in summer and fall months after the aquifer has been drawn down. Water draw from ground wells is filtered at the well for sediment and small particulate matter. During the peak water demand months of July and August, a reliable capacity of about 1.2 mgd is available, primarily from City Well No. 1 (Scotts Creek pumphouse south well).

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 and future water quality standards established by both the State of California Department of Health Services and the EPA. 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. The plant has a nameplate capacity of 500 gpm (0.72 mgd), downrated to a reliable capacity of 400 gpm (0.58 mgd).

The City did not operate this plant in 1994 and 1995 because the plant needed to be upgraded to meet the chlorine contact time (CT) requirements of the Surface Water Treatment Rule. A 136,000 gallon clearwell is now available which allows for the expansion of the treatment plant to 1500gpm (2.2 mgd). The treatment plant is suitable in size for expansion.

The raw water intake and pipeline from the raw water pump station to the treatment plant were originally sized for 1500 gpm. The raw water pump station would have to be retrofitted with new pumps to achieve 1500 gpm pumping capacity. Lakeport public works officials have conservatively estimated that when operating at full capacity, the treatment plant can serve at least an additional 3,000 to 4,000 residential unit equivalents (RUEs). This capacity far exceeds local growth projections through the next 25 years.

Treated Water Storage

The city has three storage facilities located on City property (outside the city limits) on Brewery Hill, with a total capacity of approximately 1,700,000 gallons and a useful capacity of 1,543,000 gallons. Two of the storage reservoirs are in-ground reinforced concrete tanks with a capacity of about 350,000 gallons each. These two reservoirs were constructed in 1913 and 1932. The third reservoir is a one million gallon welded steel tank constructed in 1969.

Transmission and Distribution System

The City's water supply is delivered through a network of over 105,000 feet of pipes ranging in diameter from 1 inch through 14 inches. The entire system (except for four services on Riggs Road) is within one pressure zone, with static pressure varying from about 32 psi to 93 psi, depending on elevation.

North Lakeport (County) Facilities

The County's North Lakeport system, consisting of Clear Lake water treatment, storage, transmission and distribution facilities, serves most of the area which is north of the City limits and is partially within the city's Sphere of Influence. The City is currently negotiating an agreement to intertie on Hartley. There is no formal agreement between the City and the County regarding the quantity of flow which the City thereby acquired; however, at an assumed average velocity of 4 feet per second, the increased capacity allows for about 315 gpm of water to flow into the City system on Keeling Avenue/Hartley Road and about 390 gpm on Lakeshore Boulevard. The two systems are interconnected at a metering station on Lakeshore Boulevard at the northeast corner of the City.

The North Lakeport water treatment facility, located just west of Lakeshore Boulevard and near Worley Drive, has a nameplate capacity of 1.5 mgd. The facility design allows for the future expansion of the modular treatment units to 2.5 mgd and raw water and high service pumping rates of up to 3.0 mgd. Three modular treatment units, each originally rated at 0.5 mgd, are installed and have been operating since December of 1989. The building foundation plan, piping and controls are set up to accommodate with minimal impact the future installation of two additional modular filtration units to bring the facility up to its full nameplate capacity of 2.5

mgd. Additional space is available on the site which will allow for further expansion of the treatment building and possible installation of additional filtration equipment.

WASTEWATER

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 1.0 million gallons per day (mgd), and its peak wet weather design flow is 3.0 mgd.

Existing Facilities

The City Council sits as the District's Board of Directors, and City employees provide staffing for the CLMSD. The District 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.

The District operates a wastewater treatment plant southwest of the city limits. The wastewater treatment plant has a design capacity for treatment of 2.5 mgd; however, available capacity is limited to approximately 700,000 gallons per day. According to Lakeport public works officials, the plant has the capacity to serve an additional 888 residential unit equivalent (RUEs) in its current condition. This treatment plant serves approximately the southern two-thirds of the city. Operation of the wastewater treatment plant is subject to Waste Discharge Requirements (WDR) issued by the California Regional Water Quality Control Board (RWQCB), Order No. 98-207. The records of the RWQCB indicate that the plant has been inspected on an annual basis. Minor spills in the city have been reported, consisting of 25-40 gallons with associated clean-up. A major spill occurred in 2006 which resulted in the RWQCB issuing a notice of violation to the city.

Northwest Regional LACOSAN Facility: Many parcels in the northern city limits have flows to the Lake County Sanitation District (LACOSAN) system, and subsequently some parcels in the LACOSAN service area south of the city limits are accepted in the City's system. LACOSAN operates wastewater collection, treatment, and disposal facilities throughout Lake County serving 14,000 customers.

City flows to LACOSAN are received and treated at the Northwest Regional facility. The Northwest Regional facility has resolved one cease and desist order (CDO) from the RWQCB relating to storage capacity. A second CDO is in effect but does not contain a restriction on new service connections.

LACOSAN is also subject to a program instituted by the RWQCB that regulates the future operation and maintenance programs of the system. This program is identified as CMOM (Capacity Management, Operation and Maintenance) and is part of the ongoing operational oversight of the LACOSAN facility.

LACOSAN's operational program also includes the Basin 2000 effort. Basin 2000 is a watershed restoration initiative that recycles wastewater effluent to improve water quality, create wildlife habitat, and generate geothermal power. The first phase, which began operation in 1997, uses a 30-mile pipeline to transport effluent from three communities to the Geysers for geothermal injection. The second phase, begun in 1999, extends the pipeline 20 miles to collect effluent from another six communities for dual recycling: first in constructed wetlands, and second in the Geysers steamfield. The Basin 2000 initiative interconnects three LACOSAN systems, including Northwest Regional, Southeast Regional, and Middletown.

Inflow and Infiltration: Surcharging, spills and inflow and infiltration have been long-term problems during wet weather for the five largest wastewater treatment plants in Lake County, including the City of Lakeport facility. Inflow and infiltration consists of storm water, ground water and lake water that enters the sewer system through cracked pipes and leaky manholes. Wet weather accentuates any sewer problems, especially for those systems at lake level. Inadequate hydraulic capacity is the major cause, either through pipeline capacity, pump capacity at lift stations, or treatment plant capacity. Wet weather also results in a rise in the groundwater level and soil saturation that reduces disposal pond percolation rates. Thus, under wet weather conditions a system's entire capacity can be exceeded from the collection system to the final disposal area. This can result in spills, either as sanitary sewer overflows within the collection system or of treated effluent at the treatment plant. Sanitary sewer overflows are generally of greater threat to groundwater quality. The sewer lines in many portions of the City are old, and the high water table presents additional challenges

Lakeport WWTP Flow Estimates

The year 2000 census estimated Lakeport's population at 4,820 people. The City of Lakeport's WWTP services an additional 183 connections (approximately 457 people) south of the existing city limits. Since November 2002, the City of Lakeport has been diverting a portion of its wastewater to the LACOSAN Northwest Regional Water Treatment Facility (NWRWTF), via the Ashe Street Pump Station. Special Districts estimates that a total of 774 connections (1,935 people) are now being diverted to the NWRWTR. Wastewater flow estimates were collected for 1997 through year to date 2003. The total population now served by the City of Lakeport WWTP is approximately 3,629. Table 3.13-1 below illustrates Lakeport's 2003 WWTP flows.

Table 3.13-1
Lakeport WWTP 2003 Flows

Period	Flow (mgd)
ADWF	0.37
Average Annual Flow (AAF)	0.54
Peak Month Flow(PMF)	0.95

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.

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. 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.

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 will be stenciling storm drain inlets with the message "No Dumping. Flows to Clear Lake."

SOLID WASTE

Lakeport has a contract with Lakeport Disposal for its solid waste disposal. Most solid waste refuse from Lakeport is transported first to a transfer station on Bevins St. in south Lakeport, and then on to the East Lake Landfill, located just outside the City of Clearlake.

The East Lake Landfill is located on a 32 acre parcel outside the city limits of Clearlake. The landfill has a total capacity of 6 million cubic yards and is expected to reach total capacity between 2020 and 2025. The East Lake Landfill facility receives an average of 125 tons/day of garbage from all over Lake County, about 12% (15 tons/day) originates in the City of Lakeport. In addition, Lakeport has universal and mandatory garbage and recycled materials curbside pick-up.

ELECTRICITY

The Pacific Gas and Electric Company (PG&E) provides electricity for the City of Lakeport. Existing trunk and transmission facilities are adequate to meet present and projected demand in the community.

TELECOMMUNICATIONS

Service in and around Lakeport is provided by AT&T.

CELLULAR SERVICE

Cellular telephone service is provided for the City of Lakeport by a number of companies including AT&T, Verizon, Nextel, and T-Mobile. Calls are placed from cellular phones, which are simply wireless mobile or portable phones that have radio-frequency (RF) transmitters and receivers. The RF signals are received by "cell" sites (hence the name "cellular"), which are RF receiver/transmitter stations situated on towers that are strategically placed to be able to transmit over or around topographic barriers. Signals from cellular phones are transmitted from cell to cell until they reach a mobile telephone switching office (MTSO) in the local calling area that the caller wishes to reach. Here, the call is linked by MTSO from the cellular network to the local telephone office.

From a planning viewpoint, the City must take care in approving cell sites. Planning considerations include flight patterns, visual/aesthetic effects, and possible effects on wildlife. As opposed to other utilities, however, there are no pipelines or cables other than electrical service to the site, which can represent a greater spectrum of potential effects. Also, a specific band of radio frequencies is assigned to each provider. They can be reused to serve a large number of people, since the signals are not confined to cables to which individual users must be linked. Unless a sufficient grid of towers is approved within a county, cellular phone coverage will be spotty or non-existent.

GENERAL PLAN UPDATE

Policies related to utility service systems have not substantially changed; however, one policy and two programs have been added in the updated General Plan document as stated below:

Policy LU 7.4: Best Management Practices. Implement the most recent and most appropriate stormwater Best Management Practices (BMPs) on new development and redevelopment.

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.

Program S 2.1-b: Require adherence to all waste discharge requirements and report any violations to the State Water Resources Control Board for enforcement.

Future development will be guided by the policies and programs contained in the updated General Plan. These policies are intended to avoid or minimize environmental effects as well as comply with other local, state, and federal regulations. In addition, proposed projects will undergo separate review under the provisions of the California Environmental Quality Act (CEQA).

Regulatory Setting

FEDERAL

There are no specific Federal regulations applicable to utilities and service systems.

STATE

SB 610 Water Supply Assessments

SB 610 (Section 10910-10915 of the California Public Resources Code) requires local water providers to conduct a water supply assessment for projects proposing over 500 housing units or over 500,000 square-feet of commercial space, or 650,000 square-feet of industrial park space.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (Section 10610-10656 of the California Water Code) requires that all urban water suppliers prepare urban water management plans and update them every five years.

Assembly Bill 939 California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation or land disposal, the State Legislature passed Assembly Bill (AB) 939, the California Integrated Waste Management Act of 1989, effective January 1990. According to AB 939, all cities and counties in California are required to divert 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995, and 50 percent by January 1, 2000 through source reduction, recycling and composting, and environmentally safe transformation.

AB 1327 California Solid Waste Reuse and Recycling Access Act

The Solid Waste Reuse and Recycling Access Act of 1991 requires each jurisdiction to adopt an ordinance by September 1, 1994 requiring each development project to provide an adequate storage area for collection and removal of recyclable materials.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit and passenger transportation companies. It is the responsibility of the CPUC to assure California utility customers receive safe, reliable utility service at reasonable rates; protect utility customers from fraud; and promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

Title 24 Building Energy Efficiency Standards

Building energy consumption is regulated under Title 24 of the California Code of Regulations. The efficiency standards contained in this title apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting.

LOCAL

City of Lakeport Updated General Plan

These policies are contained in the updated plan and derived and expanded upon from the existing adopted General Plan.

Land Use 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.

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.

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.

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.

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.

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.

Policy LU 7.2: Storm Drainage 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.

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.

Policy LU 7.4: Best Management Practices. Implement the most recent and most appropriate storm water Best Management Practices (BMPs) on new development and redevelopment.

Urban Boundary Element

Policy UB 4.1: Urban Services Extensions. Complete 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 complete urban services including water, sewer, and storm drainage systems are in place and can sufficiently serve the area to be annexed.

Conservation Element and Open Space and Parks Element

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: Adopt a Recycling Ordinance. A single stream recycling system is currently in place per contract with Lakeport Disposal.

Program C 4.1-d: Continue to implement a curbside recycling program for newspaper, glass and organic materials.

Program C 4.1-e: Revise the Zoning Ordinance to require all commercial/retail, office and multifamily developments to provide on-site collection 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 Industrial 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.

Safety Element

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 Ordinance.

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.

Program S 1.9-c: Continue to develop, update and implement a City Capital Improvement Program for drainage and work with the Lake County Flood Control 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.

Program S 1.9-d: Require, where necessary, construction of siltation retention ponds which are incorporated into the design of development projects.

Program S 1.9-e: Require that construction within the Seiche Zone as identified in Figure 18 be designed to reduce wave impacts as determined by the City.

City of Lakeport Zoning Ordinance

Section 17.14.010. Purpose: To protect and enhance water quality, water courses, wetland and riparian areas, flood prone areas, and ground water resources.

Section 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.

Lakeport Storm Water Management Ordinance (Ordinance Number 853)

The purpose of this Chapter/Ordinance is to insure the health, safety and general welfare of the City of Lakeport's citizens, and to protect and enhance the water quality of water courses and water bodies within the incorporated area of the City of Lakeport in a manner pursuant to and consistent with the *Federal Clean Water Act* (33 U.S.C. 1251 *et seq.*), by reducing pollutants in storm water discharges to the maximum extent practicable and by prohibiting non-storm water discharges.

In addition, Lake County has a Stormwater Management Plan in effect from Fiscal Years 2003-2004 through 2007-2008. The Lake County Clean Water Program (LCCWP) Stormwater Program is a joint effort between the Lake County Watershed Protection District, County of Lake, City of Clearlake and City of Lakeport designed to reduce the impacts of increases in peak flows from development and damage caused by polluted stormwater runoff.

3.13.2 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on the environment if it will:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which may cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which may cause significant environmental effects;

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Comply with federal, state, and local statutes and regulations related to solid waste.

3.13.3 IMPACTS AND MITIGATION MEASURES

Impact #3.13-1: Increased demand for wastewater treatment.

Discussion/Conclusion: Implementation of the updated General Plan will not directly result in exceeding wastewater treatment requirements; however, development in accordance with the updated General Plan would potentially create increased demands on wastewater collection, treatment and disposal facilities. The City is currently under a Notice of Violation for the wastewater treatment plan and has hired a consultant to evaluate the options for upgrading the plant in order to provide additional capacity. Additional facilities and expansions of existing wastewater treatment facilities will be necessary to accommodate future development.

According to the policies and programs listed in the City's General Plan, efforts will be made to expand the sewer system capacity in order to meet projected growth. Sewer expansion fees and monthly service charges will be applied to reflect the actual cost of providing sewer service and capacity. It is assumed that all wastewater infrastructure constructed as part of proposed projects will be funded by project developers/land owners. The specific plan prepared for the Specific Plan area will address the need for, and financing of, additional wastewater facilities. In addition, future development will be subject to environmental review under CEQA. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.13-2: Increased demand for storm drainage facilities.

Discussion/Conclusion: As development occurs, there will be a need for new storm drain facilities. The City has adopted a Storm Water Management Plan which is designed to reduce the discharge of pollutants into Clear Lake and to enhance the water quality. The City has also adopted an ordinance that will prohibit non-storm water discharge into the city's storm drainage system. New development will be required to install necessary storm drainage facilities that will meet all city and state requirements. In addition, the specific plan prepared for the Specific Plan

area will address storm drainage issues located within the area, and future development will be subject to environmental review under CEQA. This impact is *less than significant*.

Mitigation Measures

No mitigation measures are required.

Impact #3.13-3: Increased demand for solid waste disposal needs.

Discussion/Conclusion: Implementation of the updated General Plan will not directly result in an increase in solid waste disposal needs; however, development in accordance with the updated General Plan in the Specific Plan area may result in increased demand for solid waste disposal. Lakeport has universal and mandatory garbage and recycled materials curbside pick-up. In addition, Lakeport has a contract with Lakeport Disposal for its solid waste disposal. Most solid waste refuse from Lakeport is transferred to the East lake landfill, located just outside the City of Clearlake. The East Lake landfill is located on a 32 acre parcel outside the City limits of Clearlake. The landfill has a total capacity of 6 million cubic yards and is expected to reach total capacity between 2020 and 2025. The specific plan prepared for the Specific Plan area will address solid waste disposal issues located within the area, and future development will be subject to environmental review under CEQA. This is a *less-than-significant* impact.

Mitigation Measures

No mitigation measures are required.

Impact #3.13-4: Increased demand for water supplies and treatment facilities.

Discussion/Conclusion: Implementation of the updated General Plan would potentially increase the demand for water supplies and treatment facilities over existing conditions. The treatment plant may have some room for expansion, but would not have sufficient capacity for new development in the Specific Plan area.

The existing general plan policies provide several specific ways in which the City will attempt to meet its future water demands. The City will maintain and update a Water System Master Plan, and identify capital improvements required to meet anticipated demand; evaluate and adjust periodically, as appropriate, water expansion fees to reflect the actual cost of providing water service and capacity; actively pursue all available sources of revenue to secure debt service in order to maintain and expand the water system, including redevelopment funds; devise and implement appropriate water conservation ordinances; and require new development and projects involving extensive renovations within City limits to connect to the City's potable water system.

The City of Lakeport's Water Division operates and maintains four wells, a surface water treatment facility, and distribution system to the meter. The Division also works with developers and customers on water service issues during project design, during service installation and in the future. The City can work to ensure that supplies will be adequate to meet the needs of the General Plan at buildout. The City of Lakeport also has water conservation programs in place.

For example, the City adopted Ordinance No. 693 (1989) which is designed to preserve the use of the City's water supply, eliminate all non-essential water usage, and provide for an allocation of existing water resources to ensure a sufficient water supply for human consumption, sanitation, and fire protection. Lakeport Municipal Code Section 13.12.050 reads as follows: "13.12.050 - Wasteful uses of water are prohibited."

A specific plan prepared for the Specific Plan area will address new water supply and treatment facility construction and financing issues associated with the area, and future development will be subject to environmental review under CEQA. The above conservation programs, in combination with the existing and proposed general plan policies, will reduce the impact on water supply to a *less than significant* level.

Mitigation Measures

No mitigation measures are required.

CHAPTER FOUR

EVALUATION OF ALTERNATIVES

CHAPTER FOUR EVALUATION OF ALTERNATIVES

4.1 Description of Project Alternatives

The California Environmental Quality Act and the implementing CEQA Guidelines require that alternatives to the proposed project be discussed in the EIR. The value of such discussion is to inform public decision-makers of the differential environmental impacts which may be associated with each potential alternative, and to enable a reasoned judgment to be made as to which alternative to the proposed project may be environmentally superior. Section 15126.6 of the CEQA Guidelines provides the following description of what should be included in the alternatives discussion in an EIR:

- (a) Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The Lead Agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.
- (b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- (c) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be

used to eliminate alternatives from detailed consideration in an EIR are:
(i) failure to meet most of the basic project objectives, (ii) infeasibility, or
(iii) inability to avoid significant environmental impacts.

- (d) Evaluation of Alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.
- (e) “No Project” alternative.
 - (1) The specific alternative of “no project” shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project’s environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125).
 - (2) The “no project” analysis shall discuss the existing conditions at the time the notice of preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.
 - (3) A discussion of the “no project” alternative will usually proceed along one of two lines:
 - (A) When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the “no project” alternative will be the continuation of the plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative

plans would be compared to the impacts that would occur under the existing plan.

- (B) If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this “no project” consequence should be discussed. In certain instances, the no project alternative means “no build” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.
 - (C) After defining the no project alternative using one of these approaches, the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- (f) Rule of reason. The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.
- (1) Feasibility. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can

reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

- (2) Alternative locations.
 - (A) Key question. The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
 - (B) None feasible. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location.
 - (C) Limited new analysis required. Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of the potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative.
- (3) An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

The sections of the chapter that follow present a description of the alternatives considered and an analysis of the alternatives in the context of CEQA and the CEQA Guidelines. The range of alternatives addressed includes an evaluation of the no project alternative (which is required to be addressed), an Unchanged Sphere of Influence Alternative, and a Reduced Size Sphere of Influence Alternative. Finally, this chapter presents an analysis of the comparative environmental superiority of the various alternatives, as required by CEQA.

4.2 Project Objectives

As stated in Section Two of this Draft EIR, the objectives of the City of Lakeport for this project are as follows:

1. Changes to current General Plan designations
2. Expansion of the City of Lakeport's Sphere of Influence
3. Changes to and the reorganization of the General Plan elements

4.3 Project Alternatives

The following project alternatives have been developed for the proposed Lakeport General Plan Update, consistent with CEQA requirements and the project objectives stated above. The following represent a reasonable range of alternatives to the project, and provide adequate consideration of the likely options available to update the General Plan.

ALTERNATIVE 1: NO PROJECT ALTERNATIVE

In accordance with Section 15126.6(e)(3)(B) of the State CEQA Guidelines, the No Project alternative consists of an analysis of the circumstances under which the project does not proceed. In the case of the proposed project, this would mean the proposed General Plan Update would not be adopted and or approved. This scenario assumes that the existing General Plan would continue to administer land use policy in the City.

ALTERNATIVE 2: UNCHANGED SPHERE OF INFLUENCE ALTERNATIVE

This alternative would leave in place the current Sphere of Influence, shown on [Figure 4-1](#). The Specific Plan Area would remain outside of the Sphere of Influence, and the unincorporated area north of the city limits would remain within. Other changes to the General Plan, including changes to current designations and changes to and reorganization of the General Plan elements, would still be included in this alternative.

ALTERNATIVE 3: REDUCED SIZE SPHERE OF INFLUENCE ALTERNATIVE

This alternative, shown on [Figure 4-2](#), would eliminate the expansion of the Sphere of Influence to south, where a Specific Plan Area designation is proposed. Other changes to the General Plan, including changes to current designations and changes to and reorganization of the General Plan elements, would still be included in this alternative.

4.4 Analysis of Alternatives

Each of the alternatives is analyzed below for potential impacts on the environment. The impact discussions are qualitative, and focus on the relative comparative level of impact, as compared to the proposed project. Under each heading, a statement is made indicating whether the impacts

created by the alternative are less than, equal to, or greater than those in the proposed project. A summary of these statements is found at the conclusion of this section.

NO PROJECT ALTERNATIVE

Aesthetics

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development, which would reduce potential impacts to the existing visual character of the area. However, the No Project Alternative would not include significant changes in the Community Design Element, which are intended to help improve the visual quality of the built and natural environment. Therefore, aesthetic impacts would be *greater* than under the proposed project.

Agriculture Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential conversion of “Farmland of Local Importance” would not occur. Agricultural impacts would be *lesser* under this alternative than under the proposed project.

Air Quality

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development, which would reduce potential emissions from construction and from operation of vehicles by new residents. Potential creation of airborne asbestos caused by disturbance of natural deposits would also be reduced. Air quality impacts would be *lesser* under this alternative than under the proposed project.

Biological Resources

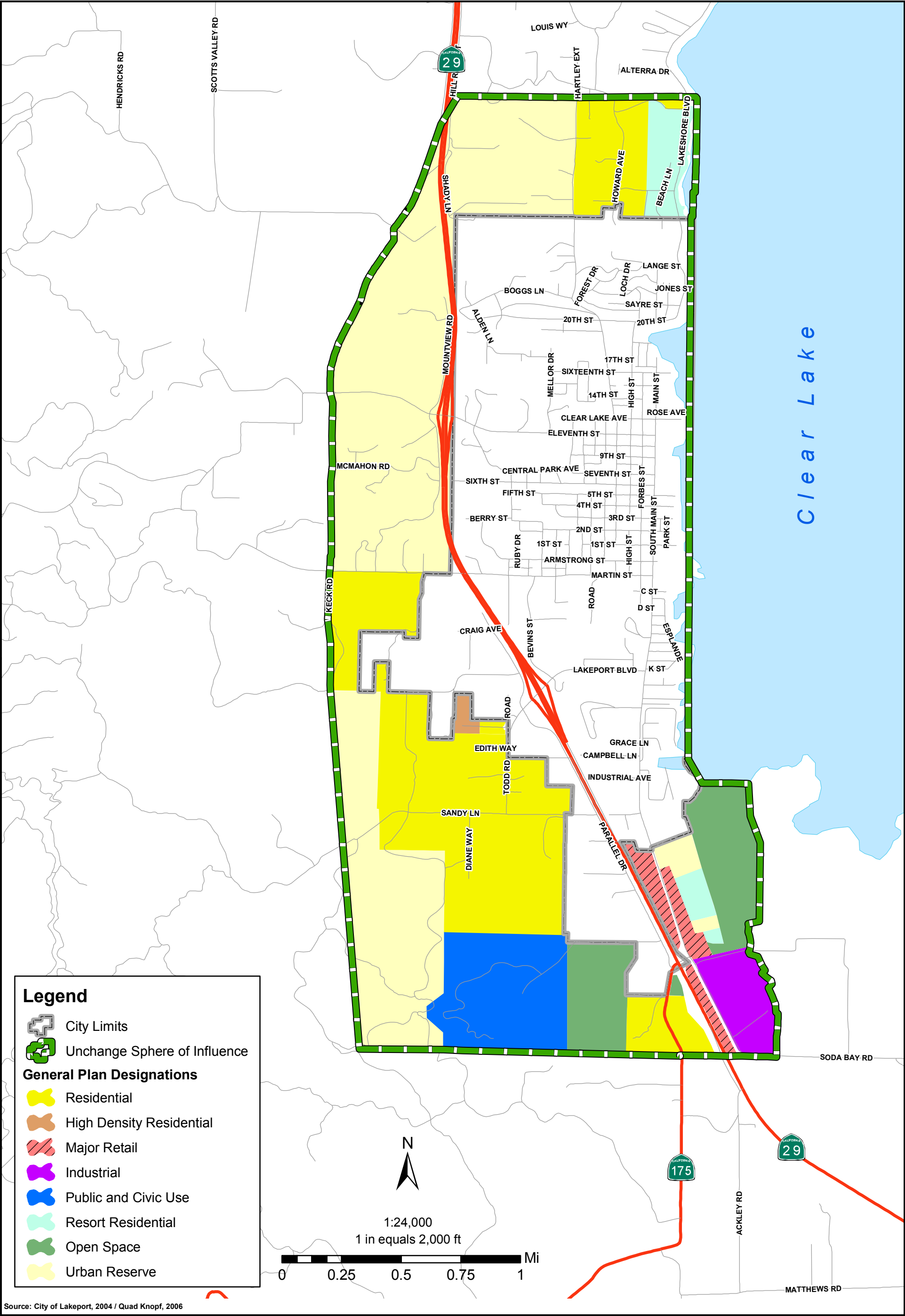
Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential impacts to special-status species and habitat would not occur. Impacts to biological resources would be *lesser* than under the proposed project.

Cultural Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential disturbance or destruction of cultural resources would not occur. Impacts to cultural resources would be *lesser* than under the proposed project.

Geology and Soils

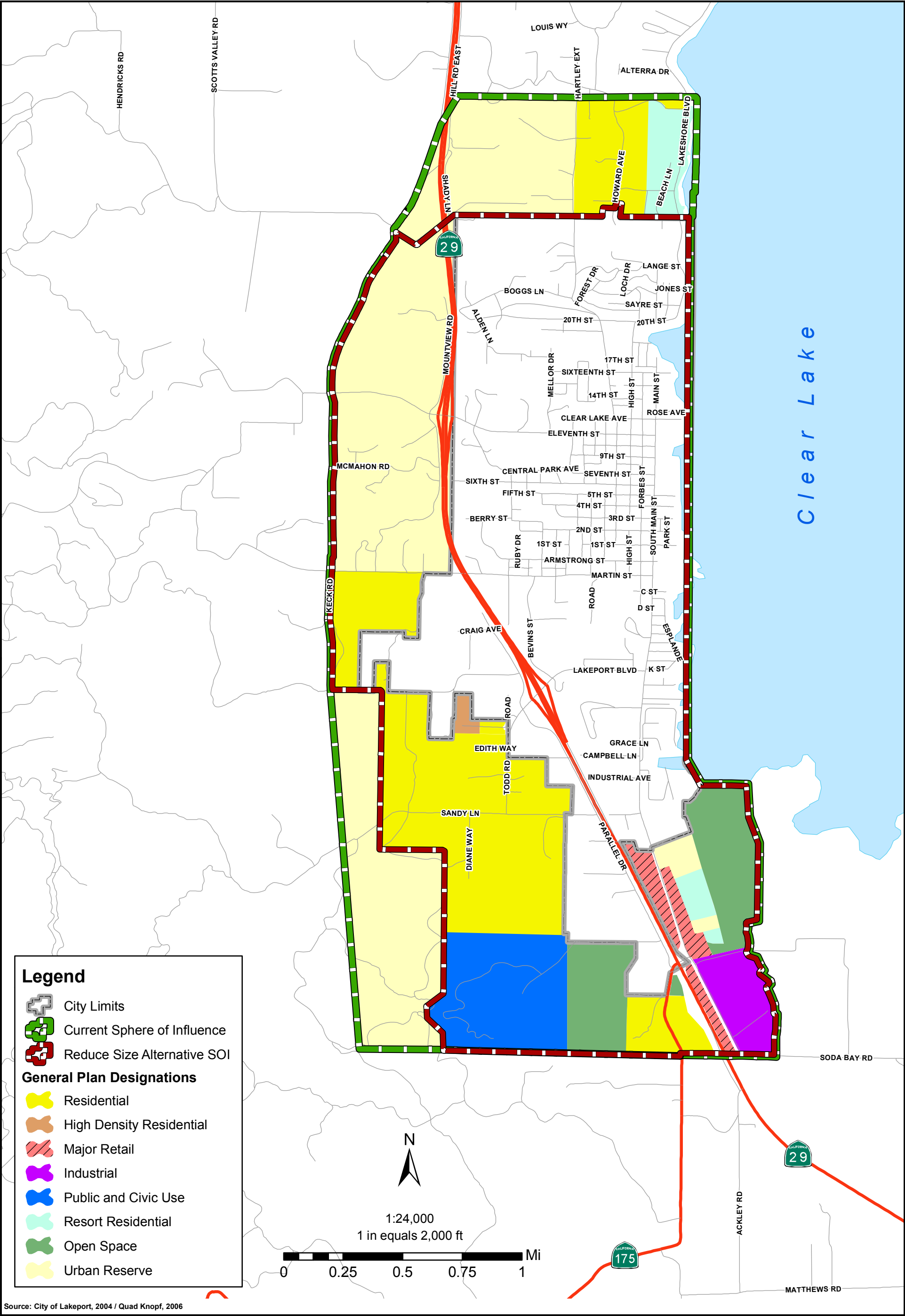
Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Although current General Plan





LAKEPORT GENERAL PLAN EIR
UNCHANGED SPHERE OF INFLUENCE ALTERNATIVE

Figure 4-1



LAKEPORT GENERAL PLAN EIR
REDUCED SIZE SPHERE OF INFLUENCE ALTERNATIVE

Figure 4-2

policies are designed to ensure building safety, potential for impacts to people or structures from fault rupture or seismic-related ground failure would be reduced this alternative. Potential impacts from soil erosion or instability would also be reduced. Geology and soils impacts would be *lesser* than under the proposed project.

Hydrology and Water Quality

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential water quality impacts and impacts from flooding from development in the Specific Plan Area would not occur. However, a new General Plan policy, which requires Best Management Practices and which could reduce water quality impacts, would not be included. Hydrology and Water Quality impacts are *greater* compared to the proposed project.

Land Use and Planning

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential land-use conflicts caused by changes in designations, which could cause physical impacts on the environment, would be reduced; however, the new community design policies would not be adopted. Land Use and Planning impacts would be *greater* than under the proposed project.

Noise

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential exposure of noise-sensitive land uses to construction noise and increases in ambient noise levels would be reduced. Noise impacts would be *lesser* than under the proposed project.

Population and Housing

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. An addition of up to 5,664 residents from development of the Specific Plan Area would not occur. Population and housing impacts would be *lesser* than under the proposed project.

Public Services and Recreation

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The potential need for increased police and fire protection services, schools, and park facilities would be reduced, except in the portion of the Sphere of Influence north of city limits, which would be retained under this alternative. Public Services and Recreation impacts would be *lesser* than under the proposed project.

Transportation/Traffic

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential impacts to State Route 29 (SR 29) and SR 29 interchanges as well as various streets inside and outside of the Sphere of Influence would be reduced. Transportation/Traffic impacts would be *lesser* than under the proposed project.

Utility Service Systems

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential increased demand on the City of Lakeport's storm drainage and wastewater treatment systems would be reduced under this alternative. Utility service systems impacts would be *lesser* than under the proposed project.

UNCHANGED SPHERE OF INFLUENCE ALTERNATIVE

Aesthetics

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. This alternative would include significant changes in the Community Design Element, which are intended to help improve the visual quality of the built and natural environment. Therefore, under this alternative, aesthetic impacts would be *lesser* compared to the proposed project.

Agriculture Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential conversion of "Farmland of Local Importance" would not occur. Agricultural impacts would be *lesser* under this alternative than under the proposed project.

Air Quality

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development, which would reduce potential emissions from construction and from operation of vehicles by new residents. Potential creation of airborne asbestos caused by disturbance of natural deposits would also be reduced. Air quality impacts would be *lesser* under this alternative than under the proposed project.

Biological Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential impacts to special-status species and habitat would not occur. Impacts to biological resources would be *lesser* than under the proposed project.

Cultural Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential disturbance or destruction of cultural resources would not occur. Impacts to cultural resources would be *lesser* than under the proposed project.

Geology and Soils

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Although current General Plan policies are designed to ensure building safety, potential for impacts to people or structures from fault rupture or seismic-related ground failure would be reduced in this alternative. Potential impacts from soil erosion or instability would also be reduced. Geology and soils impacts would be *lesser* than under the proposed project.

Hydrology and Water Quality

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential water quality impacts and impacts from flooding from development in the Specific Plan Area would not occur. Under this alternative, a General Plan policy requiring Best Management Practices and which could reduce water quality impacts, would be included. Hydrology and Water Quality impacts are *lesser* under this alternative compared to the proposed project.

Land Use and Planning

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Land-use conflicts would be reduced in this area. The new Community Design policies would be implemented. Land Use and Planning impacts would be *lesser* than under the proposed project.

Noise

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential exposure of noise-sensitive land uses to construction noise and increases in ambient noise levels would be reduced. Noise impacts would be *lesser* than under the proposed project.

Population and Housing

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. An addition of up to 5,664 residents from development of the Specific Plan Area would not occur. Population and housing impacts would be *lesser* than under the proposed project.

Public Services and Recreation

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The potential need for increased police and fire protection services, schools, and park facilities would be reduced, except in the portion of the Sphere of Influence north of city limits, which would be retained under this alternative. Public Services and Recreation impacts would be *lesser* than under the proposed project.

Transportation/Traffic

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential impacts to State Route 29 (SR 29) and SR 29 interchanges as well as various streets inside and outside of the Sphere of Influence would be reduced. Transportation/Traffic impacts would be *lesser* than under the proposed project.

Utility Service Systems

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential increased demand on the City of Lakeport's storm drainage and wastewater treatment systems would be reduced under this alternative. Utility service systems impacts would be *lesser* than under the proposed project.

REDUCED SIZE SPHERE OF INFLUENCE ALTERNATIVE

Aesthetics

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. This alternative would include significant changes in the Community Design Element, which are intended to help improve the visual quality of the built and natural environment. Therefore, under this alternative aesthetic impacts would be *lesser* compared to the proposed project.

Agriculture Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Potential conversion of "Farmland of Local Importance" would not occur. Agricultural impacts would be *lesser* under this alternative than under the proposed project.

Air Quality

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development, which would reduce potential emissions from construction and from operation of vehicles by new residents. Potential creation of airborne asbestos caused by disturbance of natural deposits would also be reduced. Air quality impacts would be *lesser* under this alternative than under the proposed project.

Biological Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Potential impacts to special-status species and habitat would not occur. Impacts to biological resources would be *lesser* than under the proposed project.

Cultural Resources

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Potential disturbance or destruction of cultural resources would not occur. Impacts to cultural resources would be *lesser* than under the proposed project.

Geology and Soils

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Although current General Plan policies are designed to ensure building safety, potential for impacts to people or structures from fault rupture or seismic-related ground failure would be reduced in this alternative. Potential impacts from soil erosion or instability would also be reduced. Geology and soils impacts would be *lesser* than under the proposed project.

Hydrology and Water Quality

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Potential water quality impacts and impacts from flooding from development in the Specific Plan Area would not occur. Under this alternative, a General Plan policy requiring Best Management Practices, which could reduce water quality impacts, would be included. Hydrology and Water Quality impacts are *lesser* under this alternative compared to the proposed project.

Land Use and Planning

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Potential land-use conflicts caused by changes in designations, which could cause physical impacts on the environment, would be reduced. Land Use and Planning impacts would be *lesser* than under the proposed project.

Noise

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Potential exposure of noise-sensitive land uses to construction noise and increases in ambient noise levels would be reduced. Noise impacts would be *lesser* than under the proposed project.

Population and Housing

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. An addition of up to 5,664 residents from development of the Specific Plan Area would not occur. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Population and housing impacts would be *lesser* than under the proposed project.

Public Services and Recreation

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. The northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. The potential need for increased police and fire protection services, schools, and park facilities would be reduced. Public Services and Recreation impacts would be *lesser* than under the proposed project.

Transportation/Traffic

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. Potential impacts to State Route 29 (SR 29) and SR 29 interchanges as well as various streets inside and outside of the Sphere of Influence would be reduced. Transportation/Traffic impacts would be *lesser* than under the proposed project.

Utility Service Systems

Under this alternative, the Sphere of Influence would not be expanded to the south, and the Specific Plan Area would not be designated for development. As with the proposed project, the northern boundary of the Sphere of Influence would be moved southward to the current northern city limits, which would further reduce development potential. Potential increased demand on the City of Lakeport's storm drainage and wastewater treatment systems would be reduced under this alternative. Utility service systems impacts would be *lesser* than under the proposed project.

4.5 Conclusion

In accordance with CEQA Guidelines Section 15126.6(d) this section compares the impacts of the four alternatives under consideration to those of the project. Table 4-1 shows whether each alternative has a lesser, unchanged, or greater impact on each environmental topic area and the total number of impacts that are reduced, increased, and unchanged for each alternative. Finally the environmentally superior alternative is identified and discussed. CEQA Guidelines Section 15126.6(e)(1) states that "if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

Table 4-1

Impact Comparison Summary between Proposed Project and Alternatives

Impact Topic	No Project Alternative	Unchanged Sphere Of Influence Alternative	Reduced Size Sphere Of Influence Alternative
Aesthetics/Light & Glare	Greater	Lesser	Lesser
Agricultural Resources	Lesser	Lesser	Lesser
Air Quality	Lesser	Lesser	Lesser
Biological Resources	Lesser	Lesser	Lesser
Cultural Resources	Lesser	Lesser	Lesser
Geology and Soils	Lesser	Lesser	Lesser
Hydrology and Water Quality	Greater	Lesser	Lesser
Land Use and Planning	Greater	Lesser	Lesser
Noise	Lesser	Lesser	Lesser
Population and Housing	Lesser	Lesser	Lesser
Public Services	Lesser	Lesser	Lesser
Transportation and Circulation	Lesser	Lesser	Lesser
Utilities and Service Systems	Lesser	Lesser	Lesser
Number of Impacts Reduced	10	13	13
Number of Impacts Increased	3	0	0
Number of Impacts Unchanged	0	0	0

Source: Quad Knopf, Inc.

This analysis has identified the Unchanged Sphere of Influence Alternative and the Reduced Size Sphere of Influence Alternative as the environmentally superior alternatives among the alternatives. Impacts associated with development of the Specific Plan Area would be eliminated. In addition, unlike the No Project Alternative new policies intended to reduce environmental effects would be retained. However, the Unchanged Sphere of Influence

Alternative and the Reduced Size Sphere of Influence Alternative would not accomplish one of the objectives (see Section 4.2) of the General Plan Update, which is to expand the City of Lakeport's Sphere of Influence.

CHAPTER FIVE

MANDATORY CEQA SECTIONS

CHAPTER FIVE

MANDATORY CEQA SECTIONS

This chapter of the Draft Environmental Impact Report provides for the required statements regarding the consequences of project implementation on the environment. The subsections below provide a listing of the environmental effects found not to be significant, significant effects which can be successfully mitigated, significant effects which cannot be mitigated, irreversible impacts, and finally cumulative impacts. Each of statements below is supported in the analysis contained in the Initial Study/Notice of Preparation contained in [Appendix A](#) or Section Three of this Draft EIR.

5.1 Effects Not Found To Be Significant

Section 15128 of the CEQA Guidelines requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Based on the analysis in the Initial Study/Notice of Preparation (NOP) and responses to the NOP contained in [Appendix A](#), the following impacts and issue areas were found not to be significant:

AESTHETICS

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

AGRICULTURE RESOURCES

- Conflict with an existing Williamson Act contract.

AIR QUALITY

- Conflict with or obstruct implementation of the applicable air quality plan.

BIOLOGICAL RESOURCES

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

CULTURAL RESOURCES

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

HAZARDS AND HAZARDOUS MATERIALS

Adoption and implementation of the updated General Plan will not directly result in activities which would involve the transportation, use, and storage of hazardous materials. Future development which would result in such transport, use and storage would be guided by the policies and programs contained in the General Plan. Specifically, the Conservation Element requires proposed development, which would handle, store, or transport hazardous materials, to be reviewed by the Fire District. Additionally, the Safety Element includes programs which encourage adoption of a Hazardous Materials and Waste Ordinance, enforces the County's Hazardous Waste Management Plan, and facilitates environmental review for proposed Hazardous Waste transport, storage and disposal facilities.

No sites located within the planning area have been listed on the Comprehensive Environmental Response, Compensation, Liability Information System (CERCLIS), the National Priority List (NPL), or the Department of Toxic Substances Control Cortese List.

The Lampson Field Airport is located less than one mile from the southwest portion of the planning area. This is the only public or private airport or airstrip located in the vicinity of the planning area. Development which occurs near the airport will be regulated by the existing Lake County Airport Land Use Compatibility Plan as well as by policies and program contained in the General Plan.

The Safety Element requires maintaining an effective emergency response system through cooperation with the County of Lake's Emergency Preparedness Plan, maintaining an updated Emergency Operations Plan, informing the public on proper emergency procedures, and designating emergency evacuation routes.

The Safety Element of the General Plan requires that all development proposals be reviewed for fire risk.

HYDROLOGY AND WATER QUALITY

- Violate any water quality standards or waste discharge requirements.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.

LAND USE AND PLANNING

- Physically divide an established community.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

MINERAL RESOURCES

There are no active mining or mineral extraction operations within the Lakeport city limits, Sphere of Influence, or expanded Sphere of Influence. Sand, gravel and borax deposits are extracted in the nearby Scotts Valley and Big Valley areas. The Mineral Resources section of the Conservation Element contains policies and programs that prohibit mining and other mineral extraction activities within the city limits.

POPULATION AND HOUSING

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

TRANSPORTATION/TRAFFIC

- Result in a change in the air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Result in inadequate parking capacity.

5.2 Effects Not Found To Be Significant In the EIR

Section 15128 of the CEQA Guidelines requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant. Based on the analysis contained in Chapter Three of this Draft EIR, the following impacts were found not to be significant.

AESTHETICS

- Substantially degrade the existing visual character.

AGRICULTURE RESOURCES

- Conversion and loss of Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use.
- Conflict with existing zoning for agricultural use.

AIR QUALITY

- Construction Emissions of ROG, NOx, and PM.
- Operational Emissions of ROG, NOx, CO and PM.
- Toxic Air Emissions.
- Odorous Emissions

BIOLOGICAL RESOURCES

- Substantial adverse impacts on candidate, special-status or sensitive species.
- Substantial adverse affect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

CULTURAL RESOURCES

None

GEOLOGY AND SOILS

- Expose people or structures to potential substantial adverse effects from fault rupture and seismic-related ground failure.
- Result in substantial soil erosion or soil instability.
- Result in potential structural damage due to expansive soils.

HYDROLOGY AND WATER QUALITY

- Depletion of groundwater or interference with recharge.
- Alteration of drainage patterns that could result in flooding.
- Demand for new storm drainage.
- Placement of people and/or structures in 100-year flood zones as a result of new development.
- Inundation by seiche.

LAND USE AND PLANNING

- Changes in land use designations which may conflict with policies intended to avoid or mitigate an environmental effect.

NOISE

- Exposure of noise-sensitive land uses to construction noise, excessive ground-borne vibration or ground-borne noise levels.
- Exposure of noise-sensitive land uses to a substantial temporary, periodic or permanent increase in ambient noise levels.
- For a project within the vicinity of a private airstrip, would the project expose people living or working in the General Plan area to excessive noise levels.

POPULATION AND HOUSING

None

PUBLIC SERVICES AND RECREATION

- Increased demand for law enforcement services in the plan area.
- Increased demand for fire protection services in the plan area.
- Impacts to local schools resulting from increased population and school enrollment in the plan area.
- Increased demand on parks and recreational facilities resulting from increased population in the plan area.

TRANSPORTATION/TRAFFIC

- Buildout of the Lakeport General Plan will increase the traffic volume on State Route 29 and will result in Levels of Service in excess of the City's LOS D standard on non-freeway sections.
- Buildout of the Lakeport General Plan will increase traffic on existing SR 29 interchanges and result in the need to upgrade these facilities.
- Buildout of the Lakeport General Plan will add traffic to the inter-regional roadway system, including streets and highways in Lake County outside of the City's Sphere of Influence.
- Adoption and implementation of the Lakeport General Plan Update could result in inadequate bicycle and pedestrian facilities.

UTILITY AND SERVICES SYSTEMS

- Increased demand for wastewater treatment.
- Increased demand for storm drainage facilities.
- Increased demand for solid waste disposal needs.
- Increased demand for water supplies and treatment facilities.

5.3 Significant Environmental Effects Requiring Mitigation

Environmental impacts have been identified which can be reduced to a level of less than significant upon incorporation of mitigation measures. These impacts are listed below. Refer to Chapter Three of the Draft EIR for a full analysis of impacts and mitigation measures.

AESTHETICS

None

AGRICULTURE RESOURCES

None

AIR QUALITY

- Naturally Occurring Asbestos.

BIOLOGICAL RESOURCES

None

CULTURAL RESOURCES

- Future development of the Specific Plan area could disturb or destroy buried/previously unidentified cultural resources (archaeological, paleontological, or human remains) within the project site.

GEOLOGY AND SOILS

None

HYDROLOGY AND WATER QUALITY

None

LAND USE AND PLANNING

None

NOISE

None

POPULATION AND HOUSING

None

PUBLIC SERVICES AND RECREATION

None

TRANSPORTATION/TRAFFIC

- Build out of the Lakeport General Plan could result in peak hour Levels of Service in excess of LOS C at intersections in Lakeport.

UTILITY AND SERVICES SYSTEMS

None

5.4 Significant Environmental Effects That Cannot Be Avoided

Section 15126(b) of the CEQA Guidelines requires that an EIR describe any significant impacts, including those that cannot be reduced to a level of insignificance. Where there are impacts that cannot be alleviated with the implementation of feasible mitigation measure(s), their implications and the reasons why the project is being proposed, should be described.

The environmental impacts caused by implementing the proposed project are discussed in detail in Chapter Three of this EIR. The following is a list of the impacts that have been found to be significant and unavoidable.

AESTHETICS

None

AGRICULTURE RESOURCES

None

AIR QUALITY

None

BIOLOGICAL RESOURCES

None

CULTURAL RESOURCES

None

GEOLOGY AND SOILS

None

HYDROLOGY AND WATER QUALITY

None

LAND USE AND PLANNING

None

NOISE

None

POPULATION AND HOUSING

- Development in the Specific Plan Area in accordance with the updated General Plan would increase the population in planning area.

PUBLIC SERVICES AND RECREATION

None

TRANSPORTATION/TRAFFIC

- Build out of the Lakeport General Plan will result in LOS D, E or F conditions on various City streets.

UTILITY AND SERVICES SYSTEMS

None

5.5 Cumulative Impacts

Section 15130 of the State CEQA Guidelines requires that an EIR discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Section 15064(h) defines a cumulative impact as "cumulatively considerable" if "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Section 15130 requires cumulative impacts to be discussed "where they are significant." A cumulative effect is deemed significant if the project's incremental contribution to a cumulative impact is "considerable." A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through fee-payment programs. The EIR must examine "reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project" (CEQA, Section 15130).

The Guidelines allow for the use of two alternative methods to determine the scope of projects for the cumulative impact analysis:

- List Method - A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency (Section 15130(A)).
- General Plan Projection Method - A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact (Section 15130(B)).

The General Plan Projection Model was selected to conduct the cumulative impact analysis for this EIR. Although the City has not adopted the Plan Update, the Draft will be used as the basis for this analysis as it contains the most current predicted improvements and development of the City.

AESTHETICS

The proposed General Plan contains policies designed to protect scenic views, maintain visual compatibility, and ensure compatibility of new development with surrounding land uses. It also contains numerous policies designed to protect the visual quality and character of the Lakeport area. Impacts to Aesthetics are less than significant and there are no cumulative impacts.

AGRICULTURE RESOURCES

A portion of the area that is proposed to be added to the City's Sphere of Influence is classified as "Farmland of Local Importance;" however, there is no Farmland of Statewide Importance that will be impacted. Upon adoption of the updated General Plan, this land will be designated "Specific Plan Area" and made available for urban development. While the proposed general plan will not directly result in the conversion of this Farmland of Local Importance, it will create the potential for such conversion. The General Plan Update proposes to add an approximately 600 acre area to the City's Sphere of Influence. Approximately 65 acres of this land is currently zoned by the county "APZ" or Agricultural Preserve District. The 65 acres will be rezoned and therefore, will be in compliance with the City's Zoning Ordinance. Impacts to Agricultural Resources are less than significant and there are no cumulative impacts.

AIR QUALITY

The General Plan Update proposes to add an approximately 600 acre area to the city's Sphere of Influence which will allow for future development of the site. In addition, there are several other areas of the City that have not yet been developed. All future development in the city will be guided by the policies contained in the updated General Plan. The Lake County Air Quality Management District has also adopted Rules and Regulations in order to achieve and maintain local, state and federal ambient air quality standards within the County. Therefore, the project will not result in cumulative impacts.

With implementation of the policies and programs in the General Plan and implementation of mitigation measures in this EIR, the Project will not likely result in substantial GHG emissions in the context of the global environment. Since the Project will not result in a cumulatively considerable incremental contribution to the significant cumulative impact of global climate change, the cumulative impacts of the proposed project on global climate change are *less than significant*.

BIOLOGICAL RESOURCES

Biological resources occur in the Project Area and surveys will be conducted for future projects. Impacts to biological resources are mitigated to a less than significant level by the General Plan policies. There are no cumulative impacts.

CULTURAL RESOURCES

Cultural resources may occur in the Project Area and surveys will be conducted for future projects. Impacts to cultural resources are mitigated to a less than significant level by the General Plan policies. There are no cumulative impacts.

GEOLOGY AND SOILS

Significant criteria for geology and soils impacts are based on potential for damage caused by seismic or geologic hazards. New developments in the Project Area would be affected to varying degrees by geologic and soil-related hazards; however, both types of hazards are site specific. Compliance with the construction standards of the California Building Code and City building code will reduce impacts below a level of significance. The project will not result in cumulative impacts.

HYDROLOGY AND WATER QUALITY

Determination of significant impacts on hydrology and water quality for surface water and groundwater are based upon the criteria of water supply, as well as applicable regulations on the use of surface water and groundwater. New development as a result of the General Plan would result in the conversion of land uses that may result in a reduction of recharge area available and a subsequent deficit in available groundwater. However, the extensive water conservation policies of the General Plan Update will apply to all future development and water usage and will mitigate the cumulative impact to a less than significant level.

In regards to water drainage, runoff, and flooding, future development activities could potentially alter drainage patterns, leading to onsite or offsite flooding. The proposed General Plan Update contains a policy to control soil erosion. In addition to current General Plan policies, the updated General Plan adds a policy which requires implementation of the most recent and most appropriate stormwater Best Management Practices (BMPs) on new development and redevelopment. In the case of stormwater run-off caused by new development, these BMPs would include engineered and constructed systems, such as detention ponds, that would be designed to minimize onsite or offsite flooding. The project will not result in cumulative impacts.

LAND USE AND PLANNING

The General Plan Update proposes various land use changes. Although these changes will not in themselves lead to development, future development occurring under these proposed designations could result in land-use conflicts with physical impacts on the environment;

however, these projects will be subject to policies of the General Plan intended to avoid or minimize environmental effects as well as other local, state, and federal regulations. The project will not result in cumulative impacts.

NOISE

Development of the Specific Plan Area will add both noise sources and receptors sensitive to noise. New noise sources could include temporary noise from operation of construction equipment during development and permanent traffic noise from developed areas. Although noise levels are projected to increase along roadway segments, most of this increase is due to increased traffic from general growth in the area as opposed to project-generated traffic. New sensitive receptors to noise could include new residences, schools, libraries, child care facilities, elder care facilities, and parks. Development projects will be subject to Noise and Land Use Compatibility Standards and other policies in the General Plan designed to maintain or reduce existing noise levels. Since implementation of plan policies will mitigate individual noise impacts to a less than significant level, there will be no cumulative impact.

POPULATION AND HOUSING

This analysis examines the population projections for the City of Lakeport, as shown in Table 5-1. Table 5-1 shows that a potential of an addition 1,200 residential dwelling units could be constructed in the Specific Plan Area, assuming the maximum building intensity specified under this proposed designation. Based on the U.S. Census 2000 estimate of the household size in Lakeport of 2.36 persons, this future development would result in the addition of 2,832 residents to the area within the expanded Sphere of Influence, and 6,840 residents for the buildout of the City and the entire Sphere of Influence. Additionally, a number of projects are currently being considered outside of the Sphere of Influence. Significant cumulative impacts to population and housing could occur as a result of implementation of the project.

Table 5-1

Residential Build-Out Figures: Lakeport and Sphere of Influence

Area	Building Intensity (units/acre)	Vacant Land Area in Acres	Additional Dwellings (at 100% of max. density)
Within City Limits			
Low Density Residential	2 - 5.5	64.16	271
Medium Density Residential	14.5	3.41	49
High Density Residential	5.5 – 21.8	16.59	288
Total Within City Limits	--	84.16	608
Sphere of Influence			
Specific Plan Area ¹	2	600	1,200
Other	1.5 - 4	231.72	1,090
Total Potential Residential Build-out	--	915.88	2,898

Source: Quad Knopf, Inc.

PUBLIC SERVICES AND RECREATION

Police and fire protection services, and educational and recreational services and facilities already exist in the area. The Plan Update includes policies for the provision of adequate fire protection, law enforcement, educational facilities, and recreational facilities to serve the predicted population growth within the Project Area. Therefore, no cumulative impact is anticipated.

TRANSPORTATION/TRAFFIC

The General Plan Update provides for street and intersection improvements to accommodate the predicted population growth and maintain an acceptable level of service and traffic flow in the Project Area.

The Traffic Study prepared for this EIR, included as [Appendix E](#), analyzed weekday level of service (LOS) impacts at a number of intersections and roadway segments as shown in Table 3.12-12. General Plan Policy T 1.1 requires the City to utilize this list of Recommended Roadway Improvements to develop the City's Five Year Roadway Capital Improvement Program.

Additionally, General Plan Policy T 19.1 requires that all new development within the city pays its fair share of planned roadway improvements such as the SR 29 / SR 175 grade separation.

With the addition of other development projects outside of the City's Sphere of Influence and the LOS of D, E, or F existing in areas until the City's Five Year Roadway Capital Improvement Program is implemented and completed, there will be a significant cumulative impact.

UTILITY AND SERVICES SYSTEMS

Development in accordance with the updated General Plan in the Specific Plan area would potentially create increased demands on wastewater collection, treatment and disposal facilities. Additional facilities and expansions of existing wastewater treatment facilities may be necessary to accommodate future development. The cumulative demand placed on public utilities and service systems by the General Plan Update will be mitigated to a less than significant level by the Update's policies. No cumulative impacts have been identified.

APPENDICES

APPENDIX A

Notice of Preparation

**To: State Clearinghouse
State Responsible Agencies
State Trustee Agencies
Other Public Agencies
Interested Organizations**

Subject: Notice of Preparation of a Draft Environmental Impact Report

Lead Agency:

City of Lakeport
(Agency Name)

City Hall 225 Park Street
(Street Address)

Lakeport, CA 95453
(City/State/Zip)

Richard Knoll
(Contact)

Consulting Firm (if applicable):

Quad Knopf, Inc.
(Firm Name)

One Sierragate Plaza, Suite 270c
(Street Address)

Roseville, CA 95678
(City/State/Zip)

Kim Hudson
(Contact)

The City of Lakeport will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR prepared by our agency when considering permits or other approvals for the project.

The project description, location and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☒ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date *but not later than 30 days* after receipt of this notice.

Please send your response to Richard Knoll at the address shown above. We will need the name for a contact person in your agency.

Project Title: City of Lakeport General Plan Update

Project Location: Lakeport, CA Lake County
(City-nearest) (County)

Scoping Meeting Notice

Please be advised that the City of Lakeport will hold a Scoping Meeting to allow individuals and agencies to learn more about the project and to comment on the scope and content of the EIR. The meeting will be held on Wednesday, November 9, 2005 at 6 p.m., Lakeport City Hall, 225 Park Street. All interested persons and agencies are invited to attend.

Project Description: (brief)

The City of Lakeport General Plan provides the principles that guide the city's future growth and development. The proposed project is the adoption and implementation of a Comprehensive Update and Amendment to the City of Lakeport General Plan.

Objectives of the General Plan update include the following: (1) Changes to current General Plan designations, (2) expansion of the City of Lakeport's Sphere of Influence, and (3) changes to and the reorganization of the General Plan elements.

Updates include, in addition to more traditional topics and issues, modified land use controls that will focus on economic development to capture lost sales tax revenue currently generated by Lakeport residents shopping outside of the city, and policies to increase employment and housing opportunities. The city's public infrastructure is also evaluated as well as the means to finance its expansion.

Potential Areas of Environmental Effect

See attached Initial Study.

Date 10/24/05

Signature

Richard Knoll

Title

G.D.D.

Telephone

707-263-5613

DRAFT

INITIAL STUDY

City of Lakeport General Plan Update

October, 2005

DRAFT

INITIAL STUDY

City of Lakeport General Plan Update

Prepared for:

City of Lakeport
Community Development Department
Richard Knoll, Director
225 Park Street
Lakeport, CA 95453
(707) 263-5613

Prepared by:



Quad Knopf

One Sierragate Plaza, Suite 270C
Roseville, California 95678

October, 2005

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1.0 INTRODUCTION

1.1 Purpose and Authority

This document is the Initial Study for the proposed City of Lakeport General Plan Update.

The proposed project is the adoption and implementation of an updated General Plan for the City of Lakeport. The existing General Plan is the comprehensive plan governing the community which was last updated in 1992. It includes the following elements: Land Use, Transportation, Conservation, Open Space and Parks, Community Design, Housing, and Safety. The General Plan Update will cover a 20-year period from 2005 to 2025 and will address traditional topics in addition to current public infrastructure issues, employment opportunities, and modification of current land use controls.

This document is an Initial Study, the purpose of which is to examine the potential impacts and the appropriate type of environmental document that is required pursuant to CEQA Guidelines. The recommended document is a Program EIR. Therefore, this Initial Study is used to identify potential project impacts in order to focus the EIR analysis.

The Initial Study and Notice of Preparation of a Program Environmental Impact Report will be circulated for agency and public review for 30 days, pursuant to CEQA Guidelines, Section 15073 (d).

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections.

Section 1.0: Introduction: Provides background information regarding the City of Lakeport General Plan update, including the purpose and conclusion of the analysis.

Section 2.0: Project Description: Describes the proposed General Plan Update goals and location.

Section 3.0: Environmental Checklist: Contains the Environmental Checklist form. The Checklist Form is used to describe the impacts of the proposed General Plan update. A discussion of each entry follows the Checklist, referenced to the Checklist sections.

Section 4.0: Persons and Sources Consulted: Lists documents and persons consulted for the analysis.

Section 5.0: List of Preparers: Lists the persons assisting in the preparation of this Initial Study.

1.2 Determination

Based on the information in this Initial Study, it is concluded that the project will require further evaluation in an Environmental Impact Report. Preparation of a Program EIR is recommended.

2.0 PROJECT LOCATION AND DESCRIPTION

2.1 Location and Environmental Setting

The City of Lakeport is located approximately 42 miles north of Santa Rosa and 91 miles north of San Francisco, in Lake County, California. Lakeport sits on the northwestern shore of Clear Lake in the western/central section of Lake County (see Figure 1). Lakeport is the County Seat and is the regional center of commerce and governmental activity in the county. Incorporated in 1888, the city lies 16 miles northwest of Clearlake, the largest city in Lake County. Principal highway access to Lakeport is via State Highway 29, which runs to the west of the city in a general north/south direction. The city limits currently contain approximately 2.5 square miles.

2.2 Project Description

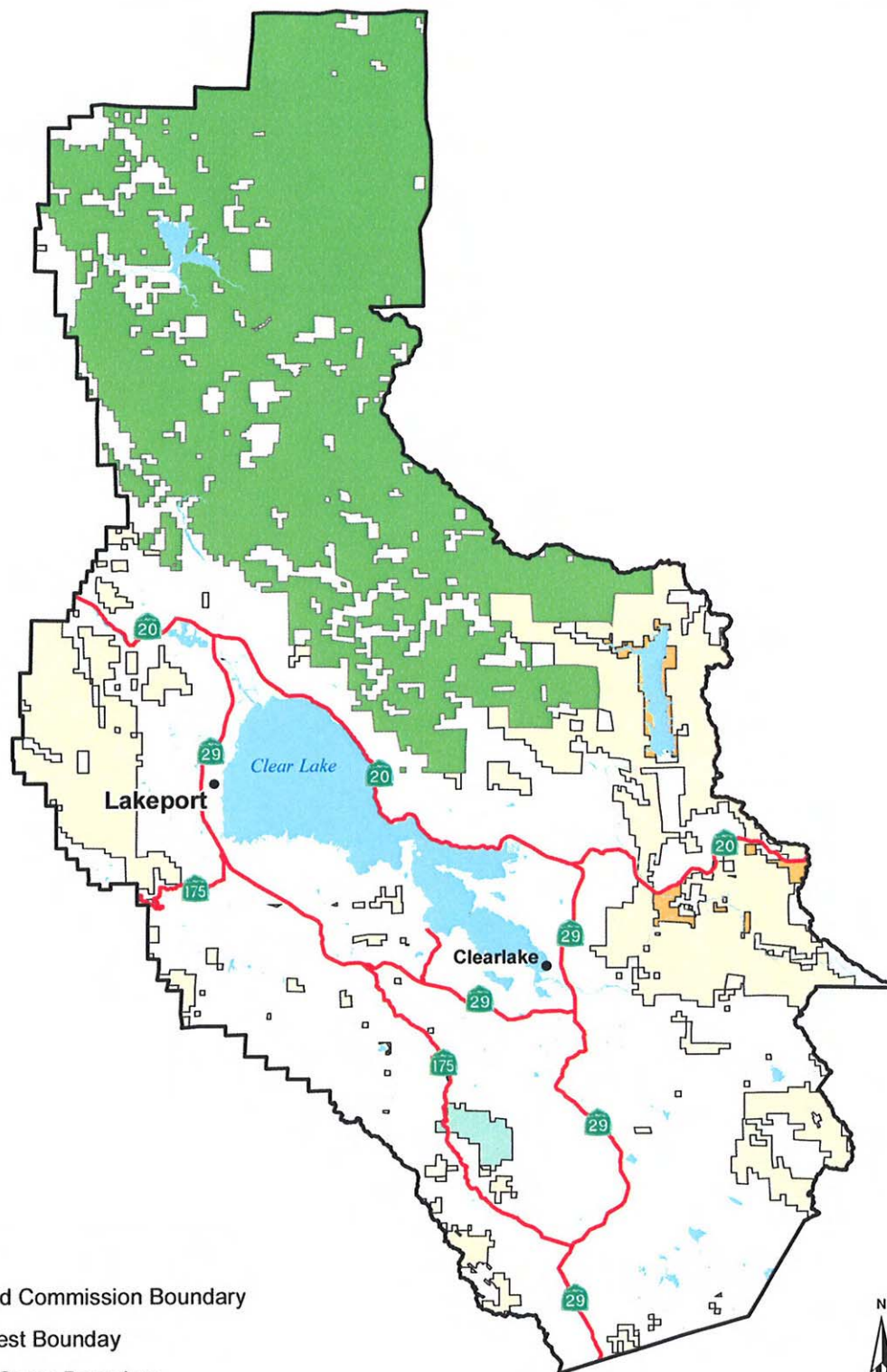
The City of Lakeport General Plan provides the principles that guide the city's future growth and development. The proposed project is the adoption and implementation of a Comprehensive Update and Amendment to the City of Lakeport General Plan. Figure 2 identifies the proposed modified Sphere of Influence area and proposed land use designations.

Objectives of the General Plan update include the following: (1) Proposed changes to current General Plan designations, (2) expansion of the City of Lakeport's Sphere of Influence, and (3) changes to and the reorganization of the General Plan elements.

Summarized below are the changes made to the General Plan land use designation from the previous General Plan.

1. From Residential to Office. Bordered by 4th Street, Tunis Street, and First Street. Comprises 3.2 acres.
2. From Major Retail to Office. Located on the east side of Highway 29, north of Eleventh Street. Comprises 10 acres.
3. From Major Retail/Low Density Residential to Residential. Bordered by Sandy Lane, Todd Road, and Edith Way. Comprises 4.15 acres.
4. From Urban Reserve to Residential. Located on the southeastern border of the current City of Lakeport's Sphere of Influence and the west side of Highway 29. Comprises 48 acres.
5. The expanded Sphere of Influence is designated "Specific Plan Area." Comprises 555 acres.
6. The current General Plan designation of "Low Density Residential" and "Medium Density Residential" are proposed to be combined into the classification "Residential."

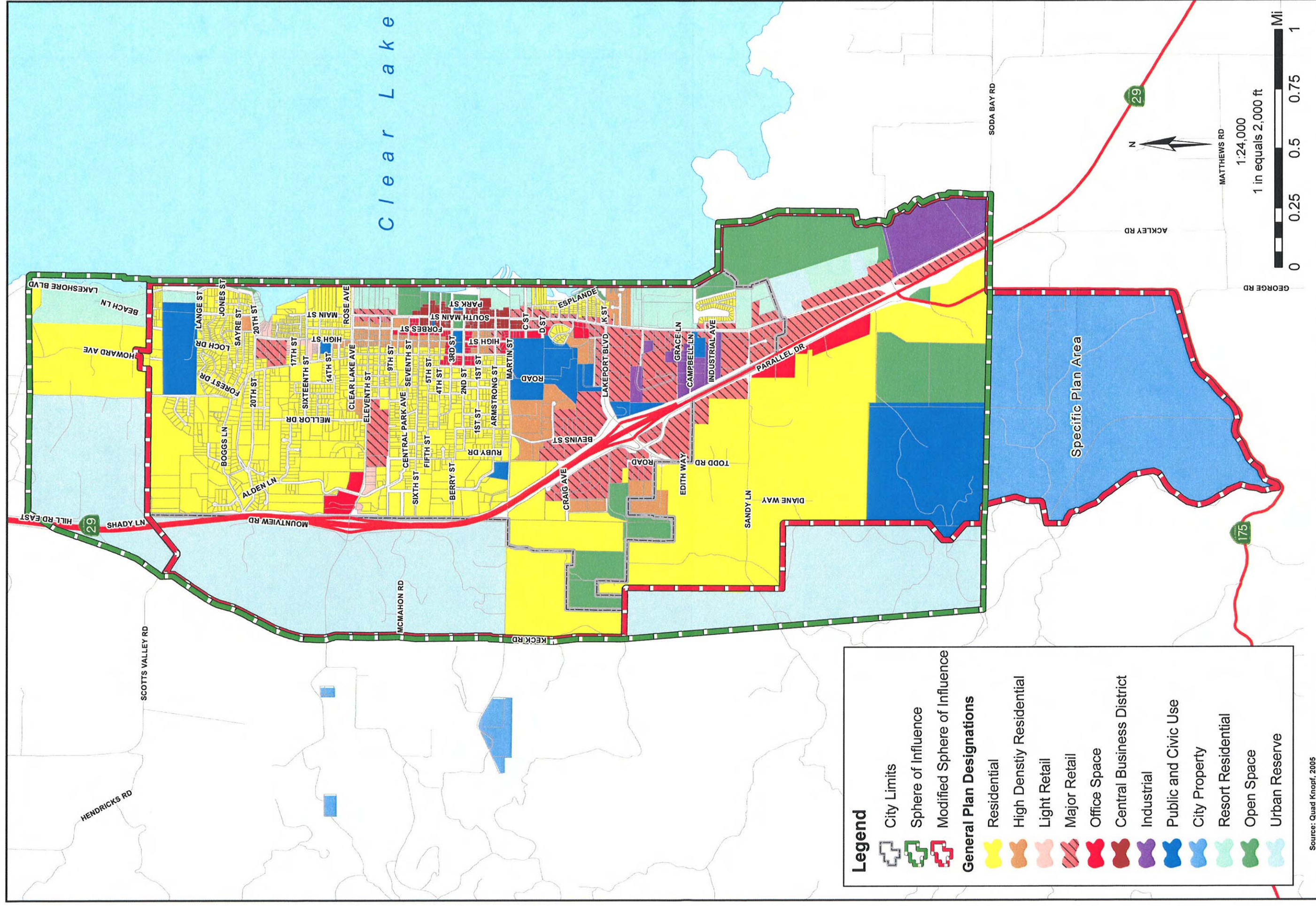
Updates include, in addition to more traditional topics and issues, modified land use controls that will focus on economic development to capture lost sales tax revenue currently generated by Lakeport residents shopping outside of the city, and policies to increase employment and housing



Legend

-  State Land Commission Boundary
-  State Forest Boundary
-  Fish and Game Boundary
-  Bureau of Land Management Boundary
-  Mendocino National Forest Boundary

Source: Quad Knopf, Inc, 2004.



PROPOSED SPHERE OF INFLUENCE AND GENERAL PLAN DESIGNATIONS

opportunities. The city's public infrastructure is also evaluated as well as the means to finance its expansion.

3.0 ENVIRONMENTAL CHECKLIST FORM

Project Title

City of Lakeport General Plan Update

Lead Agency Name and Address

City of Lakeport
City Hall
225 Park Street
Lakeport, CA 95453

Contact Person and Phone Number

Richard Knoll, Director
Lakeport Community Development Department
225 Park Street
Lakeport, CA 95453
(707) 263-5613

Project Location

The City of Lakeport is located approximately 42 miles north of Santa Rosa and 91 miles north of San Francisco, in Lake County, California. Lakeport sits on the northwestern shore of Clear Lake in the western/central section of Lake County. Lakeport is the County Seat and is the regional center of commerce and governmental activity in the county. Incorporated in 1888, the city lies 16 miles northwest of Clearlake, the largest city in Lake County. Principal highway access to Lakeport is via State Highway 29, which runs to the west of the city in a general north/south direction. The city limits currently contain approximately 2.5 square miles.

Project Sponsor's Name and Address

City of Lakeport
City Hall
225 Park Street
Lakeport, CA 95453

General Plan Designation

Used as a guide for orderly development, Lakeport's Land Use Element designates the general distribution of land for residential, commercial, industrial, and public facilities needed to serve the residents of the city. The Plan includes land outside the city's boundaries, providing a comprehensive growth and development plan. The City has established 12 land use designations:

- Residential (R),
- High Density Residential (HDR),
- Light Retail (LR),
- Major Retail (MR),
- Resort Residential (RR),
- Office (O),
- Central Business District (CBD),
- Industrial (I),
- Parkland/Open Space (P/OS),
- Public and Civic Uses (PUB),
- Specific Plan Area (SPA) and
- Urban Reserve (UR).

Summarized below are the changes made to the General Plan land use designation from the previous General Plan.

1. From Residential to Office. Bordered by 4th Street, Tunis Street, and 1st Street. Comprises 3.2 acres.
2. From Major Retail to Office. Located on the east side of Highway 29, north of Eleventh Street. Comprises 10 acres.
3. From Major Retail/Low Density Residential to Residential. Bordered by Sandy Lane, Todd Road, and Edith Way. Comprises 4.15 acres.
4. From Urban Reserve to Residential. Located on the southeastern border of the current City of Lakeport's Sphere of Influence and the west side of Highway 29. Comprises 48 acres.
5. The expanded Sphere of Influence is designated "Specific Plan Area." Comprises 555 acres.
6. The current General Plan designation of "Low Density Residential" and "Medium Density Residential" are proposed to be combined into the classification "Residential."

Zoning

Lands within the city limits are governed by the Lakeport Zoning Ordinance which is used to implement the General Plan. The Ordinance divides the city into zones consistent with General Plan designations, and prescribes regulations relating to land use, the size of the building allowed on the land, and the height and intensity of use.

Description of Project

Objectives of the General Plan update include the following: (1) Proposed changes to current General Plan designations, (2) proposed modification of the City of Lakeport's Sphere of Influence, and (3) changes to and the reorganization of the General Plan elements.

In addition to more traditional topics and issues, the General Plan Update includes modified land use controls that will focus on economic development to capture lost sales tax revenue currently generated by Lakeport residents shopping outside of the city, and policies to increase employment and housing opportunities. The City's public infrastructure is also evaluated along with the means to finance its expansion.

Surrounding Land Uses and Setting

Land uses in the unincorporated areas surrounding the City of Lakeport are primarily agricultural and rural residential. Two major agricultural areas are Scotts Valley, to the west of Lakeport, and Big Valley, to the southeast. Industrial activities include gravel extraction, rock crushing plants, rock quarries, fruit processing, timber production, and mineral processing, but account for very little of the County's land use. Recreational areas are found throughout the County and include numerous public forests, parks, and lakes. The City of Lakeport is predominantly surrounded by dispersed residential areas and agricultural land.

Other Public Agencies Whose Approval is Required (e.g., Permits, Financing Approval, or Participation Agreement)

A number of state and federal agencies and their activities have an effect on Lakeport's general planning issues. These include, but are not limited to, the U.S. Housing and Urban Development Department (HUD), Federal Insurance Administration (FIA), U.S. Army Corps of Engineers, California Department of Fish and Game, the Central Valley Regional Water Quality Control Board, the National Pollutant Discharge Elimination System (NPDES), California Environmental Protection Agency, State Lands Commission, the Lake County Air Quality Management District, and the California Department of Water Resources. These agencies are interested in the interaction of the General Plan with their own long-range resource management activities.

Environmental Factors Potentially Affected

The Initial Study identified a number of potentially significant environmental impacts. The various environmental issue areas are indicated below.

X	Aesthetics		Hazards & Hazardous Materials	X	Public Services
X	Agricultural Resources	X	Hydrology/Water Quality	X	Recreation
X	Air Quality	X	Land Use/Planning	X	Transportation/Traffic
X	Biological Resources		Mineral Resources	X	Utilities/Service Systems
X	Cultural Resources	X	Noise	X	Mandatory Findings of Significance
X	Geology/Soils	X	Population/Housing		

The Initial Study identified a number of potentially significant environmental impacts. The various environmental issue areas are discussed in detail in the Checklist.

Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

_____ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

X I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

_____ I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a potentially significant impact or potentially significant unless mitigated. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

_____ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Signature


Date

Evaluation of Environmental Impacts

I. AESTHETICS – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	X			
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Response I a): Adoption of the updated General Plan will not directly cause adverse effects on Lakeport's scenic vistas. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development could indirectly result in impacts; however, it should be noted that these impacts would also occur under the existing General Plan. The updated General Plan contains existing policies that will continue to reduce impacts. The Open Space, Parks and Recreation Element contains policies and objectives (OS 2) which are directed at a number of goals including: protection of scenic views (OS 2.10), preserving open space (OS 2.11). Additionally the Community Design Element contains Policies CD 7.2 and CD 7.3 which are directed at maintaining public open space and native tree preservation. Policy CD 4.5 will ensure that future development along the lakefront does not block views of the lake from public streets and recreation areas. The updated General Plan will continue to preserve Lakeport's scenic features, while expanding the City of Lakeport's Sphere of Influence and modifying land use designations. This is a *less-than-significant* impact.

Response I b): Adoption of the updated General Plan will not directly result in development of impacts on scenic resources of historic buildings within a state scenic highway. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development could result in impacts; however, these impacts would also occur under the existing General Plan. As stated above in Response 1 a), the Updated General Plan contains policies which will continue to protect the City's scenic resources. Additionally, although there are eligible State Scenic Highways in Lake County, as classified by the Department of Transportation, including Highway 29, which borders Lakeport, none are officially designated as such. This is a *less-than-significant* impact.

Response I c): Adoption of the updated General Plan will not directly result in degrading the visual character of the City of Lakeport. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. The Community Design Element contains policies to address architectural and site design. The specifications of the Element includes existing policies and programs which encourage traditional neighborhood designs, preserving and enhancing residential areas, facilitating variety in residential architecture, discouraging approval of new strip commercial developments, and encouraging the development of specific performance standards in the Zoning Ordinance to protect Lakeport's natural environment, beauty and character. These policies will be specifically discussed in the EIR. New buildings in the re-zoned districts include: general office uses including business, medical and professional offices, office buildings and office parks with ancillary commercial and retail services; and single family and multi-family dwellings.

Future development in the Specific Plan Area and re-zoned downtown areas, could have a ***potentially-significant*** impact with regard to degrading the existing visual character of the City of Lakeport, and will be discussed further in the EIR.

Response I d): Adoption of the updated General Plan will not directly result in the creation of new sources of substantial light or glare. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development in the Specific Plan Area has the potential to create such new sources. However, the updated General Plan contains existing policies that will reduce future impacts of future, proposed projects. CD 7.7 carries forward existing night lighting specifications, and guidelines for reviewing exterior lighting fixtures. Related objectives encouraging proper lighting designs will continue to ensure that new sources of light will not adversely impact day and nighttime views in any proposed project areas. This is a ***less-than-significant*** impact.

II. AGRICULTURE RESOURCES – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	X			
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	X			

Response II a): The Specific Plan Area contains land “not classified as Prime” by the natural Resources Conservation Service, with the exception of a small area of “Prime Farmland” at the southern end of the Specific Plan Area.

Adoption of the updated General Plan will not directly result in any conversion of farmland to non-agricultural uses. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. In this case, the Agricultural Resources section of the Conservation Element will have a beneficial impact on maintaining unique farmland by discouraging the annexation of prime agricultural land for non-agricultural uses.

The potential for conversion of Prime Farmland to a non-agricultural use is a *potentially-significant* impact, and will be discussed further in the EIR.

Response II b): There are no Williamson Act contract lands in the proposed Specific Plan area. There is *no impact*.

Response II c): Adoption of the updated General Plan will not directly result in conversion of existing farmland to a non-agricultural use. Development which occurs in the future could result in converting current agricultural operations to a non-agricultural use. Current land uses in the Specific Plan area include agricultural uses such as orchards; if this land is later zoned for development, this will result in the conversion of Farmland to a non-agricultural use. This is a *potentially-significant* impact, and will be discussed further in the EIR.

III. AIR QUALITY – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X			
c) 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)?	X			
d) Expose sensitive receptors to substantial pollutant concentrations?	X			
e) Create objectionable odors affecting a substantial number of people?	X			

Response III a): Adoption of the updated General Plan will not directly conflict with or obstruct implementation of any applicable air quality plans. Implementation of the Conservation Element will have a potentially beneficial impact regarding ensuring compliance with applicable air quality plans by requiring the Lake County Air Quality Control District to review all development proposals. The Conservation Element also includes air quality as a factor in the City's environmental review procedures and requires dust emissions control plans along with other mitigation measures for construction activities. Implementation of the updated General Plan will not conflict with applications of the Lake County Air Quality Management District Rules and Regulations. There is **no impact** associated with this criterion.

Response III b): Adoption of the updated General Plan will not directly result in any development impacts which could violate existing air quality standards. Development that occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development could indirectly result in air quality impacts. The updated General Plan carries forward existing policies (Policy C 3.1-3.2) that will continue to ensure good air quality in Lakeport by requiring review of all development proposals by the Lake County Air Quality Control district, mandating compliance with air quality standards, including air quality as a factor in the City's environmental review procedures, and continuing to require a dust emissions control plan for construction activities. These policies will be discussed further in the EIR.

Future development in the Specific Plan Area may result in violations of local air quality standards in the form of construction impacts and increased motor vehicle emissions. The Transportation Element of the updated Plan encourages roadway improvements, residential infill development, and adopting and implementing a Capital Improvement Program; all of which could contribute to incremental increases in air pollutant emissions and levels. This could result in *potentially-significant* impacts on air quality, and will be analyzed further in the EIR

Response III c): Adoption of the updated General Plan will not directly result in a cumulatively considerable net increase of any criteria non-attainment pollutant. The region is currently under attainment levels for all criteria pollutants. Future development, in accordance with the updated General Plan in the Specific Plan area could result in earthmoving, hauling, trenching, demolition, and other construction activities that would result in localized and temporary increase in particulate matter levels. Construction activities also result in pollutant emissions from the operation of gasoline and diesel powered equipment. CO and NOx emissions would be the pollutants of concern from the operation of construction equipment and would be in the form of hydrocarbons from asphalt; hydrocarbons being the precursors of the chemical ozone.

The Air Quality section of the Conservation Element includes air quality considerations such as emissions control plans and air quality review by the City and Lake County Air Quality Control District. These policies will be discussed further in the EIR. This is a *potentially-significant* impact, and will be analyzed further in the EIR.

Response III d), e): Adoption of the updated General Plan will not directly result exposing sensitive receptors to substantial pollutant concentrations or the creation of objectionable odors. Sensitive receptors in the City of Lakeport include residences, schools, parks, medical offices and other public facilities. Residences, offices, and pedestrians within or passing through the City of Lakeport are the sensitive receptors of the most concern for direct air pollutant emissions. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. Policy C 3.2 includes programs aimed at ensuring that the air quality impacts of projects located in proximity to sensitive receptors are adequately mitigated. Additionally, the general plan updated land use designations (Office and Residential) are not ones which are associated with creating objectionable odors. Future development of the Specific Plan area may include sensitive receptors, which would be subject to odor and pollutant impacts from neighboring industrial uses, which are located east of Highway 29. This impact is *potentially significant*.

IV. BIOLOGICAL RESOURCES – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	X			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	X			
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	X			
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X			
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

REGULATORY SETTING

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Once a species is listed it is fully protected from a “take” unless a take permit is issued by the U.S. Fish and Wildlife Service (USFWS). A take is defined as the killing, capturing, or harassing of a species. Proposed endangered or threatened species are those species for which a proposed regulation, but not final rule, has been published in the Federal Register.

Migratory Bird Treaty Act

To kill, possess, or trade a migratory bird, bird part, nest, or egg is a violation of the Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., § 703, Supp. I, 1989), unless it is in accordance with the regulations that have been set forth by the Secretary of the Interior.

Clean Water Act – Section 404

Section 404 of the Clean Water Act (CWA) regulates all discharges of dredged or fill material into waters of the United States. The United States Army Corps of Engineers is the agency responsible for administering the permit process for activities that affect waters of the United States. Executive Order 11990 is a federal implementation policy, which is intended to result in no net loss of wetlands.

Natural drainage channels and wetlands are considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”). The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes, which show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

Clean Water Act – Section 401

Section 401 of the Clean Water Act (CWA) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the Regional Water Quality Control Board. To obtain the water quality certification the Regional Water Quality Control Board must indicate that the proposed fill would be consistent with the standards set forth by the state.

Fish and Game Code §2050-2097 - California Endangered Species Act

The California Endangered Species Act (CESA) protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is the State's policy to conserve, protect, restore, and enhance endangered species and their habitats.

The CESA expanded upon the original Native Plant Protection Act and enhanced legal protection for plants. To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code §1900-1913 - California Native Plant Protection Act

In 1977, the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the state. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants.

Public Resources Code § 21083.4 - Oak Woodlands Conservation

In 2004, the California legislature enacted SB 1334, which added oak woodland conservation regulations to the Public Resources Code. This new law requires a County to determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a County determines that there may be a significant effect to oak woodlands, the County must require oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands. Such mitigation alternatives includes: conservation through the use of conservation easements; planting and maintaining and appropriate number of replacement of trees; contribution of funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements; and/or other mitigation measures developed by the County.

Public Resources Code § 21000 - California Environmental Quality Act

The California Environmental Quality Act (CEQA) identifies that a species that is not listed on the federal or state endangered species list may be considered rare or endangered if the species meets certain criteria. Under CEQA, public agencies must determine if a project would adversely affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e. candidate, or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency (i.e. USFWS or CDFG).

Fish and Game Code § 3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in California, generally called “raptors,” are protected. The law indicates that it is unlawful to take, possess, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code § 1601-1603 – Streambed Alteration

Under the California Fish and Game Code, the Department of Fish and Game (CDFG) has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project developers must obtain a “Streambed Alteration Agreement” from the CDFG prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFG may impose conditions to limit and fully mitigate impacts on fish and wildlife resources.

ENVIRONMENTAL SETTING

The City of Lakeport is located within the eco-region 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. 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.

Habitat Types

This eco-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 Clear Lake shoreline is 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, crappies, largemouth bass, carp and hitch are found in Clear Lake along the shores. It has been estimated that 72 percent 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.

Riparian areas also serve an important role in protecting the water quality in Clear Lake. Much of the sediments being deposited in Clear Lake are filtered out by vegetation, marshes and creek-bank structures in riparian areas. 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 less extent. Annual goldfields, poppies, lupines, and other forbs are commonly found in the spring in this plant community.

Oaks 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.

SPECIAL STATUS SPECIES

A search of the California Natural Diversity Database (CNDDB) revealed that the Boggs Lake hedge-hyssop is located in the vicinity of the City of Lakeport and Specific Plan Area. Boggs Lake hedge-hyssop is a small, semi-aquatic, herbaceous annual in the figwort family (Scrophulariaceae). It has opposite leaves, blunt, unequal sepals, and yellow and white flowers on short stalks. According to the California Department of Fish and Game, it is found in shallow waters or moist clay soils of vernal pools and lake margins in scattered sites from Modoc County south to Fresno County.

Plants

Plants that are documented in the CNDDB in the regional vicinity of Lakeport include: bristly sedge (*Carex comosa*), Norris's beard-moss (*Didymodon norrisii*), and glandular western flax (*Hesperolinon adenophyllum*) (see Table 1).

Table 1
Special Status Plants

Bristly Sedge	The bristly sedge is not listed under the state or federal endangered species act, but is listed on the "CNPS list 2." It is a perennial herb that occurs in marshes and swamps generally along lake margins. This species typically blooms between May and September. The CNDDB indicates that this species occurs approximately eight miles northwest of the City limits.
Norris's Beard-moss	Norris's beard-moss is not listed under the state or federal endangered species act, but is listed on the "CNPS list 2." It is a moss that occurs in cismontane woodland and lower montane coniferous forests and grows on rocks in areas that are intermittently wet. The CNDDB indicates that this species occurs approximately ten miles northwest of the city limits.
Glandular Western Flax	The glandular western flax is not listed under the state or federal endangered species act, but is listed on the "CNPS list 1B." It is an annual herb that occurs in chaparral, valley and foothill grasslands, often on serpentine. This species typically blooms between May and August. The CNDDB indicates that this species occurs approximately ten miles northwest of the City limits.

Animals

Animals that are documented in the CNDDB as located in the regional vicinity of Lakeport include: tricolored blackbird (*Agelaius tricolor*), northwestern pond turtle (*Clemmys marmorata marmorata*), double-crested cormorant (*Phalacrocorax auritus*), and foothill yellow-legged frog (*Rana boylei*) (see Table 2).

Table 2
Special Status Animals

Tricolored Blackbird	Tricolored blackbird is designated by the USFWS and CDFG as a “Species of Special Concern.” This species nests in colonies with open water, a protected nesting substrate, and a foraging area with insect prey within a few kilometers of the colony. The CNDDDB indicates that this species occurs to the north of the City limits.
Northwestern Pond Turtle	Northwestern pond turtle is designated as a “Species of Special Concern” by the USFWS and CDFG. Northwestern pond turtles are aquatic turtles that live in ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. They need basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying. The CNDDDB indicates that this species occurs approximately six miles northwest of the City limits.
Double-crested cormorant	Double-crested cormorant is designated by the USFWS and CDFG as a “Species of Special Concern.” This species lives on lakes, rivers, swamps, and coasts, and nests in colonies in trees, cliffs, or rocky islands near open water. The CNDDDB indicates that this species occurs to the north of the City limits.
Foothill Yellow-legged Frog	The foothill yellow-legged frog is designated by the USFWS and CDFG as a “Species of Special Concern.” This species lives in gravelly or sandy streams with sunny banks and open woodlands nearby. The CNDDDB indicates that this species occurs approximately 14 miles to the north of the city limits.

Nesting raptors/active raptor nests. Nesting raptors (predatory birds) and active raptor nests (i.e., nests in which raptors are breeding or raising young) are protected by the California Fish and Game Code Section 3503.5 and the federal Migratory Bird Treaty Act. Nest trees are typically located in open woodland habitats, including riparian woodland and oak woodland.

Plant Communities. Coastal and Valley Freshwater Marsh is a plant community that is listed in the *California Natural Diversity Database* as a rare plant community. This community generally occurs in coastal valleys near the mouth of rivers and creeks or around the shoreline or margin of a lake or pond. An area with this type of plant community requires year-round water and the dominate plants are composed of tall emergent vegetation. Coastal and Valley Freshwater Marsh is located in the regional vicinity of Lakeport.

Response IV a): Adoption of the updated General Plan will not directly result in any development of impacts on candidate, sensitive, or special status species, or riparian habitat. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development could indirectly result in habitat modification. A number of endangered plants of highest priority that are indigenous to Lake County that could possible be encountered during a rare plant survey in the Lakeport area include the Constance’s coyote thistle (*Eryngium constancei*), Burkke’s goldfield (*Lastenia burkei*), few-flowered navarretia (*Navarretia pauciflora*), and the many-flowered navarretia (*N.*

pleiantha). Vernal pools may occur within the Lakeport General Plan Area in rural areas with low topographic relief.

According to the California Natural Diversity Database, the County of Lake contains special status species. However there are no candidate, sensitive, or special-status species located in the City of Lakeport's Specific Plan area or areas proposed for changes in land use. In addition, the re-zoned areas of the Updated General Plan were already zoned for development. The updated General Plan contains revised policies that will reduce potential impacts. The Biological Resources section of the Conservation Element includes Policies C 1.1, C 1.2, and C 1.3 and related programs aimed at preserving biological resources, including special habitat areas, sensitive plant species, sensitive resource areas, and native species. This Element will help minimize the removal of native vegetation in new developments and require re-vegetation plans to include native species. These policies will be discussed further in the EIR.

Development in the Specific Plan area could result in habitat modifications which may affect special status species located throughout the County. This is a ***potentially-significant*** impact and will be discussed further in the EIR.

Response IV b): Adoption of the updated General Plan will not directly result in any development of impacts on riparian vegetation. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. The updated General Plan includes Programs C 1.1-b and C 1.1-c, which require re-vegetation plans for projects that result in vegetation or tree removal. The Conservation, Open Space, and Parks Element of the existing General Plan includes requirements for development adjacent to watercourses, including enforcing setbacks from stream banks, requires developments within and/or adjacent to riparian areas to clearly indicate the boundaries of watercourses, the slope and condition of stream banks, and if applicable, to prepare a biotic study.

Small, intermittent streams are located in the Specific Plan Area. Development within this area may include removal of valuable riparian vegetation, and the sensitive habitat associated afforded by the riparian vegetation for wildlife. This will reduce the overall abundance and diversity of plants and animals. If proper precautions are not taken during construction phases, biological abundance and diversity may be reduced by the siltation of streams and lakes in the Planning Area due to increased construction. This future development could result in ***potentially-significant*** impacts on riparian wildlife and vegetation. This impact will be examined further in the EIR.

Response IV c): Adoption of the updated General Plan will not directly result in substantial adverse impacts to vernal pools. Vernal pools may occur in rural areas with low topographic relief. According to the Natural Resources Conservation Service, the soil types found in the Specific Plan Area (Bressa-millsholm, and Wappo Loum) do not pond. This is a ***less-than-significant*** impact.

Response IV d): Adoption of the updated General Plan will not directly result in substantial adverse impacts to movement of native residents, migratory fish, or wildlife species. Development which occurs in the future will be guided by the policies and programs contained

in the updated General Plan; see Response IV b for related policies. These policies will be discussed further in the EIR.

Wildlife corridors could exist along the stream channels contained in the Specific Plan area. Future build out of the Specific Plan area may result loss of important wildlife corridors; this is a ***potentially-significant*** impact and will be discussed further in the EIR.

Response IV e): Adoption of the updated General Plan will not directly result in any conflicts with local policies or ordinances protecting biological resources. Development which occurs in the future will be guided by policies and programs contained in the updated General Plan. The updated General Plan contains new Policies (C 1.2) and Programs (C 1.2-a, and C 1.2-b) which enforce the City's Zoning Ordinance which contains specific measures to protect heritage and street trees. Additionally Policy C 1.3 encouraged planting native and drought resistant trees in new developments, and in City owned parks, rail, and recreational facilities.

The undeveloped hillsides within the Specific Plan are primarily covered by blue oaks. Additional vegetation in the area consists of annual grass/Forbs, Chamise, and northern mixed chaparral. Public Resources Code §21083.4 - Oak Woodlands Conservation, requires a County to determine whether a project within its jurisdiction may result in a conversion of oak woodlands will have a significant effect on the environment. Adoption of the updated General Plan will not directly result in any conflicts with Public Resources Code §21083.4 or other policies and ordinances which are in place to protect the City of Lakeport's biological resources. However, future development in the Specific Plan area could indirectly result in altering existing, protected habitat; the native blue oak woodlands prevalent throughout the City of Lakeport, could be replaced by invasive exotic trees found typically in urban landscaping in the region. This is a ***potentially-significant*** impact and will be analyzed further in the EIR.

Response IV f): There are no applicable Habitat Conservation Plans, Natural Community Conservation Plans, or any other local, regional, or state conservation plans. There is ***no impact***.

V. CULTURAL RESOURCES – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	X			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X			
d) Disturb any human remains, including those interred outside of formal cemeteries?	X			

Response V a): Lakeport contains many buildings of local historical significance. Following is a partial list:

- Carnegie Library- 200 Park Street
- Remnants of Lakeview Hotel- corner of Main and 3rd
- Blue Steeple Church- corner of 1st and Forbes
- Hudson House- corner of 1st and Frobes
- Old Farmers Bank Building- main Street
- Old Bank of America Building- 199 Main Street
- Bank of Lake- corner of 3rd and Main
- Aron Levi's 2nd Pioneer Store- Main Street, and
- Old Masonic Temple.

The Open Space, Parks and Recreation Element of the updated General Plan contains Policy PR-1.10 and Program PR-1.10a, which are directed at identifying and protecting sites with significant cultural, aesthetic and social characteristics which are a part of the City's heritage. Policy CD 1.7, Programs CD 1.7a-b inventory significant historic buildings and protect designated architecturally and/or historically significant areas. Policy CD 4.3 preserves existing public buildings. These policies and programs will not directly result in adverse change in the significance historical resources. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This is a *less-than-significant* impact.

Response V b), c), d): The City of Lakeport is considered a highly sensitive area for historic-period archaeological resources. These resources can include, but are not limited to, historic disposal scatters, wells, privies, and non-extant building/structure foundations. Preparation of a

development location usually includes vegetation removal, grading, excavation for foundations and utilities, etc., and these types of disturbances to the soil reduce the integrity of cultural resources and Native American sites that are present. Archaeological sites are non-renewable resources that are fragile and easily damaged. Adverse impacts may occur to cultural resources when future development takes place unless measures are taken to protect them. Displacement of artifacts could be a significant adverse impact on cultural resources. The updated General Plan does not specifically address archaeological or paleontological resources; this impact is *potentially significant* and will be analyzed further in the EIR.

VI. GEOLOGY AND SOILS – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	X			
ii) Strong seismic ground shaking?	X			
iii) Seismic-related ground failure, including liquefaction?	X			
iv) Landslides?	X			
b) Result in substantial soil erosion or the loss of topsoil?	X			
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X			
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	X			
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	X			

Response VI a.i): The 2001 Fault-Rupture Hazard Zones maps prepared by the California Geological Survey for the Alquist-Priolo Earthquake Fault Zoning Act, identifies Alquist-Priolo zones in the northern and southern sections of Lake County, but none in the City of Lakeport or the Specific Plan Area.

“Active” faults, defined as those for which there is evidence of activity during the last 11,000 years, or Holocene time, in the area include the Mayacama, about seven miles southeast of Lakeport, and the Konocti Bay, nine miles to the east. The Healdsburg and San Andreas faults lie

24 and 35 miles to the southwest. Faults near Lakeport, categorized as “potentially active,” include the Collayomi, nine miles southwest, the Barlett Springs, 20 or so miles east and the Big Valley, running along the west shore of Clear Lake. 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 potential significant hazard and must be taken into consideration when development occurs in the vicinity.

Numerous minor faults exist within the county, designated potentially active, which could cause ground rupture, failure and shaking. Development permitted by the updated General Plan could be subject to hazards based on Lakeport’s proximity to active faults.

Adoption of the updated General Plan will not directly result in exposing residents to geologic hazards relating to the rupture of an active fault. Development which occurs in the future will be guided by the Safety Element of the updated General Plan. Future development could indirectly expose more persons to local, geologic hazards; however, it should be noted that these impacts would also occur under the existing General Plan. The updated General Plan contains updated policies in the Safety Element that would further reduce impacts.

This impact remains *potentially significant* and will be discussed further in the EIR.

Response VI a.ii-iv): Despite that no damaging earthquakes have occurred on faults within Lake County during the past 200 years, the California Geological Survey has classified the area as “Seismic Zone 4,” indicating that it is a highly active earthquake area with potential for significant events. Seismic Zones are classified on a scale from one to four; Seismic Zone 4 indicates that the area has a one in ten chance that an earthquake with an active peak acceleration level of 0.04 g (4/10 the acceleration of gravity) will occur within the next 50 years. Direct effects of seismic activity include the shifting and rupturing of ground along a fault and ground shaking. Ground shaking can cause indirect effects including landslides, subsidence and differential settlement, and liquefaction.

The proposed General Plan Update will have a beneficial impact on reducing the probability that strong seismic ground shaking, seismic related ground failure, and landslides will expose people or structures to potential adverse effects. The Safety Element includes a provision that, under certain conditions, a geotechnical report must evaluate fault displacement, groundshaking, landslides, expansive soils, subsidence, and settlement. The Element also includes a policy that structures cannot be built within 50 feet of the shoreline fault rupture zone, and high priority buildings will be monitored to ensure compliance with seismic safety standards. All potential seismic and geological safety hazards in future proposed projects, including those in the expanded sphere of influence and re-designated areas, must be mitigated. The existing regulatory environment, including mandatory adherence to the Seismic Zone 4 requirements of the California Building Code, and to the policies in the updated General Plan, should reduce related impacts.

Adoption of the updated General Plan will not directly result in exposing residents to geologic hazards related to strong seismic ground shaking, seismic-related ground failure including

liquefaction, and landslides. Development which occurs in the future will be guided by the Safety Element of the updated General Plan. Future development could indirectly expose more persons to local, geologic hazards; however, it should be noted that these impacts would also occur under the existing General Plan. The updated General Plan contains updated policies in the Safety Element that would further reduce impacts.

This impact remains *potentially significant* and will be discussed further in the EIR.

Response VI b): Portions of the General and Specific Plan Area have slopes in excess of 15%. The Specific Plan area consists of Bressa-millsholm soils with a 15-30% slopes and Wappo Loam soils with a 2-15% slope. Construction on such slopes, when underlain by unconsolidated soils, and/or soils of low permeability, increases the risk of erosion or landsliding. Also, construction on Wappo loams may lead to increased erosion as well as rapid surface runoff.

Adoption of the updated General Plan will not directly result in landslides and erosion. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development could result in these impacts. The updated General Plan contains updated policies that will further reduce impacts.

This impact is remains *potentially significant* and will be examined further in the EIR.

Response VI c): See Responses VI a-b. Adoption of the updated General Plan will not directly result in exposing more people to unstable geologic units or soils. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan; specifically, those in the Safety Element will have a beneficial impact on reducing the hazards that could be posed by such elements.

A number of faults are of concern within the General and Specific Plan area due to the potential magnitude of the major faults- the Healdsburg, Mayacamas, and the San Andreas Faults; and because the faults are in proximity to the City of Lakeport. Seismic impacts to which the General and Specific Plan area may be subject to are severe ground shaking, ground rupture, settlement, landslides, seiche, subsurface liquefaction and alteration of ground water. This is considered a *potentially-significant* impact and will be discussed further in the EIR.

Response VI d): Adoption of the updated General Plan will not directly result in new developments located on expansive soils. Development which occurs in the future will be guided by policies and programs contained in the updated General Plan; specifically those contained in the Safety Element.

Manzanita and Wappo loams are the predominant soil types in the Lakeport area; other soils, such as Kimball Variant, Cole Variant clay, and Bressa-Millsholm loams are also present. These soils generally have low permeability, moderate susceptibility to erosion and an expansive soil potential. Wappo loam and Bressa-Millsholm loam soils are present in the Specific Plan area.

Developing land located on expansive soil is considered a *potentially-significant* impact and will be discussed further in the EIR.

Response VI e): Adoption of the updated General Plan will not directly result in development of septic tanks on inadequate soils. Existing and proposed land use designations are based on proximity to the sewer. Higher density land uses will have access to the sewer, while lower density uses, with sufficient land to accommodate septic tanks are located in outlying areas. Future development in outlying areas of the Specific Plan area may require septic tanks. There are no General Plan policies related to the development of septic tanks. This is a ***potentially-significant*** impact and will be discussed further in the EIR.

VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

Response VII a): Adoption of the General Plan will not directly result in activities which would involve the transportation, use, and storage of hazardous materials. Future development related activities which would result in usage of hazardous material will be guided by the policies and programs contained in the updated General Plan; specifically, those contained in the Conservation and Safety elements.

Construction of future projects in the expanded Sphere of Influence and re-designated downtown areas may result in the limited use, transportation, and storage of hazardous materials. The Conservation and Safety Elements include programs which will have a beneficial impact on protecting public health from the hazards associated with transportation, storage, and disposal of hazardous wastes.

The Conservation Element requires proposed developments, which would handle, store, or transport hazardous materials, to be reviewed by the Fire District. The Safety Element includes programs which encourage adoption of a Hazardous Materials and Waste Ordinance, re-enforce the County's Hazardous Waste Management Plan, and facilitates environmental reviews for proposed Hazardous Waste Transportation, Storage and Disposal Facilities. It also re-enforces CA Code Title 19 requirements associated with storage of hazardous materials, and directs County and City cooperation in developing regulations regarding truck traffic carrying hazardous materials. These Elements will have a beneficial impact on decreasing the hazards posed to the public through the routine transport, use, or disposal of hazardous materials.

Element policies have been retained from the previous General Plan; there will be no change in the level of hazard threats posed to the public, this is a *less-than-significant* impact.

Response VII b): Adoption of the General Plan will not directly result in creating an environment conducive to accidentally release of hazardous materials into the environment. Additionally, the Safety Element carries forward previous General Plan policies, including a variety of measures to decrease the number of accidents involving the release of hazardous material. The Element requires industries and businesses that store or process hazardous materials, provide secondary containment facilities and buffer zones to help protect public health. Element policies have been retained from the existing General Plan; there will be no change in existing conditions. This is a *less-than-significant* impact.

Response VII c): Adoption of the updated General Plan will not directly result in hazardous emissions. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. Future development in the re-designated downtown area and Specific Plan area could result in impacts; however it should be noted that these impacts would also occur under the existing General Plan. Office and Residential land uses are not associated with emitting dangerous levels of hazardous emissions, materials, substances, or waste. While existing Industrial land uses could potentially be associated with emitting or handling hazardous emissions, as a condition of approval, future proposed industrial projects would be subject to Title 5 of the California Code of Regulations, which provide regulations regarding emissions of hazardous materials near schools. This is a *less-than-significant* impact.

Response VII d): There are no sites listed on the Comprehensive Environmental Response, Compensation, Liability Information System, the National Priority List, or the Department of Toxic Substances Control Cortese List in the City of Lakeport or the Specific Plan area. This is a *less-than-significant* impact.

Response VII e): Adoption of the updated General Plan will not directly result in creating a safety hazard for people residing or working in the City of Lakeport's Sphere of Influence. Buildout of the southwest portion of the Specific Plan area would result in development less than a mile from the Lampson Field Airport. Development which occurs in the Specific Plan area will be guided by the policies and programs contained in the updated General Plan, and existing Lake County Airport Land Use Compatibility Plan. Parts of the Specific Plan area fall within the Airport Land Use Commission's B2 Compatibility Zone Boundary. The B2 zone is the Extended Approach/Departure zone where aircraft are commonly below 800 feet AGL (above ground level) on a straight-in approach or straight-out departure. Prohibited uses, as specified by the Airport Land Use Commission include: schools, day care centers, or libraries; hospitals, or nursing homes; highly noise-sensitive uses; any land use which would involve the storage of highly flammable materials; or other land uses which may produce hazards to aircraft (i.e. Glare, or distracting lights; sources of dust, steam, or smoke which may impair pilot visibility; sources of electrical interference with aircraft communications or navigation; and any use which may attract large flocks of birds, especially landfills and certain agricultural uses). Land uses considered "Not Normally Acceptable" in a B2 Zone include: Residential subdivisions, intensive retail uses, intensive manufacturing or food processing uses, multiple story offices and hotels and motels. Future development in these areas will be subject to the regulatory oversight of the ALUC and must be consistent with the General Plan policies contained in the Safety Element.

Program S 2.8-a denies development which would create air navigation hazards due to electrical interference, smoke, glare, intrusion into established height referral areas in the County Airport Land Use Commission General Referral Area.

Program S 2.8-b directs all applicable General Plan and Specific Plan amendments and re-zone applications to be subject to oversight by the County Airport Land Use Commission.

Development in the expanded Sphere of Influence would be subject to a regulatory environment which decreases potential safety hazards for people residing or working in the City of Lakeport's Sphere of Influence, to a *less-than-significant* level.

Response VII f): A private airport is not located within the Lakeport Planning area; there is *no* impact.

Response VII g): Adoption of the updated General Plan will not directly interfere with an adopted emergency response plan or emergency response system. Future development will be subject to the policies and programs contained in the General Plan. The Safety Element requires maintaining an effective emergency response system through cooperation with the County of Lake's Emergency Preparedness Plan, maintaining an updated Emergency Operations Plan, informing the public on proper emergency procedures, and designating emergency evacuation routes, which will have a beneficial impact with regard to emergency response and evacuation

plans. Re-designating downtown land uses and expanding the Sphere of Influence will result in an impact that is *less than significant*.

Response VII h): Adoption of the updated General Plan will not directly expose people or structures to a significant risk of loss, injury or death involving wildland fires. Future development proposals in the expanded Sphere of Influence area and the downtown re-designated areas will be subject to the requirements of the Safety Element of the General Plan, which includes policies and programs that require that all development proposals be reviewed for fire risk. Implementing mitigation measures to reduce fire risk, and encouraging weed abatement will have a beneficial impact on reducing the probability of risk of loss, injury or death involving wildland fires. The General Plan Update will improve existing conditions; impacts are *less than significant*.

VIII. HYDROLOGY AND WATER QUALITY – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	X			
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flood on- or off-site?	X			
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	X			
f) Otherwise substantially degrade water quality?	X			
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	X			
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	X			
i) Expose people or structures to a significant risk of loss, injury or death	X			

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow?			X	

Response VIII a): Adoption of the updated General Plan will not directly cause any violations of water standards or waste discharge requirements. All storm drainage from Lakeport presently discharges into Clear Lake, much of which is carried in natural stream beds and open channels. For the past 20 years, the City has required of new developments storm drainage improvements, hydrologic reports, on-site detention, and measures to mitigate downstream effects of construction. 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, in addition to increasing erosion via grading or cut-and-fill activities. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan; specifically those contained in the Safety Element.

The updated General Plan includes new provisions (Program S 2.1-a) which requires all development projects to be conditioned according to Best Management Practices to ensure protection of groundwater and watercourses. These BMPs, which are also required by NPDES Phase II permits, include:

- Providing vegetative swales or buffer areas, which could be incorporated into landscaped areas to slow runoff velocities and allow sediments and other pollutants to settle,
- Providing in-line storage of stormwater to reduce peak discharge, allowing settling of pollutants, and reducing potential for downstream debris,
- Performing street and parking lot cleaning to remove potential debris and pollutants that could be picked up and conveyed by stormwater,
- Designing parking lots to direct stormwater to storm drains inlets and away from garbage disposal areas.

Existing Policies include, Policy S 2.1 includes programs which are in place to protect the water quality of Clear Lake and the Scotts Valley aquifer from degradation, and Policy S 2.2 which include programs which are in place to reduce agricultural contamination of potable water supplies. Program S 2.1-b requires the County to review all development proposals within the City's Planning Area for their impact on water quality; and Program S 2.1-c discourages construction during wet months to prevent siltation.

The existing regulatory environment, including the updated General Plan, will reduce potential impacts to water quality from future development to a *less-than-significant* level.

Response VIII b): 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. A large majority of the City's water production is from these wells, in recent years varying from about 700 to 900 acre-feet per year. These wells are the most economical source of water for the City. Domestic water also comes from Clear Lake via the City's water treatment plant and through Lake County's North Lakeport water treatment plant under a contract.

Sources of water for potential developments in the Specific Plan area may include drafts from water wells. Should usable water aquifers be found in the area, the danger of settlement within the aquifer would exist. Additionally, contamination due to leeching from overlying urbanized lands might exist as well.

Adoption of the updated General Plan will not directly result in development which would potentially deplete or contaminate existing groundwater sources. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. The updated General Plan contains updated policies that will further reduce potential groundwater impacts; however this remains a *potentially-significant* impact, and will be examined in the EIR.

Response VIII c): Adoption of the updated General Plan will not directly result in substantially altering the existing drainage pattern on the site, which would result in substantial erosion or siltation on or off-site. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This development could indirectly result in impacts; however, the updated General Plan contains policies (S 1.8-d and S 1.9) that will continue to reduce potential impacts to a *less-than-significant* level.

Response VIII d): Flooding has historically been one of Lakeport's major safety concerns. In the past twenty years, federal disasters due to flooding were declared six times in the history of Lakeport during 1983, 1986, 1995 (twice), 1997, and 1998. Flooding in Lakeport historically results from two distinct type of events: shoreline flooding due to high lake levels and wind velocity, and stream bank flooding cause by high intensity cloudburst storms over one or more of the drainage areas.

Adoption of the updated General Plan will not directly result in substantial alterations of the existing drainage patterns, which would result in increased flooding. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development could result in an increase in the short term water surface elevation in the drainage streams due to an increase of impervious surfaces. In addition, construction activities may encroach on the drainage area through the addition of new structures. New development would increase the demand on the existing an inadequate storm drainage system in the City.

This impact is *potentially significant* and will be examined further in the EIR.

Response VIII e): All storm drainage from Lakeport presently discharges into Clear Lake. Existing drainage facilities vary in size from 15 inch corrugated metal pipe culverts to a 13-foot by 7.5-foot box culvert on Forbes Creek. Much of this drainage is still carried in natural stream beds and open channels.

Adoption of the updated General Plan will not directly result in new impacts on the stormwater drainage system. Development which occurs in the future by the policies and programs contained in the updated General Plan; including Safety Element programs which enforce measures that minimize soil erosion and velocity of surface runoff, and encourage continued development/implementation of the City Capital Improvement Program. However, new construction in Lakeport permitted by the updated General Plan could result in an increase to the short term water surface elevation in the drainage systems due to an increase of impervious services. In addition, construction activities may encroach on the drainage area through the addition of new structures. New development would increase the demand on the existing and inadequate storm drainage system in the City and the Specific Plan Area. This impact is *potentially significant* and will be examined further in the EIR.

Response VIII f): See Response VIII a-e. The proposed project may result in the degradation of water quality. This is a *potentially-significant* impact.

Response VIII g), h): Adoption of the updated General Plan will not directly result in placing housing within a 100-year flood hazard area, or would place structures within 100-year flood hazard area which would impede or redirect flows. Should potential development sites exist in the FEMA 100-year flood zones, new residential development could occur in these areas. This is a *potentially-significant* impact and will be examined further in the EIR.

Response VIII i), j): Adoption of the updated General Plan will not directly result in any exposure of people or structures to a significant risk of loss, injury or death involving flooding. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. Future development could indirectly result in impacts; however, it should be noted that these impacts would also occur under the existing General Plan. The updated General Plan contains policies in the Safety Element which discourages construction in flood hazard areas.

New development in the Specific Plan area permitted by the updated General Plan could result in an increase in surface water run-off in drainage streams due to an increase of impervious surfaces. Construction activities may encroach on the drainage course through the addition of new structures. New development will increase the burden on the existing storm drainage systems. The Safety Element of the updated General Plan contains programs intended to ensure that additional storm drainage runoff resulting from new development is adequately mitigated through improvements to on-site and/or down stream storm drainage conveyance facilities.

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 in the past. Existing and potential facilities near the lake shore would be affected by exposure to 100-year flood conditions and seiches due to earthquakes. This is a *potentially-significant* impact and will be examined further in the EIR.

IX. LAND USE AND PLANNING – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?			X	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	X			
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Response IX a): Adoption of the updated General Plan will not result in dividing an established community. Related changes in land use designations are consistent with surrounding uses; and expanding the City of Lakeport's Sphere of Influence will not physically divide an established community since it is an undeveloped area. This is a *less-than-significant* impact.

Response IX b): The updated General Plan contains changes in land use designations that would be in conflict with the existing general plan. Some areas outside the city boundaries are proposed for re-designation. The uses outlined for the area designated for a Specific Plan could conflict with existing County policies. This impact is *potentially significant* and will be discussed in the EIR.

Response IX c): There are no habitat conservation plans or natural community conservation plans. There is *no impact*.

X. MINERAL RESOURCES – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Response X a): Currently there are no mining or mineral extraction operations within the Lakeport city limits, Sphere of Influence, or expanded Sphere of Influence. Sand, gravel and borax deposits are extracted in the nearby Scotts Valley and Big Valley areas. The Mineral Resources section of the Conservation Element contains programs reinforcing policies that prohibit mining and other mineral extraction activities within the city limits. This Element will have a beneficial impact on maintaining availability of mineral resources; there is ***no impact***.

Response X b): There are no mineral recovery sites located in the City of Lakeport; ***no impact*** has been identified.

XI. NOISE – Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	X			
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X			
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	X			
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	X			

Response XI a), b), c), d), e), f): Current concerns regarding excess noise focus on car races held at the County Fairgrounds, boats traveling at high speed on Clear Lake, and other transient noises, such as that caused by sea planes and helicopters that occasionally operate in the area. Adoption of the updated General Plan will not have direct impacts on noise levels. Future development activities, in accordance with the provisions of the updated General Plan, located within the Specific Plan area and the downtown area, may have *potentially-significant* impacts with regard to generation of noise, exposure of people to groundborne vibrations due to construction, as well as contribute to a substantial permanent increase in ambient noise levels due to an increase in traffic, and exposure of people to airport noise.

The Noise Element of the updated General Plan includes objectives, which contain policies and programs that are aimed at: ensuring compatibility of new development with the existing and future noise environment; reducing noise to acceptable levels where it now exceeds those

standards; and preventing land uses which increase the existing noise level above established acceptable standards. This impact remains *potentially significant*. The existing and future noise environment, along with updated policies will be examined further in the EIR.

XII. POPULATION AND HOUSING – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	X			
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

Response XII a): Adoption of the updated General Plan will not directly result in substantial population growth in the area. Changes to the Land Use Element and incorporation of the Specific Plan area may induce population growth through future development; this is considered a *potentially-significant* impact and will be analyzed further in the EIR.

Response XII b), c): The updated General Plan does not contain any policies or programs which would result in displacing existing housing or substantial amounts of people. The current General Plan includes land-use designations for sites which, if redeveloped, could cause a loss of affordable housing. For example, the Well-O-Point site is designated as Resort Residential, but it currently contains a mobile home park that provides affordable housing. However, this potential displacement of people and housing is an impact that would result from implementation of the already adopted General Plan, not from the proposed update. In addition, the Housing Element (adopted December 17, 2003), contains policies to mitigate conversion of housing. For example, Policy 5 (*Relocation of Non-conforming Mobile Home Parks*) states: “Residents displaced from mobile home parks converted to other uses shall be provided relocation assistance pursuant to State Law. It shall be the responsibility of the developer to provide relocation assistance.” This is a *less-than-significant* impact.

XIII. PUBLIC SERVICES –

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	X			
ii) Police protection?	X			
iii) Schools?	X			
iv) Parks?	X			
v) Other public facilities?	X			

Response XIII a): Adoption of the updated General Plan will not directly result in any impacts on fire protection, police protection, schools, parks, or other public facilities which would result in the need for new or physically altered governmental facilities. Development in accordance with the updated General Plan, including buildout of the Specific Plan area, will indirectly result in increased service demands which would affect future provision of services, thus creating a demand for new governmental facilities. This is a *potentially-significant* impact and will be discussed further in the EIR.

XIV. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	X			
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Response XIV a): The City of Lakeport maintains a small system of parks, recreation facilities and open space for its citizens. In addition to City parks, recreational facilities are provided at the Highland Springs Reservoir, Lake County Fairgrounds, the County Park, and Clear Lake State Park. Community use of Lakeport Unified School District playing fields provides additional recreational facilities.

The City has approximately 63.5 acres of parkland not including recreational facilities at the schools. Lakeport's park and recreational facilities include: parks, Westshore Pool, and undeveloped parks. Not including the school district's park acreage, there are approximately 12 acres of City owned parkland per 1,000 residents.

The updated Lakeport General Plan continues to enforce the existing General Plan standard of 5 acres of developed parkland per 1,000 residents. While the City has acquired sufficient park lands to satisfy this requirement, only 16.5 acres of parkland have been developed. Currently, Lakeport has a ratio of approximately 3.3 acres of developed parkland per 1,000 residents.

Since the City does not currently meet General Plan standards for developed parkland and there is a potential for increased usage with regard to recreation facilities post-Specific Plan buildout; this is a **potentially-significant** impact and will be discussed further in the EIR.

Response XIV b): Adoption of the updated General Plan will not directly result in requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Development of recreational facilities that occurs in the future will be guided by the policies and programs contained in the updated General Plan. This future development could indirectly result in environmental impacts; however, it should be noted that these impacts would also occur under the existing General Plan. This is a **less-than-significant** impact.

XV. TRANSPORTATION/TRAFFIC – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	X			
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	X			
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?			X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

Response XV a), b): Adoption of the updated General Plan will not directly result in any increases in traffic. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. Development in the Specific Plan area may impact City-wide traffic loads, level of service standards, and may increase overall traffic levels. The updated General Plan contains updated policies which serve to further reduce future traffic impacts due to the development of the Specific Plan area; however, this remains a *potentially-significant* impact, and will be discussed further in the EIR.

Response XV c): Adoption of the updated General Plan will not directly result in changes in air traffic patterns, air traffic levels, or result in related safety risks. Development which occurs in the Specific Plan area will be guided by the policies and programs contained in the updated General Plan, and existing Lake County Airport Land Use Compatibility Plan. Parts of the Specific Plan area fall within the B2 Airport Compatibility Zone Boundary; the Extended Approach/Departure zone where aircraft are commonly below 800 feet AGL (above ground

level) on a straight-in approach or straight-out departure. Prohibited uses, as specified by the Airport Land Use Commission, include: schools, day care centers, or libraries; hospitals, or nursing homes; highly noise-sensitive uses; any land use which would involve the storage of highly flammable materials; or other land uses which may produce hazards to aircraft (i.e. Glare, or distracting lights; sources of dust, steam, or smoke which may impair pilot visibility; sources of electrical interference with aircraft communications or navigation; and any use which may attract large flocks of birds, especially landfills and certain agricultural uses). Future development in these areas will be subject to the regulatory oversight of the ALUC and the City. This impact is *less than significant*.

Response XV d): Adoption of the updated General Plan will not directly result in any development of impacts of traffic and circulation hazards due to design features, or incompatible uses. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. The updated General Plan specifically proposes changes in land use designations and expanding the City of Lakeport's Sphere of Influence to encompass the Specific Plan area. It does not propose any traffic infrastructure changes which might result in hazardous design features or incompatible uses. Policies such as T 40.1, increase the safety of the roadway system through programs which mandate annual evaluations of the need for street lighting modifications; review of high accident areas annually, and developing safe route to school plans. Policy T 41.1 contains Programs which encourage roadway improvements that will increase safety and accessibility for motorists and pedestrians. Policy T 42.1 contains programs which separate vehicular, bicycle and pedestrian traffic. The Transportation Element of the General Plan will further reduce potential impacts associated with build out of the Specific Plan area. The proposed General Plan update changes some land use designations with the City limits, and expands the City of Lakeport's boundary to include the Specific Plan area. It does not propose hazardous circulation design features or incompatible uses. This is a *less-than-significant* impact.

Response XV e): Adoption of the updated General Plan will not directly result in inadequate emergency access. Additionally, the updated plan contains existing policies (S 3.5) which address designated emergency evacuation routes. Development which occurs in the future will be guided by the policies and programs contained in the updated General Plan. This is a *less-than-significant* impact.

Response XV f): Adoption of the updated General Plan will not directly result in inadequate parking capacity. The updated general Plan contains no new policies which address parking capacity and does not direct development of any specific area which would impact parking capacity. This is a *less-than-significant* impact.

Response XV g): Adoption of the updated General Plan will result in carrying forward existing policies which improve and update the Bikeways plan (Policy T 24.1), improve pedestrian facilities (Policy T 26.1), and include sidewalks in all new street improvements (Policy T 27.1). These policies and programs do not conflict with adopted program supporting alternative transportation. There is *no impact*.

XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	X			
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	X			
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	X			
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Response XVI a): Adoption of the updated General Plan will not directly result in exceeding wastewater treatment requirements. Development in accordance with the updated General Plan would create increased demands on wastewater collection, treatment and disposal facilities. Surcharging, spills and inflow and infiltration have been long-term problems during wet weather for the five largest wastewater treatment plants in Lake County, including the City of Lakeport facility. Inflow and infiltration consists of storm water, ground water and lake water that enters the sewer system through cracked pipes and leaky manholes. Wet weather accentuates any sewer problems, especially for those systems at lake level. Sanitary sewer overflows are generally of greater threat to groundwater quality.

During the past five years, Clear Lake has experienced one year of extreme flooding of near shore communities in 1998. Several wastewater spills occurred during the 1998 flooding, including the City of Lakeport.

Development of the City's expanded sphere of influence could have a *potentially-significant* impact on wastewater treatment, facilities, drainage, and water supplies.

Response XVI b), c): See Response XVI a. Additional facilities and expansions of existing facilities may be necessary to accommodate development in accordance with the updated General Plan. This is a *potentially-significant* impact and will be examined further in the EIR.

Response XVI d): Adoption of the updated General Plan will not directly result in necessitating new expanded water entitlements. Development in accordance with the updated General Plan in the Specific Plan area may need to secure raw water supplies. This is a *potentially-significant* impact and will be discussed further in the EIR.

Response XVI e): Adoption of the updated General Plan will not directly result in development that would exceed the wastewater treatment provider's capacity to serve the City. However, development in the area proposed to be included in the expansion of the City's Sphere of Influence could potentially increase demand for wastewater treatment beyond the plant's current capacity. This impact is *potentially significant* and will be discussed in the EIR.

Response XVI f): Adoption of the updated General Plan will not directly result in an increase in solid waste disposal needs. Development in accordance with the updated General Plan in the Specific Plan area may result in increased demand for solid waste disposal. Lakeport has universal and mandatory garbage and recycled materials curbside pick-up. Lakeport has a contract with Lakeport Disposal for its solid waste disposal. Most solid waste refuse from Lakeport is transferred to the East lake landfill, located just outside the Town of Clearlake. The East Lake landfill is located on a 32 acre parcel outside the City limits of Clearlake. The landfill has a total capacity of 6 million cubic yards and is expected to reach total capacity between 2020 and 2025. This is a *less-than-significant* impact.

Response XVI g): Adoption of the updated General Plan will not cause future projects to be out of compliance with any federal, state, or local statutes related to solid waste. The updated General Plan changes land use designations and expands the City of Lakeport's Sphere of Influence to encompass the Specific Plan area. The updated general Plan does not propose any new policies related to solid waste. This impact is *less-than-significant*.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE -

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory?	X			
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	X			
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	X			
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X			

Response XVII a): See Response IV a-f, and Response V a. Important cultural resources, and special status species exist in and around the City of Lakeport expanded sphere of influence. Adoption of the updated General Plan will not directly result in any development of impacts on special species habitats, or eliminated important example of the major periods of California history or prehistory. Build out of the Specific Plan area may impact important habitat for special species in the area. Additionally preparation of a development location usually includes vegetation removal, grading, excavation for foundations and utilities, etc., and these types of disturbances to the soil reduce the integrity of cultural resources that are present. The adaptation of the General Plan could indirectly result in the displacement of artifacts that could be examples of major periods of California history, and destruction of important habitat that could directly

result from development that occurs after the adoption of the Plan. This impact is *potentially significant*.

Response XVII b): Adoption of the updated General Plan will result in the implementation of updated short-term and long-term environmental goals. Build out of the Specific Plan area, and adoption of the updated general plan land use designations have the potential to impact long term development. Subsequent development that could result from these changes has the potential to affect long term environmental goals. This impact is *potentially significant* and will be addressed further in the EIR.

Response XVII c): Adoption of the updated General Plan could indirectly result in impacts that are cumulatively considerable since would not necessarily induce development and growth, however it does define the context for development to occur. Although individual projects that occur under the provisions of the updated General Plan may have little if any impact, cumulative impacts could occur as a result of total buildout of the community. This impact is *potentially significant*.

Response XVIII d): Adoption of the updated General Plan will not directly result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. However, as a result of the implementation of the updated General Plan, new development would be permitted which may have direct adverse impacts on human beings. This impact is *potentially significant*.

4.0 SOURCES CONSULTED

Airport Land Use Commission. *Lake County Airport Land Use Compatibility Plan*. November 16, 1992

California Geological Survey. *2001 Fault-Rupture Hazard Zones*

County of Lake. *Lampson Field Master Plan Report*. Lakeport, California. June 15, 1993.

Department of Transportation. *California Scenic Highway Mapping System: Officially Designated State Scenic Highways and Historic Parkways*

National Resources Conservation Service. *2004 Soil Survey*

Quad Knopf, Inc. *City of Lakeport General Plan Update Background Report*, September, 2004.

United States Environmental Protection Agency. *Comprehensive Environmental Response, Compensation and Liability Information System*

5.0 LIST OF PREPARERS

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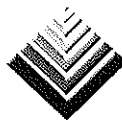
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Quad Knopf



California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair

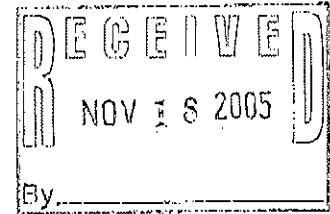


Arnold Schwarzenegger
Governor

Alan C. Lloyd Ph.D.
Agency Secretary

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Internet Address: <http://www.waterboards.ca.gov/centralvalley/>
11020 Sun Center Drive, #200, Rancho Cordova, CA 95670-6114
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16 November 2005

Richard Knoll,
Planning Director
City of Lakeport Community Development Department
225 Park Street
Lakeport, CA 95453

COMMENTS TO DRAFT INITIAL STUDY, CITY OF LAKEPORT GENERAL PLAN UPDATE, LAKE COUNTY

Regional Board staff has reviewed the Draft Initial Study for the proposed City of Lakeport General Plan Update that was received on 27 October 2005. The proposed project consists of updating and amending the City of Lakeport's General Plan. A summary of proposed land use designation changes made to the current General Plan are as follows:

1. From Residential to Office. 3.2 acres bordered by 4th street, Tunis Street, First Street.
2. From Major Retail to Office. 10 acres located on the east side of Highway 29, north of Eleventh Street.
3. From Major Retail/Low Density Residential to Residential. 4.15 acres bordered by Sandy Lane, Todd Road, and Edith Way.
4. From Urban Reserve to Residential. 48 acres located on the southeastern border of the current City of Lakeports Sphere of Influence and the west side of Highway 29.
5. The expanded Sphere of Influence comprised on 555 acres is designated "Specific Plan Area".
6. The current General Plan designation of "Low Density Residential" and "Medium Density Residential" are proposed to be combined into the classification "Residential".

Staff has the following comment regarding the Draft Initial Study:

- Section VIII (Hydrology and Water Quality) of the Draft Initial Study does not describe potential impacts to the underlying groundwater associated with additional wastewater that will be generated from adoption of the updated General Plan.
- Section VIII(a) of the Draft Initial Study states that adoption of the updated General Plan will not directly cause any violations of water standards or Waste Discharge Requirements (WDRs).

California Environmental Protection Agency

City of Lakeport
Notice of Preparation
Lake County

- 2 -

16 November 2005

Staff's review finds that this statement only pertains to storm water discharges and not potential groundwater impacts associated with wastewater treatment and disposal practices.

- The wastewater collection, treatment, and disposal system which serves the City of Lakeport is owned and operated by the City of Lakeport Municipal Sewer District and is regulated by Waste Discharge Requirements Order No. 98-207. If the proposed update to the General Plan as described above increases the monthly average dry weather discharge above 1.05 million gallons per day (mgd), then the WDRs must be updated. In order to update the WDRs, a Report of Waste Discharge must be submitted Pursuant to Section 13260 of the California Water Code the RWD must be submitted at least 150 days prior to increasing the wastewater discharge.

If you have any question regarding this letter please do not hesitate to call me at (916) 464-4648.



GUY CHILDS
Waste Discharge to Land Unit

cc: Ray Ruminski, Lake County Environmental Health Department, Lakeport

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, Governor

CALIFORNIA STATE LANDS COMMISSION100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202**PAUL D. THAYER, Executive Officer**

(916) 574-1800 FAX (916) 574-1810

Relay Service From TDD Phone 1-800-735-2929

from Voice Phone 1-800-735-2922

Contact Phone: (916) 574-1890**Contact FAX: (916) 574-1885**

November 23, 2005

File Ref: SCH#2005102104

*GP update*Ms. Nadell Gayou
The Resources Agency
901 P Street
Sacramento, CA 95814Mr. Richard Knoll
City of Lakeport
Community Development Department
City Hall, C 225 Park Street
Lakeport, CA 95453

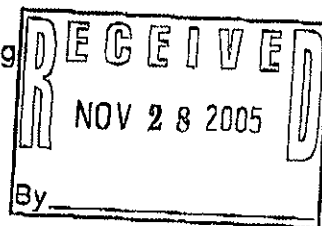
Dear Ms. Gayou and Mr. Knoll:

Subject: City of Lakeport General Plan Update

Staff of the California State Lands Commission (CSLC) has received the above referenced Notice of Preparation. Under the California Environmental Quality Act (CEQA), City of Lakeport is the Lead Agency and the CSLC is a Responsible and/or Trustee Agency for any and all projects which could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters.

The State acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all the people of the State for statewide Public Trust purposes. Pursuant to Chapter 639, Statutes of 1973, the state granted, in trust, to the County of Lake, the submerged lands of Clear Lake for the purposes of navigation, commerce, fisheries, protection of wildlife habitats, conservation of wildlife and fish resources, ecology, open space and open access to public, public recreation and other such uses which prove beneficial on a statewide basis. Activities involving granted lands must be consistent with the granting statutes and the above described Public Trust purposes. Please contact Grace Kato, Public Land Management Specialist, at 916-574-1227, for more information concerning CSLC's jurisdiction.

Sincerely,

Stephen L. Jenkins, Asst. Chief
Division of Environmental Planning
and Management



State of California - The Resources Agency

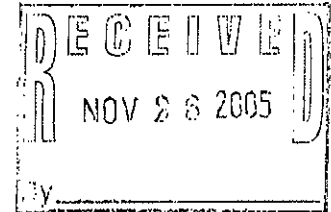
ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

November 23, 2005

Mr. Richard Knoll
City of Lakeport
Community Development Department
City Hall, C 225 Park Street
Lakeport, CA 95453



Dear Mr. Knoll:

City of Lakeport General Plan Update
Lake County
SCH # 2005102104

The Department of Fish and Game (DFG) has reviewed the Notice of Preparation. If the General Plan update results in changes to fish and wildlife resources as described in the California Code of Regulations, Title 14, Section 753.5(d)(1)(A)-(G)¹, then a de minimis determination is not appropriate, and an environmental filing fee as required under Fish and Game Code Section 711.4(d) should be paid to the Lake County Clerk on or before filing of the Notice of Determination for this project.

A complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats, should be provided. Rare, threatened and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380). The assessment should identify any rare plants and rare natural communities, following DFG's Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (revised May 8, 2000). The Guidelines are available at www.dfg.ca.gov/whdab/pdfs/guideplt.pdf.

Please be advised that a California Endangered Species Act (CESA) Permit must be obtained if projects within the City of Lakeport have the potential to result in take of species of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA Permit is subject to CEQA documentation; therefore, the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the project will impact CESA listed species, early consultation is encouraged, as significant modification to the project and mitigation measures may be required in order to obtain a CESA Permit.

¹ <http://ccr.oal.ca.gov/> Find California Code of Regulations, Title 14 Natural Resources, Division 1, Section 753

Mr. Richard Knoll
November 23, 2005
Page 2

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed, DFG may require a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant. Issuance of SAAs is subject to CEQA. DFG, as a responsible agency under CEQA, will consider the CEQA document for the project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the agreement. To obtain information about the SAA notification process, please access our website at www.dfg.ca.gov/1600; or to request a notification package, contact the Streambed Alteration Program at (707) 944-5520.

DFG wishes the City of Lakeport the best in updating their General Plan. If we can be of more assistance, please contact Mr. Liam Davis, Environmental Scientist, at (707) 944-5529; or Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,



Robert W. Floerke
Regional Manager
Central Coast Region

cc: State Clearinghouse

APPENDIX B

Actinemys marmorata marmorata

northwestern pond turtle

Element Code: ARAAD02031

Status

Federal: None

State: None

NDDB Element Ranks

Global: G3G4T3

State: S3

Other Lists

CDFG Status: SC

Habitat Associations

General: ASSOCIATED WITH PERMANENT OR NEARLY PERMANENT WATER IN A WIDE VARIETY OF HABITATS.

Micro: REQUIRES BASKING SITES. NESTS SITES MAY BE FOUND UP TO 0.5 KM FROM WATER.

Occurrence No. 100

Map Index: 38444

EO Index: 33452

Dates Last Seen

Occ Rank: Fair

Element: 1997-05-07

Origin: Natural/Native occurrence

Site: 1997-05-07

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 1998-03-24

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.93838° / -122.94187°

UTM: Zone-10 N4309940 E505037

Area: 28.5 acres

Elevation: 1,760 ft

Mapping Precision: SPECIFIC

Symbol Type: POLYGON

Township: 13N

Range: 10W

Section: 35

Qtr: NW

Meridian: M

Location: HIGHLAND CREEK, ON THE NORTH SIDE OF HIGHLAND SPRINGS ROAD, ABOUT 2 MILES UPSTREAM FROM HIGHLAND RESERVOIR.

Ecological: HABITAT CONSISTS A PERENNIAL STREAM WITH RIPARIAN DOMINATED BY SALIX LASIANDRA AND ABUNDANT EMERGENT CAREX NUDATA.

General: A SINGLE ADULT MALE WAS CAPTURED ON 7 MAY 1997 WHILE CROSSING THE DIRT BED OF HIGHLAND SPRINGS ROAD.

Owner/Manager: BLM-CLEAR LAKE RA

Occurrence No. 142

Map Index: 46847

EO Index: 46847

Dates Last Seen

Occ Rank: Good

Element: 2001-10-09

Origin: Natural/Native occurrence

Site: 2001-10-09

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2001-12-17

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.94001° / -122.90721°

UTM: Zone-10 N4310123 E508041

Area:

Elevation: 1,500 ft

Mapping Precision: NON-SPECIFIC

Symbol Type: POLYGON

Township: 13N

Range: 09W

Section: 30

Qtr: SW

Meridian: M

Location: SOUTH END OF HIGHLAND SPRINGS RESERVOIR, 0.2 MILES NORTH OF HIGHLAND SPRINGS.

Threat: CHANGE IN WATER REGIME

General: 9 OCT 2001: 2 INDIVIDUALS OBSERVED BASKING.

Owner/Manager: UNKNOWN

Occurrence No. 176

Map Index: 51831

EO Index: 51831

Dates Last Seen

Occ Rank: Good

Element: 1999-06-XX

Origin: Natural/Native occurrence

Site: 1999-06-XX

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2003-07-22

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.93695° / -122.88468°

UTM: Zone-10 N4309786 E509994

Radius: 80 meters

Elevation: 1,460 ft

Mapping Precision: SPECIFIC

Symbol Type: POINT

Township: 13N

Range: 09W

Section: 32

Qtr: NE

Meridian: M

Location: ADOBE CREEK, SW OF HIGHLAND SPRINGS CUTOFF, 1 MILE EAST OF HIGHLAND SPRINGS RESERVOIR

Location Detail: SITE IS LOCATED ~100' WEST OF POLE #3973+80.

General: 1 INDIVIDUAL OBSERVED DURING MAY-JUN 1999.

Owner/Manager: PVT

Agelaius tricolor

Tricolored blackbird

Element Code: ABPBXB0020

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G2G3

CDFG Status: SC

State: None

State: S2

Habitat Associations

General: HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.

Micro: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Occurrence No. 133

Map Index: 08028

EO Index: 24704

Dates Last Seen

Occ Rank: None

Element: 1936-05-29

Origin: Natural/Native occurrence

Site: 1936-05-29

Presence: Possibly Extirpated

Record Last Updated: 1991-07-25

Trend: Unknown

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.02239° / -122.90000°

UTM: Zone-10 N4319266 E508656

Radius: 1 mile

Elevation: 1,330 ft

Township: 14N

Range: 09W

Section: 31

Qtr: XX

Mapping Precision: NON-SPECIFIC

Symbol Type: POINT

Meridian: M

Location: MARSH NEAR LAKE PORT.

Location Detail: COLONY OF APPROX 75 OBS IN CATTAILS.

General: PRESUMED EXTIRPATED ACC TO BEEDY 1991.

Owner/Manager: BIA-BIG VALLEY RANCHERIA, PVT

Occurrence No. 134

Map Index: 08055

EO Index: 24707

Dates Last Seen

Occ Rank: Unknown

Element: 1972-06-10

Origin: Natural/Native occurrence

Site: 1972-06-10

Presence: Presumed Extant

Record Last Updated: 1989-08-10

Trend: Unknown

Quad Summary: Lakeport (3912218/549C), Upper Lake (3912228/549B), Bartlett Mtn. (3912227/549A)

County Summary: Lake

Lat/Long: 39.13516° / -122.88999°

UTM: Zone-10 N4331781 E509507

Radius: 1 mile

Elevation: 1,320 ft

Township: 15N

Range: 09W

Section: 20

Qtr: XX

Mapping Precision: NON-SPECIFIC

Symbol Type: POINT

Meridian: M

Location: 3 MI NW OF NICE.

Location Detail: FLOCK OF APPROX 2500 OBS BY DE HAVEN W/NESTLINGS IN BLACKBERRY.

Owner/Manager: PVT

Amphispiza belli belli

Bell's sage sparrow

Element Code: ABPBX97021

----- Status -----	NDDB Element Ranks	----- Other Lists -----
Federal: None	Global: GST2T4	CDFG Status:
State: None	State: S2?	

----- Habitat Associations -----

General: NESTS IN CHAPARRAL DOMINATED BY FAIRLY DENSE STANDS OF CHAMISE. FOUND IN COASTAL SAGE SCRUB IN SOUTH OF RANGE.
Micro: NEST LOCATED ON THE GROUND BENEATH A SHRUB OR IN A SHRUB 6-18 INCHES ABOVE GROUND. TERRITORIES ABOUT 50 YDS APART.

Occurrence No. 1	Map Index: 44020	EO Index: 44020	----- Dates Last Seen -----
Occ Rank: Excellent			Element: 2000-06-XX
Origin: Natural/Native occurrence			Site: 2000-06-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-10-12

Quad Summary: Highland Springs (3812288/534B)
County Summary: Lake, Mendocino

Lat/Long: 38.90232° / -122.92051°	Township: 12N
UTM: Zone-10 N4305940 E506892	Range: 10W
Area: 572.0 acres	Section: 12 Qtr: XX
Elevation: 2,700 ft	Meridian: M
Mapping Precision: SPECIFIC	
Symbol Type: POLYGON	

Location: ROAD TO MONUMENT PEAK, ADOBE CREEK ROAD, AND CUTOFF TO HIGHLAND SPRINGS ROAD, COW GLADE, MAYACMAS MOUNTAINS
Location Detail: SURVEYS TAKEN ALONG THE 3 ROADS, UTM COORDINATES GIVE LOCATIONS TO SUB-METER ACCURACY (POST PROCESSED, DATUM USED NOT GIVEN) AS PER GALEA.
Ecological: CHAPARRAL, SOME RECENTLY BURNED (1999). SURROUNDING LAND USE: SOME CATTLE GRAZING.
General: >50 OBSERVED NESTING, RELATIVELY HIGH DENSITY OF THIS SPECIES, 2000.
Owner/Manager: PVT

Occurrence No. 2	Map Index: 17131	EO Index: 44022	----- Dates Last Seen -----
Occ Rank: Excellent			Element: 2000-06-XX
Origin: Natural/Native occurrence			Site: 2000-06-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-10-12

Quad Summary: Highland Springs (3812288/534B)
County Summary: Lake

Lat/Long: 38.93143° / -122.92345°	Township: 13N
UTM: Zone-10 N4309170 E506635	Range: 10W
Area:	Section: 36 Qtr: S
Elevation: 1,525 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	
Symbol Type: POLYGON	

Location: HIGHLAND SPRINGS ROAD, 0.8 MILES SOUTHWEST OF HIGHLAND SPRINGS.
Location Detail: NO COORDINATE DATA GIVEN WITH ROUGH DRAWING ON MAP.
General: UNKNOWN NUMBER OF BIRDS OBSERVED.
Owner/Manager: UNKNOWN

Amsinckia lunaris

bent-flowered fiddleneck

Element Code: PDBOR01070

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.2	

Habitat Associations

General: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.

Micro: 50-500M.

Occurrence No. 22	Map Index: 17131	EO Index: 49071	Dates Last Seen
Occ Rank: Unknown			Element: 1952-05-03
Origin: Natural/Native occurrence			Site: 1952-05-03
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2002-10-17

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.93143° / -122.92345°	Township: 13N
UTM: Zone-10 N4309170 E506635	Range: 10W
Area:	Section: 36 Qtr: S
Elevation: 1,525 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Location: 1.2 MILES SOUTHWEST OF HIGHLAND SPRINGS.

Ecological: IN SHALLOW ROCKY SOIL ON 3 YEAR BURN, SOUTH FACING SLOPE.

General: NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No. 25	Map Index: 49074	EO Index: 49074	Dates Last Seen
Occ Rank: Unknown			Element: 1958-04-26
Origin: Natural/Native occurrence			Site: 1958-04-26
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2002-10-17

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.01996° / -122.91323°	Township: 14N
UTM: Zone-10 N4318995 E507511	Range: 10W
Area:	Section: 36 Qtr: XX
Elevation:	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Location: 1.6 MILES SOUTH OF LAKEPORT ON ROAD TO LAKEPORT.

General: 1958 COLLECTION BY CHISAKI ET AL. IS ONLY SOURCE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Andrena blennospermatis

Blennosperma vernal pool andrenid bee

Element Code: IHHYM35030

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G2	CDFG Status:
State: None	State: S2	

Habitat Associations

General: THIS BEE IS OLIGOLECTIC ON VERNAL POOL BLENNOSPERMA.

Micro: BEES NEST IN THE UPLANDS AROUND VERNAL POOLS.

Occurrence No. 3	Map Index: 59345	EO Index: 59381	Dates Last Seen
Occ Rank: Unknown			Element: 19XX-XX-XX
Origin: Natural/Native occurrence			Site: 19XX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-01-14

Quad Summary: Lakeport (3912218/549C), Upper Lake (3912228/549B)

County Summary: Lake

Lat/Long: 39.11778° / -122.90654°	Township: 15N
UTM: Zone-10 N4329851 E508079	Range: 09W
Radius: 3/5 mile	Section: 30
Elevation: 1,400 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: XX
Symbol Type: POINT	

Location: 5 MILES NORTH OF LAKEPORT.

Location Detail: NO OTHER LOCATION INFORMATION GIVEN.

Ecological: THIS SPECIES COLLECTS POLLEN ONLY FROM FLOWERS OF BLENNOSPERMA, AND HAS BEEN RECORDED FROM B. NANUM AND B. BAKERI.

General: AN UNKNOWN NUMBER OF FEMALES COLLECTED, DATE UNKNOWN.

Owner/Manager: UNKNOWN

Occurrence No. 4	Map Index: 59347	EO Index: 59383	Dates Last Seen
Occ Rank: Unknown			Element: 19XX-XX-XX
Origin: Natural/Native occurrence			Site: 19XX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-01-18

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.02470° / -122.91533°	Township: 14N
UTM: Zone-10 N4319522 E507328	Range: 10W
Radius: 1/5 mile	Section: 36
Elevation: 1,390 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: XX
Symbol Type: POINT	

Location: 1 MILE SOUTH OF LAKEPORT.

Location Detail: NO OTHER LOCATION INFORMATION GIVEN.

Ecological: THIS SPECIES COLLECTS POLLEN ONLY FROM FLOWERS OF BLENNOSPERMA, AND HAS BEEN RECORDED FROM B. NANUM AND B. BAKERI.

General: AN UNKNOWN NUMBER OF FEMALES COLLECTED; DATE UNKNOWN.

Owner/Manager: UNKNOWN

Occurrence No. 7	Map Index: 59361	EO Index: 59397	Dates Last Seen
Occ Rank: Unknown			Element: 19XX-XX-XX
Origin: Natural/Native occurrence			Site: 19XX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-01-14

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.02177° / -122.90404°	Township: 14N
UTM: Zone-10 N4319197 E508306	Range: 09W
Radius: 2/5 mile	Section: 31
Elevation: 1,330 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: XX
Symbol Type: POINT	

Location: 2 MILES NW OF FINLEY AT THE SOUTHWEST END OF CLEAR LAKE.

Ecological: THIS SPECIES IS OLIGOLECTIC ON VERNAL POOL FLOWERS, ESPECIALLY BLENNOSPERMA.

General: NO ADDITIONAL COLLECTING DATA GIVEN.

Owner/Manager: UNKNOWN

<i>Antirrhinum subcordatum</i>			
dimorphic snapdragon		Element Code: PDSCR2S070	
Status		NDDB Element Ranks	
Federal: None	Global: G3	Other Lists	
State: None	State: S3.3	CNPS List: 4.3	
Habitat Associations			
General: CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.			
Micro: GENERALLY ON SERPENTINE OR SHALE IN FOOTHILL WOODLAND OR CHAPARRAL ON S- AND W-FACING SLOPES. 185-800M.			

Occurrence No. 25	Map Index: 17131	EO Index: 17883	Dates Last Seen	
Occ Rank: Unknown			Element:	1951-05-13
Origin: Natural/Native occurrence			Site:	1978-07-18
Presence: Presumed Extant			Record Last Updated: 2007-10-16	
Trend: Unknown				

Quad Summary: Highland Springs (3812288/5348)				
County Summary: Lake				
Lat/Long: 38.93143° / -122.92345°	UTM: Zone-10 N4309170 E506635		Township: 13N	
Area:	Mapping Precision: NON-SPECIFIC	Range: 10W	Section: 36	Qtr: S
Elevation: 1,525 ft	Symbol Type: POLYGON	Meridian: M		

Location: 1.2 MILES SOUTHWEST OF HIGHLAND SPRINGS.				
Ecological: IN 2 YEAR OLD CHAPARRAL BURN IN SHALLOW ROCKY SOIL. ASSOCIATED WITH QUERCUS WISLIZENII, Q. DUMOSA, ADENOSTOMA, CEANOTHUS, ARCTOSTAPHYLOS. SOUTH-FACING SLOPE.				
General: SEEN IN 1951. VISITED IN 1977 AND 1978 AND NO PLANTS SEEN.				
Owner/Manager: UNKNOWN				

Archoplites interruptus

Sacramento perch

Element Code: AFCQB07010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G3	CDFG Status: SC
State: None	State: S1	

Habitat Associations

General: HISTORICALLY FOUND IN THE SLOUGHS, SLOW-MOVING RIVERS, AND LAKES OF THE CENTRAL VALLEY.

Micro: PREFERS WARM WATER. AQUATIC VEGETATION IS ESSENTIAL FOR YOUNG. TOLERATES WIDE RANGE OF PHYSIO-CHEMICAL WATER CONDITIONS.

Occurrence No. 5	Map Index: 43098	EO Index: 43098	Dates Last Seen
Occ Rank: None			Element: 1937-04-29
Origin: Natural/Native occurrence			Site: 1937-04-29
Presence: Possibly Extirpated			
Trend: Unknown			Record Last Updated: 2000-06-19

Quad Summary: Lucerne (3912217/549D), Lakeport (3912218/549C), Clearlake Highlands (3812286/533B), Clearlake Oaks (3912216/548C)

County Summary: Lake

Lat/Long: 39.02646° / -122.77960°	Township: 14N
UTM: Zone-10 N4319736 E519077	Range: 08W
Area:	Section: XX Qtr: XX
Elevation: 1,326 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	
Symbol Type: POLYGON	

Location: CLEAR LAKE, BETWEEN HIGHWAYS 20, 29 & 53, LAKE COUNTY.

General: 11 FISH COLLECTED IN CLEAR LAKE AND KEPT IN AQUARIUM AT ELK GROVE, RECEIVED AT NATIONAL MUSEUM OF NATURAL HISTORY DECEMBER 1937, ACC #146125 (USNM 00106570). 1 GILA CRASSICAUDA ALSO COLLECTED FROM THIS SITE, FEB 10, 1873.

Owner/Manager: UNKNOWN

Arctostaphylos manzanita ssp. elegans

Konocti manzanita

Element Code: PDERI04271

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G5T2	CNPS List: 1B.3
State: None	State: S2.3	

Habitat Associations

General: CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.

Micro: VOLCANIC SOILS. 395-1400M.

Occurrence No. 18	Map Index: 24303	EO Index: 45540	Dates Last Seen
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-08-10

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.93683° / -122.90707°	Township: 13N
UTM: Zone-10 N4309770 E508054	Range: 09W
Radius: 1 mile	Section: 31
Elevation: 1,500 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: XX
Symbol Type: POINT	

Location: HIGHLAND SPRINGS, MAYACAMAS RANGE.

General: NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Ardea herodias

great blue heron

Element Code: ABNGA04010

_____ Status _____	NDDB Element Ranks _____	Other Lists _____
Federal: None	Global: G5	CDFG Status:
State: None	State: S4	

_____ Habitat Associations _____

General: COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

Micro: ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

Occurrence No. 11	Map Index: 08046	EO Index: 25971	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 198X-XX-XX
Origin: Natural/Native occurrence			Site: 198X-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1996-01-25

Quad Summary: Lakeport (3912218/549C), Upper Lake (3912228/549B)

County Summary: Lake

Lat/Long: 39.12238° / -122.89556°	Township: 15N
UTM: Zone-10 N4330362 E509027	Range: 09W
Radius: 1/5 mile	Section: 30
Elevation: 1,350 ft	Meridian: M
	Qtr: NE

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Location: RODMAN SLOUGH, 0.6 MILES UPSTREAM FROM CLEAR LAKE.

Owner/Manager: UNKNOWN

Calycadenia micrantha

small-flowered calycadenia

Element Code: PDAST1P0C0

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G2G3	CNPS List: 1B.2
State: None	State: S2S3.2	

Habitat Associations
General: CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, MEADOWS AND SEEPS, LOWER MONTANE CONIFEROUS FOREST.
Micro: ROCKY TALUS OR SCREE; SPARSELY VEGETATED AREAS. OCCASIONALLY ON ROADSIDES; SOMETIMES ON SERPENTINE. 5-1500M.

Occurrence No. 4	Map Index: 17131	EO Index: 63743	Dates Last Seen
Occ Rank: Unknown			Element: 1950-05-06
Origin: Natural/Native occurrence			Site: 1950-05-06
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2006-01-11

Quad Summary: Highland Springs (3812288/534B)
County Summary: Lake

Lat/Long: 38.93143° / -122.92345°	Township: 13N
UTM: Zone-10 N4309170 E506635	Range: 10W
Area:	Section: 36
Elevation: 1,525 ft	Meridian: M
	Qtr: S

Location: 1.0 MI WEST OF HIGHLAND SPRINGS ON BOTH SIDES OF THE ROAD; MAYACMAS MOUNTAINS.
Location Detail: LOCATION DESCRIPTION VAGUE, MAPPED AS BEST GUESS 1 MI WEST ALONG HIGHLAND SPRINGS ROAD FROM SOUTHERN TIP OF RESERVOIR AT HIGHLAND SPRINGS.
Ecological: ON SMALL GRASSY KNOLL OVER SERPENTINE.
General: COLLECTED AS CALYCADENIA TRUNCATA SSP. MICROCEPHALA; MAPPED BY CNDDB AS C. MICRANTHA BASED ON RANGE. NEEDS FIELDWORK TO VERIFY.
Owner/Manager: UNKNOWN

Occurrence No. 5	Map Index: 63649	EO Index: 63744	Dates Last Seen
Occ Rank: Unknown			Element: 2003-08-23
Origin: Natural/Native occurrence			Site: 2003-08-23
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2006-01-11

Quad Summary: Highland Springs (3812288/534B)
County Summary: Lake

Lat/Long: 38.99528° / -122.93049°	Township: 13N
UTM: Zone-10 N4316255 E506019	Range: 10W
Radius: 80 meters	Section: 12
Elevation: 1,640 ft	Meridian: M
	Qtr: NW

Location: ALONG HIGHWAY 175, ABOUT 2.5 MI WEST OF JUNCTION WITH HIGHWAY 29; WEST OF LAKEPORT.
Location Detail: MAPPED BASED ON LAT/LONG COORDINATES PROVIDED.
General: 2003 CARR COLLECTION IS THE ONLY SOURCE FOR THIS SITE. NEEDS FIELDWORK.
Owner/Manager: UNKNOWN

Coastal and Valley Freshwater Marsh

Element Code: CTT52410CA

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G3	
State: None	State: S2.1	
Habitat Associations		
General:		
Micro:		

Occurrence No. 9 Map Index: 08067 EO Index: 16080 Dates Last Seen
Occ Rank: Unknown Element: 1977-03-XX
Origin: Natural/Native occurrence Site: 1977-03-XX
Presence: Presumed Extant
Trend: Unknown Record Last Updated: 1998-07-16

Quad Summary: Lakeport (3912218/549C), Lucerne (3912217/549D)
County Summary: Lake

Lat/Long: 39.02635° / -122.87386° Township: 14N
UTM: Zone-10 N4319708 E510917 Range: 09W
Area: 696.1 acres Mapping Precision: SPECIFIC Section: 28 Qtr: XX
Elevation: 1,330 ft Symbol Type: POLYGON Meridian: M

Location: BIG VALLEY MARSH; SOUTH BORDER OF THE UPPER PART OF CLEAR LAKE (1 MILE SOUTH OF LAKEPORT).

Ecological: OPEN WATER EXTENDING EAST-WEST 4 MI; TYPHA LATIFOLIA, SCIRPUS SP ARE DOMINANT.

Threat: DEVELOPMENT IN SOME AREAS; AGRICULTURE ENCROACHING TO SOUTH.

General: THIS WAS OCC #009 OF CTT52410CA.

Owner/Manager: UNKNOWN

Occurrence No. 16 Map Index: 08037 EO Index: 16076 Dates Last Seen
Occ Rank: Unknown Element: 1977-02-XX
Origin: Natural/Native occurrence Site: 1977-02-XX
Presence: Presumed Extant
Trend: Unknown Record Last Updated: 1998-07-16

Quad Summary: Lakeport (3912218/549C), Upper Lake (3912228/549B)
County Summary: Lake

Lat/Long: 39.13212° / -122.89955° Township: 15N
UTM: Zone-10 N4331443 E508681 Range: 09W
Area: 238.6 acres Mapping Precision: SPECIFIC Section: 19 Qtr: XX
Elevation: 1,328 ft Symbol Type: POLYGON Meridian: M

Location: RODMAN SL MARSH; N OF CLEAR LK ALONG E SIDE OF RODMAN SLOUGH 2 MI S OF UPPER LK.

Ecological: ALONG SLOUGH TYPHA LATIFOLIA & SCIRPUS APP ARE DOMINANT. E. SIDE HAS LEVEE; MARSH CONDITION VARIES W/LK LEVEL.

Threat: PASTURES ARE ENCROACHING.

General: THIS WAS OCC #016 OF CTT52410CA.

Owner/Manager: UNKNOWN

Cryptantha clevelandii var. *dissita*

serpentine cryptantha

Element Code: PDBOR0A0H2

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G5T1	CNPS List: 1B.1
State: None	State: S1.1	
Habitat Associations		
General: CHAPARRAL.		
Micro: SERPENTINE OUTCROPS. 330-730M.		

Occurrence No. 3 Map Index: 24302 EO Index: 29068 Dates Last Seen
Occ Rank: Unknown Element: 1943-05-10
Origin: Natural/Native occurrence Site: 1943-05-10
Presence: Presumed Extant
Trend: Unknown Record Last Updated: 1996-05-24

Quad Summary: Highland Springs (3812288/534B), Lakeport (3912218/549C)

County Summary: Lake, Mendocino

Lat/Long: 38.98746° / -122.97222° Township: 13N
UTM: Zone-10 N4315385 E502405 Range: 10W
Radius: 1 mile Mapping Precision: NON-SPECIFIC Section: 09 Qtr: SE
Elevation: 1,800 ft Symbol Type: POINT Meridian: M

Location: 5 MILES WEST OF LAKEPORT ON ROAD TO HOPLAND.

Location Detail: MAPPED ALONG HIGHWAY 175, 5 MILES FROM JUNCTION WITH HIGHWAY 29. 1938 COLLECTION BY BAKER FROM "WEST OF LAKEPORT...NEAR FOOT OF GRADE" IS ALSO MAPPED AT THIS SITE.

Ecological: SERPENTINE.

General: TYPE LOCALITY. TWO COLLECTIONS ATTRIBUTED TO THIS SITE; HOWELL #18008 (CAS) IN 1943 AND BAKER #8956 (DU) IN 1938.

Owner/Manager: UNKNOWN

Occurrence No. 4 Map Index: 24314 EO Index: 817 Dates Last Seen
Occ Rank: Unknown Element: 1943-05-11
Origin: Natural/Native occurrence Site: 1943-05-11
Presence: Presumed Extant
Trend: Unknown Record Last Updated: 1996-02-28

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.01444° / -122.91102° Township: 14N
UTM: Zone-10 N4318382 E507703 Range: 09W
Radius: 2/5 mile Mapping Precision: NON-SPECIFIC Section: 31 Qtr: SW
Elevation: 1,400 ft Symbol Type: POINT Meridian: M

Location: 1-2 MILES SOUTH OF LAKEPORT.

Location Detail: MAPPED AT HILL JUST SOUTH OF THE JUNCTION OF HIGHWAY 175 AND HIGHWAY 29. SITE REPORTED FROM ABRAMS "2 MILES SOUTH OF LAKEPORT" AND HOWELL "1 MILE SOUTH OF LAKEPORT". DIFFERENCE COULD REFLECT WHERE THEY STARTED MEASURING DISTANCE.

Ecological: SERPENTINE.

General: KNOWN COLLECTIONS FROM AREA INCLUDE HOWELL #18017 (CAS) IN 1943 AND ABRAMS #12351 (DU) IN 1928.

Owner/Manager: UNKNOWN

Occurrence No. 5 Map Index: 32962 EO Index: 819 Dates Last Seen
Occ Rank: Unknown Element: 1967-05-12
Origin: Natural/Native occurrence Site: 1967-05-12
Presence: Presumed Extant
Trend: Unknown Record Last Updated: 1996-02-28

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.03639° / -122.98279° Township: 14N
UTM: Zone-10 N4320815 E501489 Range: 10W
Radius: 2/5 mile Mapping Precision: NON-SPECIFIC Section: 28 Qtr: NW
Elevation: 1,600 ft Symbol Type: POINT Meridian: M

Location: SOUTH FORK SCOTTS CREEK, 4 MILES WEST OF LAKEPORT.

Location Detail: MAPPED NEAR THE MOUTH OF SCOTTS CREEK.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1967 COLLECTION BY JAMESON #15 (CAS).

Owner/Manager: UNKNOWN

Cryptantha clevelandii var. *dissita*

serpentine cryptantha

Element Code: PDBOR0A0H2

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G5T1	CNPS List: 1B.1
State: None	State: S1.1	

Habitat Associations
General: CHAPARRAL.
Micro: SERPENTINE OUTCROPS. 330-730M.

Occurrence No. 6	Map Index: 07911	EO Index: 820	Dates Last Seen
Occ Rank: Unknown			Element: 1902-05-30
Origin: Natural/Native occurrence			Site: 1902-05-30
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1996-01-25

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.10100° / -122.96862°	Township: 15N
UTM: Zone-10 N4327985 E502713	Range: 10W
Radius: 1 mile	Section: 33
Elevation: 1,400 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: SE
Symbol Type: POINT	

Location: HILLS ABOUT SCOTTS VALLEY, 6 MILES NORTHWEST OF LAKEPORT.

Location Detail: MAPPED AT 6 ROAD MILES NORTHWEST OF LAKEPORT ON SCOTTS VALLEY ROAD.

Ecological: CHAPARRAL.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1902 COLLECTION BY TRACY #1744 (JEPS).

Owner/Manager: UNKNOWN

Didymodon norrisii

Norris' beard moss

Element Code: NBMUS2C0H0

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G2G3	CNPS List: 2.2
State: None	State: S2.2	

Habitat Associations

General: CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.

Micro: MOSS FROM INTERMITTENTLY MESIC SITES; ON ROCKS 600-1700M.

Occurrence No. 3	Map Index: 45391	EO Index: 45391	Dates Last Seen
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-08-20

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.00313° / -122.89881°	Township: 13N
UTM: Zone-10 N4317129 E508761	Range: 09W
Radius: 1/5 mile	Section: 06 Qtr: SE
Elevation: 1,350 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Location: MANNING CREEK, HWY 175, ABOUT 4 MI W OF LAKEPORT.

Location Detail: SE 1/4, SEC 6.

General: NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No. 17	Map Index: 65394	EO Index: 65473	Dates Last Seen
Occ Rank: Unknown			Element: 2002-03-25
Origin: Natural/Native occurrence			Site: 2002-03-25
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2006-07-26

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.99552° / -122.94271°	Township: 13N
UTM: Zone-10 N4316282 E504960	Range: 10W
Radius: 1/10 mile	Section: 11 Qtr: NW
Elevation: 1,460 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Location: ROUGHLY 4 AIR MILES SSW OF LAKEPORT. ON THE N SIDE OF HWY 175, 1.8 ROAD MILES WEST OF THE INTERSECTION WITH GEORGE RD.

Location Detail: IN THE NE 1/4 OF THE NW 1/4 OF SECTION 11. LOCATION BASED ON COORDINATES PROVIDED IN COLLECTION INFORMATION.

Ecological: ON BARE SOIL IN RAIN GULLY.

General: ONLY SOURCES OF INFORMATION FOR THIS OCCURRENCE ARE THREE 2002 COLLECTIONS BY ALLEN.

Owner/Manager: UNKNOWN

Hesperolinon adenophyllum

glandular western flax

Element Code: PDLIN01010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.3	

Habitat Associations
General: CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.
Micro: SERPENTINE SOILS; GENERALLY FOUND IN SEPENTINE CHAPARRAL. 425-1315M.

Occurrence No. 9	Map Index: 08005	EO Index: 18600	Dates Last Seen
Occ Rank: Unknown			Element: 1998-06-18
Origin: Natural/Native occurrence			Site: 1998-06-18
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-07-05

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.01539° / -122.91289°	Township: 14N
UTM: Zone-10 N4318488 E507541	Range: 10W
Area: 1.5 acres	Section: 36
Elevation: 1,400 ft	Meridian: X
Mapping Precision: SPECIFIC	Qtr: SE
Symbol Type: POLYGON	

Location: BIG VALLEY, 0.2 MILE SOUTH OF JUNCTION OF HIGHWAY 175 AND HIGHWAY 29, EAST OF HIGHWAY 175, SOUTH OF LAKEPORT.

Location Detail: ON SERPENTINE KNOLL. MAPPED WITHIN THE NE 1/4 OF THE SE 1/4 OF SECTION 36.

Ecological: IN SERPENTINE CHAPARRAL. ASSOCIATED WITH ERIOGONUM VIMINEUM, CHLOROGALUM POMERIDIANUM, AND ARCTOSTAPHYLOS VISCIDA.

Threat: VEHICLE TRACKS AND TRASH DUMPING.

General: LESS THAN 1000 PLANTS OBSERVED IN 1978 BETWEEN THIS OCCURRENCE AND OCCURRENCE #10. COLLECTION FROM 1998 BY TAYLOR (#16666, JEPS) ATTRIBUTED HERE (THOUGH LAT-LONG COORDS IN SMASCH PLACE SITE TO SOUTHEAST).

Owner/Manager: UNKNOWN

Occurrence No. 10	Map Index: 08012	EO Index: 18599	Dates Last Seen
Occ Rank: Unknown			Element: 1978-07-18
Origin: Natural/Native occurrence			Site: 1978-07-18
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-04-13

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.00738° / -122.90955°	Township: 13N
UTM: Zone-10 N4317599 E507831	Range: 09W
Area: 1.4 acres	Section: 06
Elevation: 1,400 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: NW
Symbol Type: POLYGON	

Location: BIG VALLEY, 0.7 MILE SOUTH OF JUNCTION OF HIGHWAY 175 AND HIGHWAY 29, 0.15 MILE EAST OF CEMETERY, SOUTH OF LAKEPORT.

Location Detail: ON SERPENTINE KNOLL. MAPPED WITHIN THE NW 1/4 OF THE NW 1/4 OF SECTION 6.

Ecological: IN SERPENTINE CHAPARRAL; MAY BE ASSOCIATED WITH ARCTOSTAPHYLOS VISCIDA, ERIOGONUM VIMINEUM AND QUERCUS DURATA.

General: FEWER THAN 1000 PLANTS OBSERVED IN 1978 BETWEEN THIS OCCURRENCE AND OCCURRENCE #9.

Owner/Manager: UNKNOWN

Occurrence No. 17	Map Index: 07933	EO Index: 18593	Dates Last Seen
Occ Rank: Fair			Element: 1999-06-18
Origin: Natural/Native occurrence			Site: 1999-06-18
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-04-13

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.94942° / -122.96118°	Township: 13N
UTM: Zone-10 N4311164 E503363	Range: 10W
Area: 3.8 acres	Section: 27
Elevation: 1,920 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: NW
Symbol Type: POLYGON	

Location: HIGHLAND SPRINGS ROAD ABOUT 3.5 - 4.5 MILES WEST OF HIGHLAND SPRINGS, MAYACMAS MOUNTAINS.

Location Detail: 2 COLONIES. WEST COLONY ON NORTH SIDE OF ROAD ON BARE ROAD CUT, JUST WEST OF CREEK CROSSING. MAPPED WITHIN THE NW 1/4 NW 1/4 SECTION 27. EAST COLONY ON BOTH SIDES OF THE ROAD, MAPPED WITHIN THE SE 1/4 NW 1/4 OF SECTION 27.

Ecological: ASSOCIATED WITH CALYCADENA MULTIGLANDULOSA, CEANOTHUS CUNEATUS, AND QUERCUS DURATA. LESS THAN 20% VEGETATION COVER. SERPENTINE ROAD CUTS.

Threat: ROAD MAINTENANCE, GRADING, SUSCEPTIBLE TO EROSION. PLANTS COULD BE DESTROYED BY HERBICIDE MISUSE.

General: 1995:30-40 PLANTS AT E COLONY. 1999:3 PLANTS AT E COLONY AND 1 PLANT AT W COLONY. 1931 COLLECTION BY HILDEBRAND FROM 3 MI W OF HIGHLAND SPRINGS ON TOLL ROAD ATTRIBUTED TO THIS SITE. THE RARE CALYSTEGIA COLLINA SSP. OXYPHYLLA OCCURS NEARBY.

Hesperolinon adenophyllum

glandular western flax

Element Code: PDLIN01010

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G2

CNPS List: 1B.2

State: None

State: S2.3

Habitat Associations

General: CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.

Micro: SERPENTINE SOILS; GENERALLY FOUND IN SEPENTINE CHAPARRAL. 425-1315M.

Owner/Manager: UNKNOWN

Occurrence No. 18	Map Index: 07911	EO Index: 821	Dates Last Seen
Occ Rank: Unknown			Element: 1905-07-15
Origin: Natural/Native occurrence			Site: 1905-07-15
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1996-01-25

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.10100° / -122.96862°	Township: 15N
UTM: Zone-10 N4327985 E502713	Range: 10W
Radius: 1 mile	Section: 33
Elevation: 1,400 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: SE
Symbol Type: POINT	

Location: APPROX 6 MILES NORTH (NW) OF LAKEPORT, IN HILLS ABOUT SCOTTS VALLEY. EDGE OF CHAPARRAL.

Location Detail: MAPPED AT 6 ROAD MILES NORTHWEST OF LAKEPORT ON SCOTTS VALLEY ROAD; TRACY DID NOT SPECIFY AIR OR ROAD MILES.

General: LIKELY HABITAT IN VICINITY NEEDS TO BE CHECKED. COLLECTION WAS ANNOTATED BY SHARSMITH IN 1959.

Owner/Manager: UNKNOWN

Occurrence No. 24	Map Index: 42758	EO Index: 42758	Dates Last Seen
Occ Rank: Excellent			Element: 1999-06-18
Origin: Natural/Native occurrence			Site: 1999-06-18
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-05-04

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.94348° / -122.91173°	Township: 13N
UTM: Zone-10 N4310508 E507649	Range: 09W
Area: 46.1 acres	Section: 30
Elevation: 1,460 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: SW
Symbol Type: POLYGON	

Location: HIGHLAND SPRINGS ROAD, ALONG WEST SIDE OF HIGHLAND SPRINGS RESERVOIR, EAST OF THE MAYACMAS MOUNTAINS.

Location Detail: PLANTS OCCUR ON BOTH SIDES OF ROAD FROM ABOUT 0.5 - 1.2 MILES SOUTH OF HIGHLAND SPRINGS CUTOFF (EAST HIGHLAND SPRINGS ROAD). PLANTS ON BASE OF SLOPE NEAR ROAD AND ON TOP OF SLOPE APPROXIMATELY 6 FEET FROM ROAD EDGE.

Ecological: OPENINGS IN CHAMISE CHAPARRAL ON EAST FACING SLOPES. ASSOCIATED WITH AIRA CARYOPHYLLA, LOTUS HUMISTRATUS, BROMUS HORDEACEUS, VULPIA SPP., ERIOPHYLLUM LANATUM, AVENA BARBATA, TRITELEIA LAXA, MADIA EXIGUA, M. GRACILIS, ETC.

Threat: POSSIBLE THREATS INCLUDE ROAD MAINTENANCE, HERBICIDES. BLM PORTION OF THIS SITE UNDER CONSIDERATION FOR LAND EXCHANGE.

General: 1500-2000 PLANTS OBSERVED IN 1995. 100 PLANTS OBSERVED ON BLM CLEAR LAKE RESOURCE AREA PARCEL 117-L IN 1997. MORE THAN 5000 PLANTS OBSERVED IN 1999. THE RARE CALYSTEGIA COLLINA SSP. OXYPHYLLA OCCURS NEARBY.

Owner/Manager: PVT, BLM

Hesperolinon adenophyllum

glandular western flax

Element Code: PDLIN01010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G2	CNPS List: 1B 2
State: None	State: S2.3	

Habitat Associations

General: CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.
Micro: SERPENTINE SOILS; GENERALLY FOUND IN SEPENTINE CHAPARRAL. 425-1315M.

Occurrence No. 25	Map Index: 42759	EO Index: 42759	Dates Last Seen
Occ Rank: Good			Element: 1997-05-07
Origin: Natural/Native occurrence			Site: 1997-05-07
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-04-13

Quad Summary: Highland Springs (3812288/534B)
County Summary: Lake

Lat/Long: 38.93169° / -122.94197°	Township: 13N
UTM: Zone-10 N4309198 E505029	Range: 10W
Radius: 80 meters	Section: 35
Elevation: 2,360 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: SW
Symbol Type: POINT	

Location: HILLSLOPE ABOVE HIGHLAND CREEK, ABOUT 1.3 MILES NORTHEAST OF HIGH VALLEY RANCH, WEST OF HIGHLAND SPRINGS RESERVOIR.
Location Detail: ON RIDGELINE ADJACENT OT FIRE ROAD ABOUT 2-3 YEARS OLD IN 1997. MAPPED JUST SOUTH OF THE CENTER OF SECTION 35. BLM EXCHANGE PARCEL 147-L.
Ecological: ROCKY RIDGE ON RAW SERPENTINE AND REDDISH, WEATHERED SOILS, GROWING ON MARGIN OF DOZER ROAD, IN CHAPARRAL WITH PINUS ATTENUATA, CEANOTHUS JEPSONII VAR. ALBIFLORUS, AND CUPRESSUS SARGENTII.
Threat: PARCEL UNDER CONSIDERATION FOR SALE TO PRIVATE OWNER (LAND EXCHANGE).
General: 1000 PLANTS OBSERVED IN 1997.
Owner/Manager: BLM

Occurrence No. 26	Map Index: 42760	EO Index: 42760	Dates Last Seen
Occ Rank: Good			Element: 1998-06-24
Origin: Natural/Native occurrence			Site: 1998-06-24
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-06-28

Quad Summary: Highland Springs (3812288/534B)
County Summary: Mendocino, Lake

Lat/Long: 38.93098° / -122.96200°	Township: 13N
UTM: Zone-10 N4309118 E503286	Range: 10W
Area: 10.4 acres	Section: 34
Elevation: 2,640 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: SW
Symbol Type: POLYGON	

Location: NORTH SLOPE OF HIGH VALLEY, SLOPES ON EAST SIDE OF ADOBE CREEK ROAD, ABOUT 3 MILES WSW OF HIGHLAND SPRINGS RESERVOIR.
Location Detail: EXTENDING EASTWARD FROM ADOBE CREEK ROAD IN A RECENT 2-3 YEAR OLD (IN 1997) BURN AREA. MAPPED WITHIN THE NE 1/4 OF THE SW 1/4 OF SECTION 34. BLM EXCHANGE PARCEL 146-L.
Ecological: ROCKY RIDGE ON RAW SERPENTINE AND REDDISH, WEATHERED SOILS. GROWING IN MATRIX OF SERPENTINE CHAPARRAL OF PINUS SABINIANA, CEANOTHUS JEPSONII ALBIFLORUS, CUPRESSUS SARGENTII. PLANTS COLONIZING LOOSE SOIL FROM RECENT DISTURBANCE ALONG ROAD.
Threat: PARCEL UNDER CONSIDERATION FOR SALE TO PRIVATE OWNER (LAND EXCHANGE).
General: 5,000 PLANTS OBSERVED IN 1997, AND UNKNOWN NUMBER IN 1998.
Owner/Manager: BLM

Hesperolinon adenophyllum

glandular western flax

Element Code: PDLIN01010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.3	

Habitat Associations

General: CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.

Micro: SERPENTINE SOILS; GENERALLY FOUND IN SEPENTINE CHAPARRAL. 425-1315M.

Occurrence No. 27	Map Index: 42763	EO Index: 42763	Dates Last Seen
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-04-13

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake, Mendocino

Lat/Long: 38.88096° / -122.88849°	Township: 12N
UTM: Zone-10 N4303572 E509672	Range: 09W
Radius: 1/5 mile	Section: 17
Elevation: 2,500 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: XX
Symbol Type: POINT	

Location: EASTERN END OF PINE MOUNTAIN ROAD, AT BOUNDARY OF MENDOCINO AND LAKE COUNTIES.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE ARE COLLECTIONS BY RAICHE (40,210 CAS) AND KNIGHT (5436 CAS) CITED IN A FLORA OF THE VASCULAR PLANTS OF MENDOCINO COUNTY.

Owner/Manager: UNKNOWN

Occurrence No. 41	Map Index: 61836	EO Index: 61872	Dates Last Seen
Occ Rank: Unknown			Element: 1999-06-03
Origin: Natural/Native occurrence			Site: 1999-06-03
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-07-01

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.92288° / -122.90104°	Township: 12N
UTM: Zone-10 N4308223 E508578	Range: 09W
Area: 16.1 acres	Section: 06
Elevation: 1,800 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: NE
Symbol Type: POLYGON	

Location: ABOUT 5 MILES SOUTHWEST OF KELSEYVILLE AND 1.0 AIRMI SOUTH OF HIGHLAND SPRINGS.

Location Detail: ALONG ROADCUT ABOUT 1.1 ROAD MILES UPHILL FROM GATE AT HIGHLAND SPRINGS ROAD. MAPPED IN THE NW 1/4 OF THE NE 1/4 OF SECTION 6.

Ecological: ROADCUT ON SANDSTONE IN CHAPARRAL. NORTH ASPECT. ASSOCIATED WITH ADENOSTOMA FASCICULATUM, QUERCUS BERBERIDIFOLIA, AND HETEROMELES ARBUTIFOLIA.

General: UNKNOWN NUMBER OF PLANTS SEEN IN 1999.

Owner/Manager: UNKNOWN

Horkelia bolanderi

Bolander's horkelia

Element Code: PDROS0W010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G1	CNPS List: 1B.2
State: None	State: S1.2	

Habitat Associations

General: LOWER MONTANE CONIFEROUS FOREST, CHAPARRAL, MEADOWS, VALLEY AND FOOTHILL GRASSLAND.

Micro: GRASSY MARGINS OF VERNAL POOLS AND MEADOWS. 450-850M.

Occurrence No. 6	Map Index: 17131	EO Index: 9842	Dates Last Seen
Occ Rank: Unknown			Element: 1950-05-20
Origin: Natural/Native occurrence			Site: 1989-05-28
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1992-02-03

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.93143° / -122.92345°	Township: 13N
UTM: Zone-10 N4309170 E506635	Range: 10W
Area:	Mapping Precision: NON-SPECIFIC
Elevation: 1,525 ft	Section: 36 Qtr: S
	Meridian: M
	Symbol Type: POLYGON

Location: 1.2 MILES SOUTHWEST OF HIGHLAND SPRINGS.

Location Detail: LATEST SURVEY DIDN'T KNOW WHERE TO START MEASURING FROM. BETTER DIRECTIONS NEEDED FROM SWEENEY.

Ecological: SWEENEY'S ORIGINAL HERBERIUM LABEL SAYS PLANT COLLECTED ON 1 YEAR BURN IN CHAPARRAL ON SHALLOW ROCKY SOIL, SOUTH-FACING SLOPE. THIS IS ATYPICAL

General: MORE FIELD SURVEYS NEEDED.

Owner/Manager: UNKNOWN

Lavinia exilicauda chi

Clear Lake hitch

Element Code: AFCJB19011

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G5T2	CDFG Status: SC
State: None	State: S2	

Habitat Associations

General: FOUND ONLY IN CLEAR LAKE, LAKE CO. 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. 2	Map Index: 63527	EO Index: 63619	Dates Last Seen
Occ Rank: Unknown			Element: 1963-04-12
Origin: Natural/Native occurrence			Site: 1963-04-12
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-12-28

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.95744° / -122.89042°	Township: 13N
UTM: Zone-10 N4312060 E509494	Range: 09W
Area:	Section: 20
Elevation: 1,413 ft	Meridian: M
	Qtr: SW

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Location: ADOBE CREEK AT BELL HILL ROAD IN BIG VALLEY

Ecological: TRIBUTARY CREEK TO CLEAR LAKE.

General: COLLECTED 12 APR 1963 BY J.D. HOPKIRD & C.C. SWIFT (CAS #23261) PARATYPE.

Owner/Manager: UNKNOWN

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

Quad Summary: Lucerne (3912217/549D), Lakeport (3912218/549C), Clearlake Highlands (3812286/533B), Clearlake Oaks (3912216/548C)

County Summary: Lake

Lat/Long: 39.02646° / -122.77960°	Township: 14N
UTM: Zone-10 N4319736 E519077	Range: 08W
Area:	Section: XX
Elevation: 1,326 ft	Meridian: M
	Qtr: XX

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Location: CLEAR LAKE

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

Layia septentrionalis

Colusa layia

Element Code: PDAST5N0F0

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G2

CNPS List: 1B.2

State: None

State: S2.2

Habitat Associations

General: CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.

Micro: SCATTERED COLONIES IN FIELDS AND GRASSY SLOPES IN SANDY OR SERPENTINE SOIL. 145-1095M.

Occurrence No. 3

Map Index: 37004

EO Index: 818

Dates Last Seen

Occ Rank: Unknown

Element: 1995-04-11

Origin: Natural/Native occurrence

Site: 1995-04-11

Presence: Presumed Extant

Record Last Updated: 2005-06-29

Trend: Unknown

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.01459° / -122.91024°

UTM: Zone-10 N4318399 E507770

Area: 26.2 acres

Mapping Precision: SPECIFIC

Township: 14N

Range: 01W

Section: 31

Qtr: SW

Elevation: 1,400 ft

Symbol Type: POLYGON

Meridian: M

Location: SOUTH OF LAKEPORT AT AND NEAR JUNCTION OF HWY 20 AND HWY 175 (FORMERLY HOPLAND ROAD). SCATTERED ALONG SOUTH MAIN STREET.

Location Detail: OLD COLLECTIONS LIST DIFF. MILEAGES FROM LAKEPORT (0.8-2.5), BUT SITE IS PROB. SERPENTINE HILL. MAPPED AT CNDDB WHERE SEEN IN 1995 (S. MAIN STREET). PLANTS MAY BE MORE WIDESPREAD (IE: AT SUMMIT OF HILL), BUT MAP DETAIL/SURVEY INFO NEEDED.

Ecological: SEVERAL COLLECTIONS FROM THE AREA ON LARGE SERPENTINE HILL. S. HABITAT DESCRIBED AS DRY, ROCKY, GRAVELLY, GRASSY; SERPENTINE BALD. WITH ESCHSCHOLZIA CA, ZIGADENUS FREMONTII, PHACELIA HETEROPHYLLA CA, FESTUCA, PLATYSTEMON, GILIA, DELPHINIUM.

Threat: ROAD CONSTRUCTION.

General: TYPE LOCALITY: "2.5 MI S OF LAKEPORT". COLLECTED AT & NEAR SUMMIT OF HILL IN 1988. AT LEAST 100 PLANTS SEEN AT MAPPED LOCALITY IN 1995. PLANTS MAY BE FOUND WHERE MAPPED (SUCH AS AT SUMMIT OF HILL), BUT MAP DETAIL NEEDED.

Owner/Manager: UNKNOWN

Occurrence No. 4

Map Index: 24302

EO Index: 29069

Dates Last Seen

Occ Rank: Unknown

Element: 1943-05-10

Origin: Natural/Native occurrence

Site: 1943-05-10

Presence: Presumed Extant

Record Last Updated: 1996-01-25

Trend: Unknown

Quad Summary: Highland Springs (3812288/534B), Lakeport (3912218/549C)

County Summary: Lake, Mendocino

Lat/Long: 38.98746° / -122.97222°

UTM: Zone-10 N4315385 E502405

Radius: 1 mile

Mapping Precision: NON-SPECIFIC

Township: 13N

Range: 10W

Section: 09

Qtr: SE

Elevation: 1,800 ft

Symbol Type: POINT

Meridian: M

Location: 5 MILES WEST OF LAKEPORT ON ROAD TO HOPLAND. MAPPED 5 ROAD MILES FROM JUNCTION OF HWYS 29 & 175.

General: ONLY INFO IS COLLECTION BY HOWELL (#18005).

Owner/Manager: UNKNOWN

Occurrence No. 14

Map Index: 24303

EO Index: 7029

Dates Last Seen

Occ Rank: Unknown

Element: 1928-04-28

Origin: Natural/Native occurrence

Site: 1928-04-28

Presence: Presumed Extant

Record Last Updated: 1993-10-12

Trend: Unknown

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.93683° / -122.90707°

UTM: Zone-10 N4309770 E508054

Radius: 1 mile

Mapping Precision: NON-SPECIFIC

Township: 13N

Range: 09W

Section: 31

Qtr: XX

Elevation: 1,500 ft

Symbol Type: POINT

Meridian: M

Location: HIGHLAND SPRINGS, MAYACMAS RANGE.

Ecological: FOOTHILLS.

General: NO ELEVATION GIVEN ON HERB LABEL.

Owner/Manager: UNKNOWN

Pandion haliaetus

osprey

Element Code: ABNKC01010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G5	CDFG Status:
State: None	State: S3	

Habitat Associations

General: OCEAN SHORE, BAYS, FRESH-WATER LAKES, AND LARGER STREAMS.

Micro: LARGE NESTS BUILT IN TREE-TOPS WITHIN 15 MILES OF A GOOD FISH-PRODUCING BODY OF WATER.

Occurrence No. 55	Map Index: 08072	EO Index: 26816	Dates Last Seen
Occ Rank: Unknown			Element: 1985-04-29
Origin: Natural/Native occurrence			Site: 1985-04-29
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1996-01-25

Quad Summary: Lucerne (3912217/549D), Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.11822° / -122.87832°	Township: 15N
UTM: Zone-10 N4329903 E510519	Range: 09W
Radius: 1/5 mile	Section: 29 Qtr: SE
Elevation: 1,300 ft	Meridian: M

Location: APPROX 0.5 MILES EAST OF RODMAN SLOUGH ALONG NICE-LUCERNE CUTOFF ROAD.

Location Detail: NEST IS SOUTH OF ROAD IN FIELD.

Threat: NESTS ARE SMALL & OLD; REPLACEMENTS MAY BE LACKING. GRAZING NEARBY; CLOSE TO HEAVILY-USED RD; RECREATIONAL DISTURBANCE.

General: NESTS (ACTIVE AND INACTIVE) ARE IN SMALL TREES ALONG NORTH END OF LAKE.

Owner/Manager: PVT

Phalacrocorax auritus			
double-crested cormorant		Element Code: ABNFD01020	
Status		NDDDB Element Ranks	
Federal: None	Global: G5	Other Lists	
State: None	State: S3	CDFG Status:	
Habitat Associations			
General: COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS, & ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE.			
Micro: NESTS ALONG COAST ON SEQUESTERED ISLETS, USUALLY ON GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE MARGINS.			
Occurrence No. 23	Map Index: 08046	EO Index: 27368	Dates Last Seen
Occ Rank: Unknown			Element: 198X-XX-XX
Origin: Natural/Native occurrence			Site: 198X-XX-XX
Presence: Presumed Extant			Record Last Updated: 1996-01-25
Trend: Unknown			
Quad Summary: Lakeport (3912218/549C), Upper Lake (3912228/549B)			
County Summary: Lake			
Lat/Long: 39.12238° / -122.89556°		Township: 15N	
UTM: Zone-10 N4330362 E509027		Range: 09W	
Radius: 1/5 mile	Mapping Precision: NON-SPECIFIC	Section: 30	Qtr: NE
Elevation: 1,350 ft	Symbol Type: POINT	Meridian: M	
Location: RODMAN SLOUGH, 0.6 MILES UPSTREAM FROM CLEAR LAKE.			
Owner/Manager: UNKNOWN			

Plagiobothrys lithocaryus

Mayacamas popcorn-flower

Element Code: PDBOR0V0P0

Status		NDDB Element Ranks	Other Lists	
Federal: None		Global: GH	CNPS List: 1A	
State: None		State: SH		

Habitat Associations

General: MEADOWS? VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, CHAPARRAL?

Micro: MOIST SITES. 285-450M.

Occurrence No. 1	Map Index: 26367	EO Index: 22578	Dates Last Seen
Occ Rank: Unknown			Element: 1884-XX-XX
Origin: Natural/Native occurrence			Site: 1884-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1996-10-10

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.04479° / -122.93016°	Township: 14N
UTM: Zone-10 N4321749 E506043	Range: 10W
Radius: 1 mile	Section: 24
Elevation: 1,350 ft	Meridian: M
	Qtr: XX

Mapping Precision: NON-SPECIFIC
 Symbol Type: POINT

Location: LAKEPORT.

General: TYPE LOCALITY. ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1884 COLLECTION BY CURRAN.

Owner/Manager: UNKNOWN

Rana boylei

foothill yellow-legged frog

Element Code: AAABH01050

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G3

CDFG Status: SC

State: None

State: S2S3

Habitat Associations

General: PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.

Micro: NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.

Occurrence No. 114	Map Index: 32343	EO Index: 2576	Dates Last Seen
Occ Rank: Unknown			Element: 1956-04-XX
Origin: Natural/Native occurrence			Site: 1956-04-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1995-06-27

Quad Summary: Hopland (3812381/535A), Highland Springs (3812288/534B)

County Summary: Lake, Mendocino

Lat/Long: 38.99134° / -122.99060°	Township: 13N
UTM: Zone-10 N4315815 E500814	Range: 10W
Area:	Section: 08
Elevation: 2,400 ft	Meridian: M
	Qtr: XX

Mapping Precision: NON-SPECIFIC
 Symbol Type: POLYGON

Location: MCDOWELL CREEK; LAKE/MENDOCINO COUNTY LINES; WEST OF BIG VALLEY.

Ecological: RIVER.

General: MODERATELY ABUNDANT NUMBERS OBSERVED.

Owner/Manager: UNKNOWN

Occurrence No. 163	Map Index: 38444	EO Index: 33451	Dates Last Seen
Occ Rank: Fair			Element: 1997-07-11
Origin: Natural/Native occurrence			Site: 1997-07-11
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1998-03-24

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.93838° / -122.94187°	Township: 13N
UTM: Zone-10 N4309940 E505037	Range: 10W
Area: 28.5 acres	Section: 35
Elevation: 1,760 ft	Meridian: M
	Qtr: NW

Mapping Precision: SPECIFIC
 Symbol Type: POLYGON

Location: HIGHLAND CREEK, ON THE NORTH SIDE OF HIGHLAND SPRINGS ROAD, ABOUT 2 MILES UPSTREAM FROM HIGHLAND RESERVOIR.

Ecological: HABITAT CONSISTS A PERENNIAL STREAM WITH RIPARIAN DOMINATED BY SALIX LASIANDRA AND ABUNDANT EMERGENT CAREX NUDATA.

General: 4 ADULTS CAPTURED ON 11 JULY 1997 ALONG THE CREEK BANKS.

Owner/Manager: BLM-CLEAR LAKE RA

Occurrence No. 290	Map Index: 44336	EO Index: 44336	Dates Last Seen
Occ Rank: Excellent			Element: 1999-XX-XX
Origin: Natural/Native occurrence			Site: 1999-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-11-16

Quad Summary: Highland Springs (3812288/534B)

County Summary: Mendocino

Lat/Long: 38.90267° / -122.98863°	Township: 12N
UTM: Zone-10 N4305976 E500985	Range: 10W
Radius: 80 meters	Section: 08
Elevation: 1,560 ft	Meridian: M
	Qtr: XX

Mapping Precision: SPECIFIC
 Symbol Type: POINT

Location: PIETA CREEK, NORTH OF CLOVERDALE PEAK, IN THE MAYACAMAS MOUNTAINS

Ecological: HABITAT CONSISTS OF RIPARIAN.

General: 1 FYLF OF UNKNOWN AGE OBSERVED DURING SURVEYS MADE DURING MAY-JUN 1999.

Owner/Manager: UNKNOWN

Rana boylei

foothill yellow-legged frog

Element Code: AAABH01050

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G3	CDFG Status: SC
State: None	State: S2S3	

Habitat Associations

General: PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.

Micro: NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.

Occurrence No. 291	Map Index: 44380	EO Index: 44380	Dates Last Seen
Occ Rank: Fair			Element: 1999-XX-XX
Origin: Natural/Native occurrence			Site: 1999-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-11-27

Quad Summary: Highland Springs (3812288/534B)

County Summary: Mendocino

Lat/Long: 38.90821° / -122.98656°	Township: 12N
UTM: Zone-10 N4306591 E501165	Range: 10W
Radius: 80 meters	Mapping Precision: SPECIFIC
Elevation: 2,200 ft	Section: 08 Qtr: NE
	Meridian: M
	Symbol Type: POINT

Location: BETWEEN JAKES CREEK AND PIETA CREEK, NORTH OF CLOVERDALE PEAK, IN THE MAYACAMAS MOUNTAINS

Location Detail: LOCATED APPROXIMATELY 100 FEET EAST OF POLE 4523+65.

General: 1 FYLF OF UNKNOWN AGE OBSERVED DURING SURVEYS MADE DURING MAY-JUN 1999.

Owner/Manager: PVT

Occurrence No. 292	Map Index: 44381	EO Index: 44381	Dates Last Seen
Occ Rank: Good			Element: 1999-XX-XX
Origin: Natural/Native occurrence			Site: 1999-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-11-27

Quad Summary: Highland Springs (3812288/534B)

County Summary: Lake

Lat/Long: 38.91800° / -122.90087°	Township: 12N
UTM: Zone-10 N4307681 E508593	Range: 09W
Radius: 80 meters	Mapping Precision: SPECIFIC
Elevation: 2,000 ft	Section: 06 Qtr: SE
	Meridian: M
	Symbol Type: POINT

Location: 1.4 MILES SOUTH OF HIGHLAND SPRINGS, IN THE MAYACAMAS MOUNTAINS

Location Detail: LOCATED APPROXIMATELY 450 FEET SOUTH OF POLE 4090.

General: 1 FYLF OF UNKNOWN AGE OBSERVED DURING SURVEYS MADE DURING MAY-JUN 1999.

Owner/Manager: PVT

Streptanthus breweri* var. *hesperidis

green jewel-flower

Element Code: PDBRA2G092

_____ Status _____	NDDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G5T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ Habitat Associations _____

General: CHAPARRAL, CISMONTANE WOODLAND.

Micro: OPENINGS IN CHAPARRAL OR WOODLAND; SERPENTINE, ROCKY SITES. 130-760M.

Occurrence No. 15	Map Index: 28367	EO Index: 49262	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1933-06-19
Origin: Natural/Native occurrence			Site: 1933-06-19
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2002-11-05

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.04479° / -122.93016°	Township: 14N
UTM: Zone-10 N4321749 E506043	Range: 10W
Radius: 1 mile	Section: 24
Elevation: 1,350 ft	Meridian: M
Mapping Precision: NON-SPECIFIC	Qtr: XX
Symbol Type: POINT	

Location: LAKEPORT JUNCTION HILL.

Location Detail: MAPPED AS BEST GUESS AT LAKEPORT.

Ecological: IN SERPENTINE SOIL.

General: NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Taxidea taxus

American badger

Element Code: AMAJF04010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G5	CDFG Status: SC
State: None	State: S4	

Habitat Associations

General: MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.

Micro: NEED SUFFICIENT FOOD, FRIABLE SOILS & OPEN, UNCULTIVATED GROUND. PREY ON BURROWING RODENTS. DIG BURROWS.

Occurrence No. 129	Map Index: 28367	EO Index: 56793	Dates Last Seen
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2004-09-14

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.04479° / -122.93016°	Township: 14N
UTM: Zone-10 N4321749 E506043	Range: 10W
Radius: 1 mile	Section: 24 Qtr: XX
Elevation: 1,350 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
 Symbol Type: POINT

Location: LAKEPORT, LAKE COUNTY.

General: 1 FEMALE COLLECTED (CAS #20651) BY S. PARRISH ON UNKNOWN DATE.

Owner/Manager: UNKNOWN

Tracyina rostrata

beaked tracyina

Element Code: PDAST9D010

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G1G2	CNPS List: 1B.2
State: None	State: S1S2.2	

_____ Habitat Associations _____

General: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.

Micro: OPEN GRASSY MEADOWS WITHIN OAK WOODLAND AND GRASSLAND HABITATS. 150-500M.

Occurrence No. 8	Map Index: 28330	EO Index: 29462	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1902-06-02
Origin: Natural/Native occurrence			Site: 1998-06-05
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1996-09-27

Quad Summary: Lakeport (3912218/549C)

County Summary: Lake

Lat/Long: 39.08950° / -122.96496°	Township: 18N
UTM: Zone-10 N4326709 E503030	Range: 10W
Radius: 1 mile	Section: 03 Qtr: XX
Elevation: 1,400 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Location: 6 MILES NW OF LAKEPORT, IN HILLS ABOVE SCOTTS VALLEY.

Location Detail: ONLY INFORMATION IS HERBARIUM LABEL; NO ELEVATION GIVEN. MAPPED 6 MI NW OF LAKEPORT ALONG WEST SCOTTS VALLEY ROAD.

General: ONLY INFORMATION IS HERBARIUM LABEL; NEEDS FIELDWORK. IN 1998 GUGGOLZ AND GUGGOLZ SEARCHED GRASSLANDS ALONG SCOTT'S VALLEY ROAD FROM 4 MILES NW OF LAKEPORT TO JCT WITH HWY 20, DID NOT FIND PLANTS. MANY HOMES NOW FOUND ALONG THE ROAD.

Owner/Manager: UNKNOWN

APPENDIX C

Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species
that Occur in or may be Affected by Projects in the
HIGHLAND SPRINGS (534B)
U.S.G.S. 7 1/2 Minute Quad

Database Last Updated: August 10, 2006

Document Number: 060824123341

Species of Concern - The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. See www.fws.gov/sacramento/es/spp_concern.htm for more information and links to these sensitive species lists.

Red-Legged Frog Critical Habitat - The Service has designated final critical habitat for the California red-legged frog. The designation became final on May 15, 2006. See our [map index](#).

Listed Species

Invertebrates

Syncaris pacifica

California freshwater shrimp (E)

Fish

Hypomesus transpacificus

delta smelt (T)

Oncorhynchus kisutch

coho salmon - central CA coast (E) (NMFS)

Critical habitat, coho salmon - central CA coast (X) (NMFS)

Oncorhynchus mykiss

Central California Coastal steelhead (T) (NMFS)

Central Valley steelhead (T) (NMFS)

Critical habitat, Central California coastal steelhead (X) (NMFS)

Oncorhynchus tshawytscha

California coastal chinook salmon (T) (NMFS)

Amphibians

Rana aurora draytonii

California red-legged frog (T)

Birds

Haliaeetus leucocephalus

bald eagle (T)

Strix occidentalis caurina

northern spotted owl (T)

Key:

- (E) *Endangered* - Listed (in the Federal Register) as being in danger of extinction.
- (T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* - Officially proposed (in the Federal Register) for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Marine Fisheries Service](#). Consult with them directly about these species.
- Critical Habitat* - Area essential to the conservation of a species.
- (PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
- (C) *Candidate* - Candidate to become a proposed species.
- (X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey [7½ minute quads](#). The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the quad or quads covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the nine surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All plants and animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

[Critical Habitat](#)

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [critical habitat page](#) for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 22, 2006.

Sacramento Fish & Wildlife Office

**Federal Endangered and Threatened Species
that Occur in or may be Affected by Projects in the
LAKEPORT (549C)
U.S.G.S. 7 1/2 Minute Quad**

Database Last Updated: August 10, 2006

Document Number: 060823034224

Species of Concern - The Sacramento Fish & Wildlife Office no longer maintain a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. See www.fws.gov/sacramento/es/spp_concern.htm for more information and links to these sensitive species lists.

Red-Legged Frog Critical Habitat - The Service has designated final critical habitat for the California red-legged frog. The designation became final on May 15, 2006. See our [map index](#).

Listed Species

Fish

Hypomesus transpacificus

delta smelt (T)

Oncorhynchus kisutch

coho salmon - central CA coast (E) (NMFS)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha

California coastal chinook salmon (T) (NMFS)

Amphibians

Rana aurora draytonii

California red-legged frog (T)

Birds

Haliaeetus leucocephalus

bald eagle (T)

Strix occidentalis caurina

northern spotted owl (T)

Candidate Species

Mammals

Martes pennanti

fisher (C)

Key:

- (E) Endangered - Listed (in the Federal Register) as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed (in the Federal Register) for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Marine Fisheries Service](#). Consult with them directly about these species.
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- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
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- (X) Critical Habitat designated for this species

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All plants and animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR Â§17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

[Critical Habitat](#)

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management

considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [critical habitat page](#) for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 21, 2006.

APPENDIX D

CNPS Inventory of Rare and Endangered Plants

Status: Plant Press Manager window with 10 items - Thu, Aug. 24, 2006 11:35 c

Reformat list as:

Standard List - with Plant Press controls

ECOLOGICAL REPORT

scientific	family	life form	blooming	communities	elevation	CNPS
<u>Amsinckia lunaris</u>	Boraginaceae	annual herb	Mar-Jun	<ul style="list-style-type: none"> •Coastal bluff scrub (CBScr) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrs) 	3 - 500 meters	List 1B.2
<u>Arctostaphylos manzanita ssp. elegans</u>	Ericaceae	perennial evergreen shrub	Mar-May	<ul style="list-style-type: none"> •Chaparral (Chprl) •Cismontane woodland (CmWld) •Lower montane coniferous forest (LCFrS)/volcanic 	395 - 1615 meters	List 1B.3
<u>Calycadenia micrantha</u>	Asteraceae	annual herb	Jun-Sep	<ul style="list-style-type: none"> •Chaparral (Chprl) •Meadows and seeps (Medws) (volcanic) •Valley and foothill grassland (VFGrs)/roadsides, rocky talus scree sometimes serpentinite sparsely vegetated areas 	5 - 1500 meters	List 1B.2
<u>Cryptantha clevelandii var. dissita</u>	Boraginaceae	annual herb	Apr-Jun	<ul style="list-style-type: none"> •Chaparral (Chprl) (serpentinite) 	395 - 580 meters	List 1B.1
<u>Didymodon norrisii</u>	Pottiaceae	moss	<ul style="list-style-type: none"> •Cismontane woodland (CmWld) •Lower montane coniferous forest (LCFrS)/intermittently mesic, rock 	600 - 1700 meters	List 2.2	
<u>Hesperolinon adenophyllum</u>	Linaceae	annual herb	May-Aug	<ul style="list-style-type: none"> •Chaparral (Chprl) •Cismontane woodland (CmWld) •Valley and foothill 	150 - 1315 meters	List 1B.2

				grassland (VFGrS)/usually serpentinite		
<u>Horkelia bolanderi</u>	Rosaceae	perennial herb	Jun-Aug	<ul style="list-style-type: none"> •Chaparral (Chprl) •Lower montane coniferous forest (LCFrS) •Meadows and seeps (Medws) •Valley and foothill grassland (VFGrS)/edges, vernally mesic areas 	450 - 1100 meters	List 1B.2
<u>Layia septentrionalis</u>	Asteraceae	annual herb	Apr-May	<ul style="list-style-type: none"> •Chaparral (Chprl) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrS)/sandy, serpentinite 	100 - 1095 meters	List 1B.2
<u>Micropus amphibolus</u>	Asteraceae	annual herb	Mar-May	<ul style="list-style-type: none"> •Broadleafed upland forest (BUFrS) •Chaparral (Chprl) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrS)/rocky 	45 - 825 meters	List 3.2
<u>Plagiobothrys lithocaryus</u>	Boraginaceae	annual herb	Apr-May	<ul style="list-style-type: none"> •Chaparral (Chprl) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrS)/mesic 	300 - 450 meters	List 1A

APPENDIX E

CITY OF LAKEPORT GENERAL PLAN UPDATE: DEIR CIRCULATION ELEMENT

EXISTING CONDITIONS / STANDARDS

Level of Service Thresholds

To describe current traffic conditions and put current traffic volumes into perspective we compared existing traffic volumes and future forecasts to Level of Service thresholds employed by applicable planning agencies. "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. The Draft City of Lakeport General Plan indicates that LOS "C" will continue to be the minimum standard.

Levels of Service thresholds were developed based on review of the current General Plan and other recent traffic studies completed in Lakeport. No readily identifiable thresholds have been used which equate daily traffic volumes with general planning level Levels of Service. Thus threshold previously developed by the Florida Department of Transportation and employed by many California planning agencies have been used to identify Levels of Service on City streets. Resulting LOS thresholds are presented in Table 1.

**TABLE 1
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					

Level of Service thresholds have also been identified for State Route 29 using the procedures contained in the 2000 Highway Capacity Manual assuming a 60% / 40% peak hour split and 10% of the ADT in the peak hour.

Current Traffic Conditions

As part of this study traffic counts were made at locations on major roads in Lakeport in order to supplement data available from Caltrans for state highways and from other recent studies. This sample of current traffic volumes is intended to look at those roads which already carry major traffic

volumes and which are expected to carry high traffic volumes in the future. These counts were conducted in January 2005. Count locations are presented in Figure 1, while these counts are presented in Table 2. As noted, the current daily traffic volume on most of these roads fall within the Level of Service “C” standard, indicating that current traffic conditions in the community are good. However, Lakeport Blvd operates at LOS D near the SR 29 interchange.

**TABLE 2
JANUARY 2005 DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE**

Road	Location from	To	Count #	Year 2004		
				Class Lanes	Daily Volume (12/04)	LOS
State Highway						
SR 29	Parkway	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
City Streets						
Hartley Street	Anastasia Drive	20 th Street	12	Col 2	670	C
Lakeshore Blvd	Lange Street	Beach Drive	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	Orchid Way	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

TABLE 2
JANUARY 2005 DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Road	Location from	To	Count #	Year 2004		
				Class Lanes	Daily Volume (12/04)	LOS
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	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						

Current Peak Hour Levels of Service

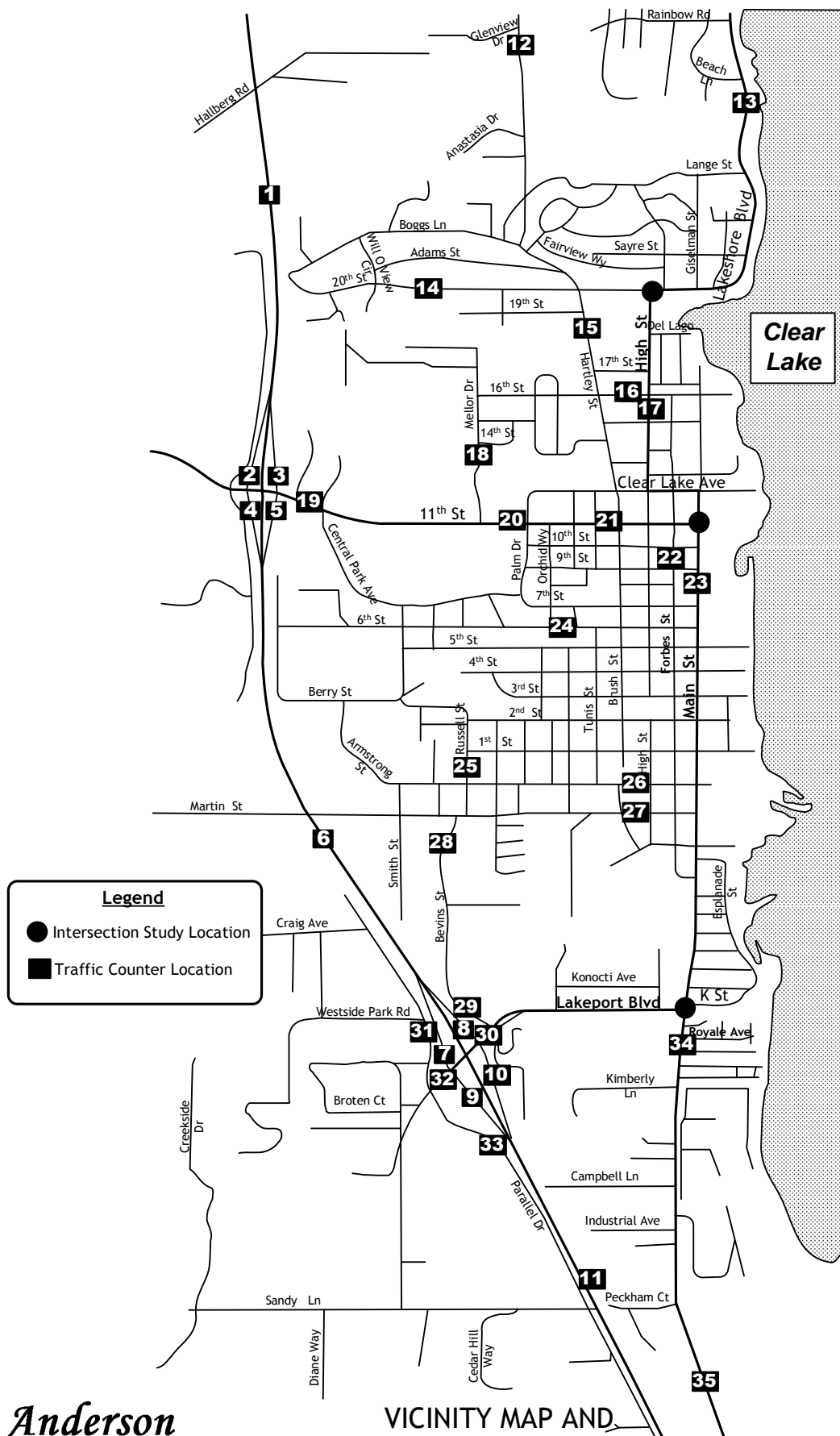
A.m. (7:00 to 9:00 a.m.) and p.m. (4:00 to 6:00 p.m.) peak hour Levels of Service were also determined for three major intersections in Lakeport. These locations were identified by City staff based on local knowledge of locations where improvements may soon be warranted. Traffic counts for these calculations were also collected in January 2005. Levels of Service were calculated using the methodologies presented in the 2000 Highway Capacity Manual, and the results are presented in Tables 3. 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. The volume of traffic at the Main Street / Lakeport Blvd intersection already satisfies Caltrans Warrant No. 11 (peak hour volume) for signalization, but as the current Level of Service is within City standards, a traffic signal isn’t needed today.

TABLE 3
CURRENT PEAK HOUR INTERSECTION LEVELS OF SERVICE

Intersection			Control	A.M Peak Hour		P.M. Peak Hour		Signal Needed?
				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.



KD Anderson
Transportation Engineers

**VICINITY MAP AND
STUDY INTERSECTIONS**

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 4, peak month volumes are about 6% to 12% higher than the annual average.

**TABLE 4
2005 DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE**

Road	Location from	To	Daily Traffic 2005	
			Average Annual Volume	Peak Month
State Highway				
SR 29	Parkway	11 th Street	12,700	13,900
	11 th Street	Lakeport Blvd	14,600	15,900
	Lakeport Blvd	SR 175	13,100	14,000
	SR 175	South	12,500	12,900
SR 175	Hopland	SR 29	820	920

Historic Growth Trends

Data available from the previous General Plan Update can be useful for gaining perspective on traffic conditions in Lakeport. Table 5 compares recent traffic counts with 1991 data presented in the prior GPU DEIR. As shown, where comparable data is available, annualized growth rates have either been negative or not appreciably large.

**TABLE 5
HISTORIC TRAFFIC VOLUME GROWTH TRENDS**

Road	Location from	To	Daily Volume		
			April 1991	January 2005	% Increase
State Highway					
SR 29	Parkway	11 th Street	9,264	12,700	1.3%
	11 th Street	Lakeport Blvd	9,068	14,600	2.0%
	Lakeport Blvd	SR 175	10,965	13,100	0.7%
	SR 175	South	9,066	12,500	1.4%
SR 175	Hopland	SR 29	1,805	820	--
City Streets					
Hartley Street	Anastasia Drive	20 th Street		670	
Lakeshore Blvd	Lange Street	Beach Drive		4,930	
20 th Street	Will O View Circle			420	
Hartley Street	19 th Street	17 th Street	2,286	2,020	>0.0%
16 th Street	Hartley Street	High Street		870	
High Street	15 th Street	16 th Street	9,275	8,200	>0.0%
Mellor Drive	14 th Street	11 th Street		1,050	
11 th Street	SR 29	Central Park Ave	11,000	11,020	0.0%
11 th Street	Mellor Drive	Pool Street		11,030	
11 th Street	Tunis Street	Brush Street	9,000	9,100	0.0%
Forbes Street	Eighth Street	Ninth Street		3,840	
Main Street	7 th Street	9 th Street	13,000	9,200	>0.0%
Sixth Street	Orchid Way	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	>0.0% -
Bevins Street	Bevins Court	Martin Street	2,654	3,480	1.1%
Bevins Street	Lakeport Blvd	Bevins Court		4,290	
Lakeport Blvd	SR 29	Bevins Street	10,000	11,925	0.7%
Parallel Drive	north	Lakeport Blvd		3,500	
Lakeport	Parallel Dr	SR 29		11,940	
Parallel Drive	Lakeport Blvd	Sandy Lane		1,320	
Main Street	Royale Ave	Kimberly Lane	9,500	9,900	0.2%
Main Street	Lakeport Blvd	Martin Street		7,940	

Public Transit

The Lakeport area is served by **Lake Transit**. Fixed route service links the City with Ukiah via US 101 (Route 7), 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.

IMPACTS OF IMPLEMENTING THE GENERAL PLAN

Methodology / Assumptions

To evaluate the impacts of implementing the General Plan it was necessary to identify and quantify the land use expected to develop over the life of the General Plan, identify the amount of vehicular traffic accompanying that development, assign traffic to the planned circulation system and determine resulting Levels of Service.

Land Use. The amount of new residential and non-residential land use that could be developed under the new General Plan has been identified based on an inventory of vacant property within the General Plan area. The land use quantities assumed for this study are presented in Table 6. As shown, development under the proposed General Plan would yield more than 2,700 new dwellings, approximately 473 new hotel rooms, 700 RV spaces, and slightly more than 1.0 million sf of new commercial space.

**TABLE 6
NEW LAND USE DEVELOPED UNDER THE LAKEPORT GENERAL PLAN**

Land Use Designation	Acres	Yield
<i>Residential</i>		
Urban Reserves	155.38 acres	100 new du's
Low Density residential	350.8 acres	1,063 new du's
Medium Density Residential	7.05 acres	49 new du's
High Density residential	19.84 acres	298 new du's
Specific Plan Area	600 acres	1,200 new du's
Resort Residential	41.61 acres	473 new hotel rooms / 700 RV spaces
Total	1,174.68 acres	2,710 new du's, 473 new hotel rooms and 700 RV specs
<i>Non-Residential</i>		
Central Business District	0.14 acres	3,700 sf
Civic / Public	170.80 acres	25,700 sf of building and 168 acres parks
Industrial	4.15 acres	45,500 sf
Office	7.44 acres	194,200 sf
Light Retail	0.54 acres	5,900 sf
Major Retail	73 acres	803,400 sf
Golf Course	150 acres	18 holes and restaurant
Total	406.87	1,078,400 sf

Trip Generation. Traffic Engineers describe the amount of vehicular activity associated with development proposals in terms of vehicle “trips ends”. The rates at which various land uses generate new “trips” are typically determined through observation of similar uses and by compiling data from many nationally recognized sources. The most widely accepted source is the Institute of Transportation Engineers (ITE) publication *Trip Generation*, 7th Edition.

Table 7 identifies trip generation rates that would be applicable for the broad land use categories identified in the Lakeport General Plan.

**TABLE 7
TRIP GENERATION RATES**

Land Use Designation	Description	Unit	Trips Per Unit		
			Daily	A.M. Peak Hour	P.M. Peak Hour
Residential					
Urban Reserves	Single family residence	Dwelling	9.60	0.75	1.01
Low Density residential	Single family residence	Dwelling	9.60	0.75	1.01
Medium Density Residential	Single family residence	Dwelling	9.60	0.75	1.01
High Density residential	Townhouse / condo	Dwelling	5.90	0.44	0.52
Specific Plan Area	Single family residence	Dwelling	9.60	0.75	1.01
Resort Residential	Resort hotel	Rooms	5.80	0.31	0.42
Non-Residential					
Central Business District	General Office Building	1,000 sf	11.00	1.55	1.49
Civic / Public	170.80 acres				
Industrial	Industrial Park	1,000 sf	7.00	0.84	0.86
Office	General Office Building	1,000 sf	11.00	1.55	1.49
Light Retail	Specialty Retail	1,000 sf	44.00	2.71	2.71
Major Retail	Regional shopping center (i.e., 150 to 200 ksf)	1,000 sf	37.30	0.83	3.47
Civic / Public	Regional park	Acre	4.6	0.20	0.20
	Civic Center	1,000 sf	28.00	2.21	2.85
Golf Course	150 acres	Holes	36.00	2.22	2.74

This land use data and trip generation rates have been used to make estimates of daily and peak hour vehicular trip generation resulting from development under the proposed General Plan. As shown in Table 8, Build Out of the proposed General Plan could generate 65,374 new daily automobile trips. Of that total, 3,380 new trips are expected during the a.m. peak hour (7:00 to 9:00 a.m.) and 6,338 trips would be generated during the p.m. peak hour.

**TABLE 8
TRIP GENERATION FORECAST**

Land Use Designation	Quantity	Trips		
		Daily	A.m. Peak Hour	P.m. Peak Hour
<i>Residential</i>				
Urban Reserves	100 dwelling units	960	75	101
Low Density residential	1,063 dwelling units	10,205	797	1,074
Medium Density Residential	49 dwelling units	470	37	50
High Density residential	298 dwelling units	1,758	121	155
Specific Plan Area	1,200 dwelling units	11,520	900	1,212
Resort Residential	473 hotel rooms	2,743	147	199
	700 RV Spaces	2,590	140	259
<i>Sub-Total Residential</i>		<i>30,246</i>	<i>2,227</i>	<i>3,050</i>
<i>Non-Residential</i>				
Central Business District	3.7 ksf	41	6	6
Industrial	45.5 ksf	319	38	39
Office	194.2 ksf	2,136	301	289
Light Retail	5.9 ksf	565	16	16
Major Retail	803.4 ksf	29,967	667	2,788
Civic / Public	168.4 acre	775	34	34
	25.65 ksf	718	57	73
Golf Course	18 holes	648	40	49
<i>Sub-Total Non-Residential</i>		<i>35,128</i>	<i>1,153</i>	<i>3,288</i>
Total Residential and Non-Residential		65,374	3,380	6,338

Travel Demand Forecasting

The volume of traffic anticipated on the Lakeport Circulation system is an important issue in updating the General Plan. Traffic engineers make use of computer based travel demand forecasting models to account for the interaction between land uses and forecast the volume of traffic on the regional street system.

For this analysis the TRAFFIX trip assignment model was employed. This model identifies the trip generation contribution from individual traffic analysis zones and superimposes that traffic onto current background traffic volume to develop future traffic conditions. This process is sufficient where it is possible to isolate the effects of new residential and non-residential traffic. In this case, a portion of the new retail traffic will likely have origin–destination within the new residential areas being developed. This analysis assumes that new home-shopping trips will comprise approximately 20% of the total retail trips ends, and an applicable reduction to the retail trip generation. SR 29 will provide regional access to new development in Lakeport, and 40% of the trips generated by new residences are assumed to be external to the community via the highway. Additional information regarding the directional distribution of new trips is included in the model worksheets included in the appendix to this report.

Daily Traffic Volume forecasts.

Table 9 identifies the incremental increase in traffic expected on City streets and State highways in Lakeport.

TABLE 9
DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE
EXISTING PLUS GENERAL PLAN BUILD OUT

Road	Location from	To	Count #	Year 2005			General Plan Build Out				
							Daily Volume			With Improvements	
				Lanes	Daily Volume (12/04)	LOS	Lakeport Growth Increment	Total	LOS	Lanes	LOS
State Highway											
SR 29	Parkway	11 th Street	1	Free 4	12,700	A	11,680	24,380	B	4	B
	Southbound off	To 11 th Street	2	1	2,100	C	660	2,760	C	1	C
	Northbound on	From 11 th Street	3	1	1,900	C	530	2,430	C	1	C
	Southbound on	From 11 th Street	4	1	3,000	C	2,160	5,160	C	1	C
	Northbound off	To 11 th Street	5	1	3,300	C	2,080	5,380	C	1	C
	11 th Street	Lakeport Blvd	6	Free 4	14,600	A	14,730	29,330	C	4	C
	Southbound off	To Lakeport	7	1	3,200	C	5,470	8,670	D	2	C
	Northbound on	From Lakeport	8	1	3,500	C	5,470	8,970	D	2	C
	Southbound on	From Lakeport	9	1	3,000	C	2,880	5,880	C	1	C
	Northbound off	To Lakeport	10	1	3,000	C	2,910	5,910	C	1	C
	Lakeport Blvd	SR 175	11	Art 4	13,100	A	9,580	22,680	C	Art 4	C
SR 175	South		Art 4	12,500	A	13,480	25,980	D	4-freeway	B	
SR 175	SR 29	Parallel Dr		2	820	C	7,430	8,250	C	2	C
	Parallel Dr	Specific Plan		2	820	C	3,620	4,440	C	2	C
	Specific Plan			2	820	C	1,610	2,430	C	2	C
City Streets											
Hartley Street	Anastasia Drive	20 th Street	12	Col 2	670	C	910	1,580	C	2	C
Lakeshore Blvd	Lange Street	Beach Drive	13	Art 2	4,930	C	4,470	9,400	C	2	C
20 th Street	Will O View Circle		14	Col 2	420	C	1,900	2,320	C	2	C
Hartley Street	19 th Street	17 th Street	15	Col 2	2,020	C	2,180	4,200	C	2	C
16 th Street	Hartley Street	High Street	16	Col 2	870	C	810	1,680	C	2	C
High Street	15 th Street	16 th Street	17	Art 2	8,200	D	5,800	14,000	D	Art 4	C

TABLE 9
DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE
EXISTING PLUS GENERAL PLAN BUILD OUT

Road	Location from	To	Count #	Year 2005			General Plan Build Out				
							Daily Volume			With Improvements	
				Lanes	Daily Volume (12/04)	LOS	Lakeport Growth Increment	Total	LOS	Lanes	LOS
Mellor Drive	14 th Street	11 th Street	18	Col 2	1,050	C	2,240	3,290	C	2	C
11 th Street	SR 29	Central Park Ave	19	Art 2	11,020	C	5,000	16,020	E	Art 4	C
11 th Street	Mellor Drive	Poole Street	20	Art 2	11,030	C	2,100	13,130	D	Art 2	D
11 th Street	Tunis Street	Brush Street	21	Art 2	9,100	C	1,520	10,620	C	2	C
Forbes Street	Eighth Street	Ninth Street	22	Art 2	3,840	C	1,630	5,470	C	2	C
Main Street	7 th Street	9 th Street	23	Art 2	9,200	C	4,890	14,090	E	Art 4	B
Sixth Street	Orchid Way	Brush Street	24	Col 2	510	C	1,060	1,570	C	2	C
Russell Street	Armstrong Street		25	Col 2	850	C	1,500	2,350	C	2	C
Martin Street	Brush Street	High Street	27	Art 2	2,740	C	1,680	4,420	C	2	C
Bevins Street	Bevins Court	Martin Street	28	Col 2	3,480	C	3,520	7,000	C	2	C
Bevins Street	Lakeport Blvd	Bevins Court	29	Col 2	4,290	C	4,810	9,100	C-D	2	C-D
Lakeport Blvd	SR 29	Bevins Street	30	Art 2	11,925	D	12,250	24,175	F	Art 4	C
Parallel Drive	north	Lakeport Blvd	31	Col 2	3,500	C	3,110	6,610	C	2	C
Lakeport	Parallel Drive	SR 29	32	Art 2	11,940	D	15,930	27,870	F	Art 4	D
Parallel Drive	Lakeport Blvd	Sandy Lane	33	Col 2	1,320	C	9,150	10,470	D	Art 2	C
Main Street	Royale Avenue	Kimberly Lane	34	Art 2	9,900	C	7,350	17,250	F	Art 4	C
Main Street	Lakeport Blvd	Martin Street	35	Art 2	7,940	C	8,600	16,540	F	Art 4	C
Todd Road	Sandy Lane	Parallel Drive		Art 2	<1,000	C	1,300	2,300	C	2	C
Parallel Drive	Todd Rd	Woodward Drive		Col 2	1,320	C	4,110	5,430	C	2	C

Traffic Impacts Based on Roadway Segment Levels of Service

The following key impacts are noted from review of daily traffic volume forecasts:

Impact 1. Buildout of the Lakeport General Plan will increase the traffic volume on State Route 29 and Levels of Service in excess of the City's LOS C standard are projected on non-freeway sections.

Discussion: The volume of traffic forecast for SR 29 is in the range of 25,000 to 28,000 vehicles per day through Lakeport. Lakeport residents and visitors will use the highway to reach regional destinations and for intra-city travel. The forecasts traffic volumes require elimination of at-grade intersections and the development of a grade separation at the SR 175 / SR 99 intersection. Development of the interchange will require widening of SR 175 approaches and potential relocation of adjoining closely spaced intersections. The need for an interchange was noted in the current General Plan, confirmed in this update and identified in the GPU Circulation Diagram. The City of Lakeport should work with Lake County and Caltrans to ensure the timely deliver of the interchange and new development in the City should contribute its fair share to the cost of this improvement.

Impact 2. Buildout of the Lakeport General Plan will increase traffic on existing SR 29 interchanges and result in the need to upgrade these facilities.

Discussion. The volume of traffic forecast at the SR 29 / Lakeport Blvd interchange is indicative of conditions in excess of available capacity on ramps and on mainline Lakeport Blvd across the freeway. Interchange improvements to provide additional capacity are likely to be needed. However, additional analysis of design requirements through preparation of a Caltrans Project Study Report (PSR) is needed before a definitive improvement project can be identified. As the extent of needed improvements is closely linked to decisions regarding the scope of commercial development near the interchange and regarding circulation system decisions of the Specific Plan area, the City of Lakeport should pursue completion of a PSR when more definitive information regarding area development becomes available. The City of Lakeport will also need to develop a funding mechanism to accumulate funds for "fair share" contribution to the cost of interchange modifications.

Impact 3. Build out of the Lakeport General Plan will result in LOS D, E or F conditions on various City streets.

Discussion: The following roadway segments are projected to operate at Level of Service in excess of LOS C:

High Street from 15th Street to 16th Street (2 lanes LOS D)

11th Street from SR 29 to Poole Street (2 lanes LOS E to LOS D)

Main Street from 7th Street to Kimberly Lane (2 lanes LOS F)

Lakeport Blvd from Parallel Drive to Bevins Street (2 lanes LOS F)

Parallel Drive from Lakeport Blvd to Sandy lane (2 lanes LOS D)

The Circulation Element of the Lakeport General Plan suggests that these streets will be widened and otherwise improved as development occurs. In the case of Parallel Drive, re-designation of the route as an Arterial and construction to that standard would be applicable. The City will also need to update its traffic impact / road fee program to include the costs associated with improvements in those locations where fronting development is not expected to fully fund needed improvements.

The extent of street improvements in the south area of Lakeport is closely linked to decisions regarding the layout of the street system serving the Specific Plan area. The locations of connections to the existing streets system will have a tangible effect on the volume of traffic occurring on streets in this area. The GPU analysis assumes connections to the Specific plan area via an extension of Todd Road and a connection to SR 175. A comprehensive traffic study supplementing the GPU EIR will be needed when the Specific Plan area moves forward.

Impact 4. Buildout of the Lakeport General Plan will add traffic to the inter-regional roadway system, including streets and highways in Lake County outside of the City's Sphere of Influence.

Discussion. New development in Lakeport will add traffic to the roadways linking the community with SR 20 and to the street network that links the city with other Lake County communities. The addition of new Lakeport traffic will contribute to the need to maintain these roads and to provide future capacity at locations that are beyond the limits of this analysis.

While the inter-regional street and highway system is not the sole responsibility of the City of Lakeport, the City should investigate mechanisms for City development to participate on a "fair share" basis in the costs of maintaining and improving roads outside of the City limits. The City, Lake County and Caltrans should work towards creating a mechanism to address impacts to roads of regional importance.

Impacts to Intersections

The quality of traffic flow at key intersections in Lakeport has also been evaluated on a peak hour basis at the three intersections initially addressed as part of the GPU process.

Methodology. A two step process was employed to create future intersection turning movements at study locations. First, a.m. and p.m. peak hour trip generation forecasts were made of identified new development. These forecasts were then assigned to citywide circulation system under the assumptions noted previously. Resulting peak hour turning movements are identified in the appendix to this report.

Levels of Service. Peak Hour Levels of Service were calculated for study intersections under two scenarios. The first scenario assumes no improvements have been made to these intersections. The second scenario assumes that the study area intersections are improved in a

manner that is consistent with the number of lanes designated in the Circulation Diagram. Where applicable auxiliary turn lanes have also been added and signalization has been assumed at those locations where projected peak hour volumes exceed warrant requirements. Table 10 and 11 presents resulting Levels of Service during the a.m. and p.m. peak hours.

The following impacts are noted.

Impact 4: Build out of the Lakeport General Plan could result in peak hour Levels of Service in excess of LOS C at intersections in Lakeport.

Discussion. As noted in Tables 10 and 11, projected traffic volume increases will deliver peak hour Levels of Service in excess of the City's LOS C Standard at two of the three intersections addressed in this study. Improvements to each intersection will be needed, including signalization.

It is also possible to identify future signalized intersections based on the daily traffic volume warrant thresholds contained in the Manual of Uniform Traffic Control Devices (MUTCD). At a planning level, intersections with daily volumes on all legs totaling more than 24,000 ADT with at least 3,000 ADT on each leg can be assumed to eventually warrant signalization. Other locations may justify traffic signals based on spacing along major streets.

Table 12 lists the locations of traffic signals that are projected to be needed at General Plan Build Out. As shown the two existing traffic signals could be joined by 13 new signals over the life of the General Plan

TABLE 10
AM PEAK HOUR INTERSECTION LEVELS OF SERVICE
AT GENERAL PLAN BUILD OUT

Intersection			Control	Existing		GP Buildout with no Improvements		Signal Warranted?	With GP Improvements	
				Avg Delay	LOS	Avg Delay	LOS		Avg Delay	LOS
1	Main Street	Lakeport Blvd	All-Way Stop	11.0 sec	B	19.2 sec	C	Yes	20.0 sec	C
2	Main Street	11 th Street	EB Stop	11.5 sec	B	13.5 sec	B	No	-	-
3	High Street	20 th Street	EB Stop	17.2 sec	C	36.0 sec	E	Yes	5.4 sec	A

TABLE 11
PM PEAK HOUR INTERSECTION LEVELS OF SERVICE
AT GENERAL PLAN BUILD OUT

Intersection			Control	Existing		GP Buildout with no Improvements		Signal Warranted?	With GP Improvements	
				Avg Delay	LOS	Avg Delay	LOS		Avg Delay	LOS
1	Main Street	Lakeport Blvd	All-Way Stop	16.0 sec	B	117.2 sec	F	Yes	20.1 sec	C
2	Main Street	11 th Street	EB Stop	12.0 sec	B	17.1 sec	C	No	-	-
3	High Street	20 th Street	EB Stop	12.1 sec	B	32.1 sec	D	No	4.8 sec	A

TABLE12
SIGNALIZED INTERSECTIONS

1	Lakeshore Blvd/20 th Street
2	11 th Street/SB SR 29 Ramps
3	11 th Street/NB SR 29 Ramps
4	11 th Street / Forbes Street
5	11 th Street/Main Street
6	Martin Street/Russell Street
7	Martin Street/Main Street
8	Lakeport Blvd/SB SR 29 Ramps
9	Lakeport Blvd/NB SR 29 Ramps
10	Lakeport Blvd/Bevins Street
11	Lakeport Blvd/Main Street
12	Todd Road/Sandy Lane
13	SR 29/SR 175/Main Street

Impact 6: Build Out of the Lakeport General Plan will result in intersections carrying traffic volume that meet traffic signal warrants.

Discussion. The City traffic impact fee program already collects fees towards the cost of signalizing intersections in Lakeport. While the need to install signals will eventually be predicated on actual traffic volumes occurring on each street, and the fee program will need to be updated to reflect new locations that will need to be funded in the city, as well as “fair share” contribution to the cost of locations outside of the City limits.

APPENDIX F

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APPENDIX G

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