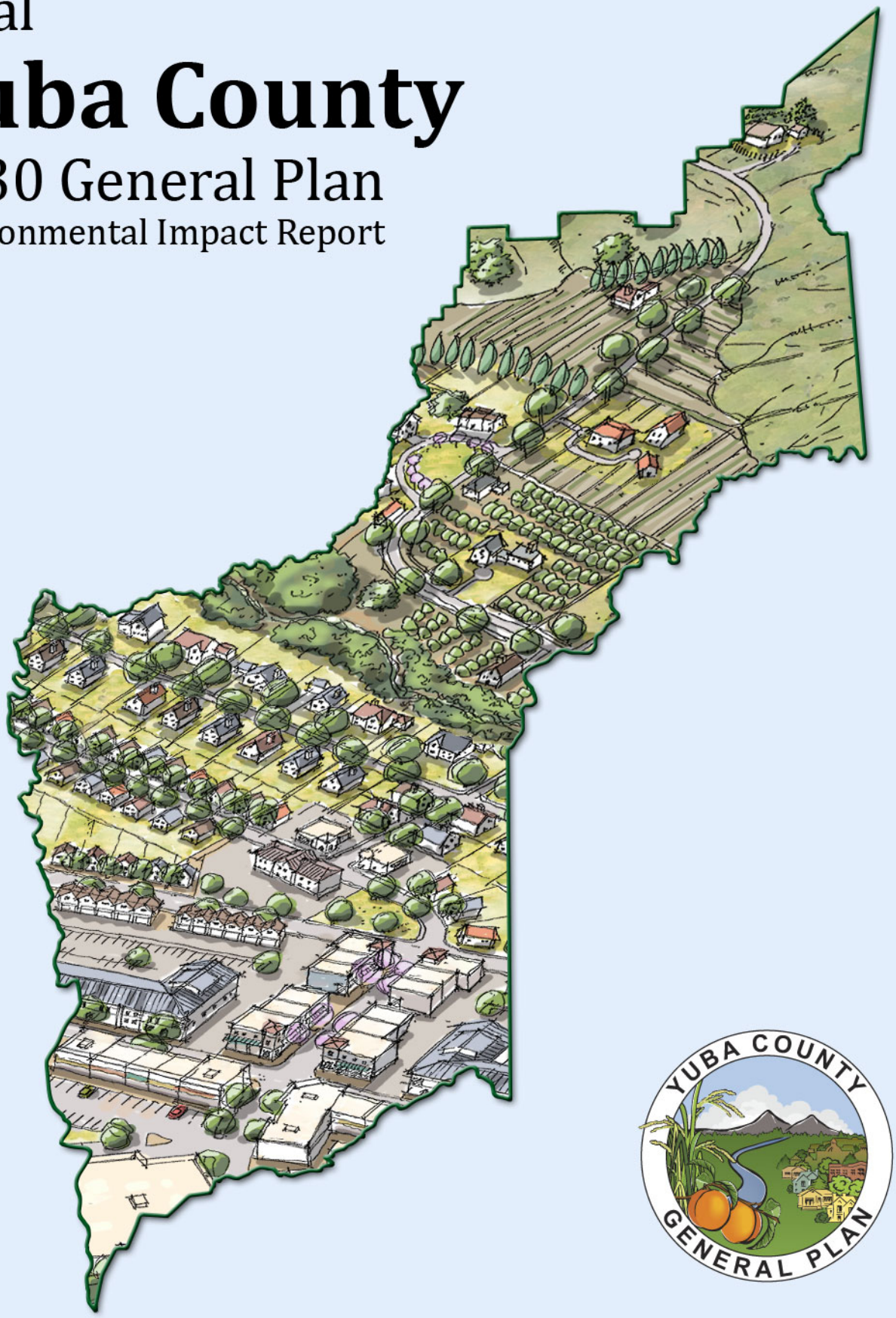
Final

Yuba County

2030 General Plan

Environmental Impact Report



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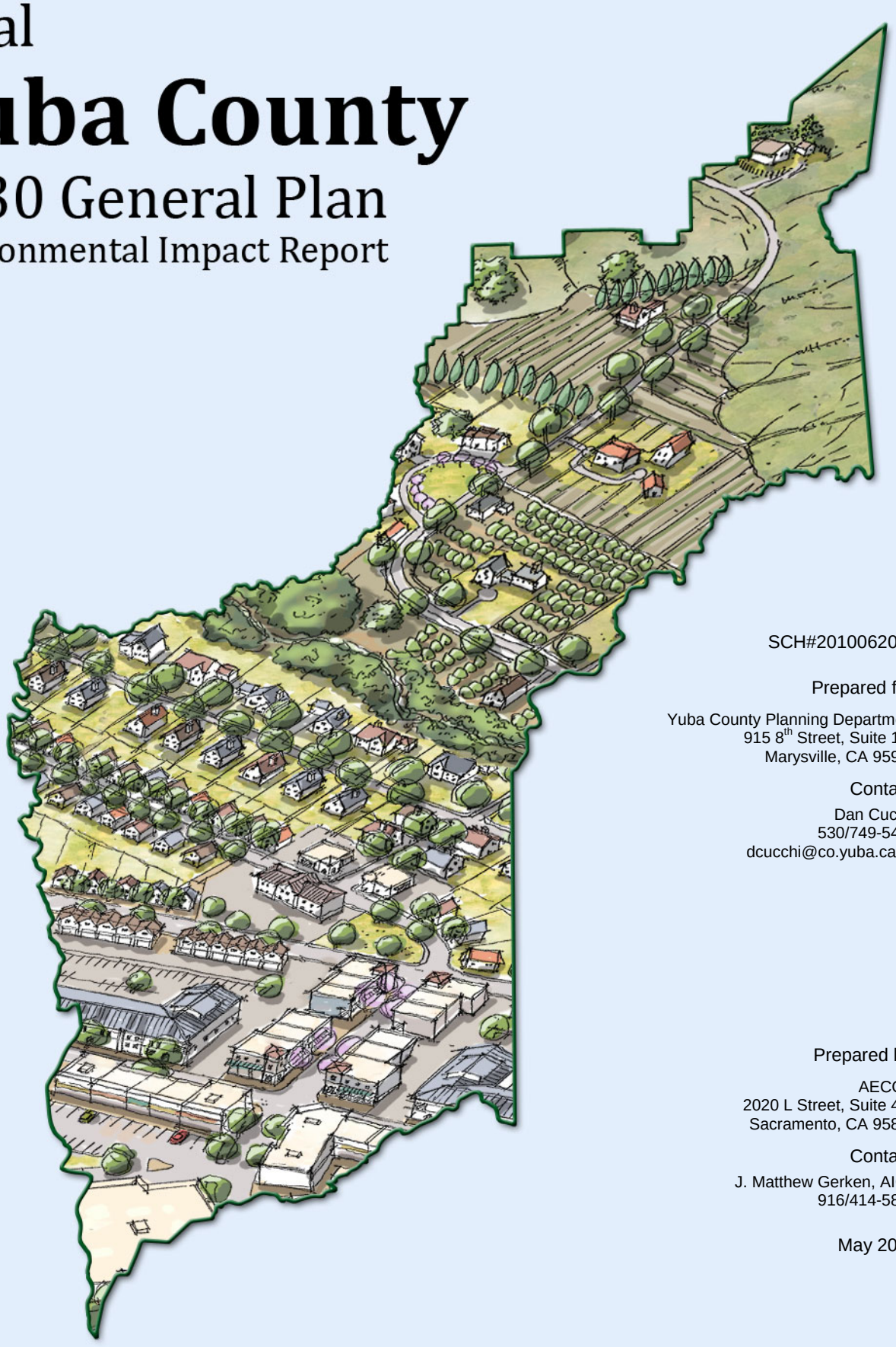

SCH#2010062054

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May 2011

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ACRONYMS AND ABBREVIATIONS

°C	Centigrade
°F	Fahrenheit
2030 General Plan	*Yuba County 2030 General Plan*
40 CFR	Volume 40 of the Code of Federal Regulations
AB	Assembly Bill
AEP	Annual Exceedence Probability
AFB	Air Force Base
AICUZ	Air Installation Compatible Use Zone
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APS	Alternative Planning Strategy
AQAP	2006 *Air Quality Attainment Plan*
ARB	California Air Resources Board
ATCM	Airborne Toxics Control Measure
BACT	best available control technology for toxics
Basin Plan	Water Quality Control Plan for the Sacramento River and San Joaquin River Basins
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BNSF	Burlington Northern Santa Fe
BSC	California Building Standards Commission
CAA	federal Clean Air Act
CAAA	federal Clean Air Act Amendments of 1990
CAAQS	California ambient air quality standards
Cal EMA	California Emergency Management Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
CalARP	California Accidental Release Prevention Program
Caltrans	California Department of Transportation
CBC	California Residential Building Code
CBSC	California Building Standard Code
CCAA	California Clean Air Act
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGP	Construction General Permit
CGS	California Geological Survey
CH_4	methane
CHP	California Highway Patrol

CIWMB	California Integrated Waste Management Board
CLUP	Comprehensive Land Use Plan
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	Yuba County
CPUC	California Public Utilities Commission
CSD	Community Services District
CTPA	California Timberland Productivity Act of 1982
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CVP	Central Valley Project
CWA	Clean Water Act of 1972
CWC	California Water Code
dbh	diameter at breast height
DEIR	draft environmental impact report
DFG	California Department of Fish and Game
DPS	distinct population segment
DTSC	California Department of Toxic Substances Control
DWQ	Division of Water Quality
DWR	California Department of Water Resources
EC	electrical conductivity
ECC	Emergency Communications Center
EIR	environmental impact report
ENMP	Environmental Noise Management Program
EPA	U.S. Environmental Protection Agency
ESU	evolutionary significant unit
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FPD	Fire Protection District
FPP	Farmland Protection Program
FPPA	Farmland Protection Policy Act
FRA	Federal Railroad Administration
FRAP	California Fire and Resource Assessment Program
FRAQMD	Feather River Air Quality Management District
GHG	greenhouse gas
GIS	geographic information systems
GWh	gigawatt-hours

HAP	hazardous air pollutant
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbon
HSC	California Health and Safety Code
I-5	Interstate 5
IBC	International Residential Building Code
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
JLUS	Joint Land Use Study
kWh	kilowatt-hours
LAFCO	Local Agency Formation Commission
lb	pounds
LCFS	Low Carbon Fuel Standard
LRP	Legally Responsible Person
LUPs	Linear Underground/Overhead Projects
LUST	leaking UST
MACT	maximum available control technology for toxics
maf	million acre-feet
MCL	maximum contaminant level
MMT	million metric tons
MMT CO_2e /yr	million metric tons of carbon dioxide equivalent emissions per year
MOUs	memorandums of understanding
MPO	Metropolitan Planning Organization
msl	mean sea level
MT	metric tons
MTP	Metropolitan Transportation Plan
MW	megawatt
MWh	megawatt-hours
N_2O	nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NAL	Technology-Based Numeric Action Levels
NCCP	Natural Community Conservation Plan
NCIC	North Central Information Center
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NEL	Technology-Based Numeric Effluent Limitations
NESHAP	national emissions standards for HAPs
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NIMS	National Incident Management System

NO	nitric oxide
NO_2	nitrogen dioxide
NOI	Notices of Intent
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSVAB	Northern Sacramento Valley Air Basin
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Units
NWP	nationwide permit
OES	Governor's Office of Emergency Services
OMR	Office of Mine Reclamation
OPR	Governor's Office of Planning and Research's
OSHA	U.S. Department of Labor, Occupational Safety and Health Administration
pCi/L	picocuries per liter
PFC	perflurorocarbon
PG&E	Pacific Gas and Electric
PM	particulate matter
$PM_{2.5}$	particulate matter less than or equal to 2.5 microns in diameter
PM_{10}	particulate matter less than or equal to 10 microns in diameter
ppm	parts per million
PRC	Public Resources Code
PRD	Permit Registration Document
RCA	Soil and Water Resources Conservation Act of 1977, as amended
RCRA	Resource Conservation and Recovery Act
REAP	Rain Event Action Plan
RHNA	Regional Housing Needs Allocation
RHNP	Regional Housing Needs Plan
RPF	Registered Professional Forester
RTP	Regional Transportation Plan
RWD	Reports of Waste Discharge
RWMG	Regional Water Management Group
RWQCB	Regional Water Quality Control Boards
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
SCEA	Sustainable Communities Environmental Assessment
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
SEMS	Standardized Emergency Management Systems
SF_6	sulfur hexafluoride
SFNA	Sacramento Federal Nonattainment Area
SFWPA	South Feather Water and Power Agency

SHPO	State Historic Preservation Office
SIP	state implementation plan
SMARA	California Surface Mining and Reclamation Act of 1975
SMGB	State Mining and Geology Board
SO_2	sulfur dioxide
SOPs	standard operating procedures
SP	service population"
SR	State Route
SRA	State Responsibility Area
State CEQA Guidelines	California Environmental Quality Act Guidelines
SVP	Society for Vertebrate Paleontology
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCP	Traditional Cultural Property
TDS	total dissolved solids
THP	Timber Harvest Plan
TMDL	total maximum daily load
TPY	tons per year
TPZ	timberland preserve zones
TRLIA	Three Rivers Levee Improvement Authority
TRUs	transportation refrigeration units
UCMP	University of California Museum of Paleontology
UNFCCC	United Nations Framework Convention on Climate Change
UPRR	Union Pacific Railroad
URBEMIS	Urban Emissions
US DOI	U.S. Department of Interior
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	urban water management plan
VMT	vehicle miles travelled
WDR	waste discharge requirement
YCWA	Yuba County Water Agency

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PREFACE

OVERVIEW AND PURPOSE OF THIS DOCUMENT

The final environmental impact report (FEIR) for the Yuba County 2030 General Plan includes the draft Environmental Impact Report (DEIR) with revisions, comment letters on the DEIR, and written responses to comments on the 2030 General Plan DEIR.

PUBLIC COMMENTS

The DEIR (State Clearinghouse Number 2010062054) was received on December 10th, 2010 by the State Clearinghouse. The County provided for a review period that lasted until February 9th, 2011. The County provided an additional opportunity to offer verbal comments during a duly noticed public workshop February 9th, 2011. Comment letters on the DEIR are included in their entirety in this document. Verbal comments from the February 9th workshop are also summarized in Chapter 9 of this document.

RESPONSES TO COMMENTS

In accordance with Section 15088 of the State California Environmental Quality Act (CEQA) Guidelines, Yuba County, as the lead agency, has reviewed the comments received on the DEIR for the 2030 General Plan and has prepared written responses to the comments received.

Chapter 9 of this FEIR includes the written and oral comments received on the DEIR and presents responses to significant environmental issues raised in these comments (as required by the State CEQA Guidelines Section 15132). The focus of the responses to comments is on the disposition of significant environmental issues that are raised in the comments, as specified by Section 15088(c) of the State CEQA Guidelines. Detailed responses are not provided to comments on the merits of the General Plan.

REVISIONS TO THE DEIR

In certain instances, responses to comments may warrant modification of the text of the DEIR. In those cases, the text of the DEIR is revised and the changes compiled in sections 1 through 8 of this document. The text deletions are shown in strikeout (~~strikeout~~) and additions are shown in underline (<u>underline</u>).

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1 INTRODUCTION

1.1 TYPE OF EIR

This environmental impact report (EIR) evaluates the impacts of the *Yuba County 2030 General Plan* (2030 General Plan). The 2030 General Plan EIR is a program EIR, as described under the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 et seq. [14 CCR 15000 et seq.).

According to the State CEQA Guidelines (Section 15168[a]), a state or local agency should prepare a program EIR, rather than a project EIR, when the lead agency proposes the following:

- a series of related actions that are linked geographically;
- logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or,
- individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

A program EIR "may be prepared on a series of actions that can be characterized as one large project and are related...in connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program" (State CEQA Guidelines Section 15168[a][3]). In this case, the program EIR will address the 2030 General Plan, which is the proposed "project," as defined by CEQA. This program EIR considers a series of actions related to implementation of the 2030 General Plan.

As a program EIR, this document focuses on the overall effect of the 2030 General Plan. The analyses in this EIR do not examine the effects of site-specific projects that may occur within the overall umbrella of this program. The nature of general plans is such that many proposed policies are intended to be general, with details to be worked out during implementation. As a result, many of the impacts and mitigation measures in this EIR can be described only in general or qualitative terms.

This EIR does, however, quantify impacts related to transportation, drainage, air quality, noise, and other topics, making reasonable assumptions as to the amount, type, and character of land use change under the General Plan. The General Plan describes existing conditions information and some of the environmental consequences associated with its implementation and is hereby incorporated by reference.

1.1.1 TIERING AND STREAMLINING

The County intends to use the 2030 General Plan EIR to streamline approval of private and public projects. The County will make full use of existing streamlining provided by CEQA, and will make full use of emerging streamlining techniques, such as those related to implementation of the Sustainable Communities Strategy (Public Resources Code [PRC] Section 21155). The County will identify and incorporate other streamlining techniques as they become available in the future. The County has invested substantial resources in the 2030 General Plan and wants to promote fiscally prudent use of this EIR, once it is certified, to accommodate development consistent with the 2030 General Plan.

Although the legally required contents of a program EIR are the same as those of a project EIR, in practice, there are differences in level of detail. General Plans by their nature are broad, long-range, and conceptual. Program EIRs are typically conceptual and abstract. They contain a more general discussion of impacts, alternatives, and mitigation measures than do project-level EIRs. This is appropriate since the 2030 General Plan is meant to guide

long-term development within the County. The 2030 General Plan does not dictate specific site-planning requirements, internal transportation networks, or other project-level details. The County acknowledges and intends to make best use of the advantages to the programmatic approach to environmental analysis and reporting in this EIR. As noted in CEQA Guidelines Section 15168(b):

> "Use of a program EIR can provide the following advantages. The program EIR can:
>
> (1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
>
> (2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis;
>
> (3) Avoid duplicative reconsideration of basic policy considerations;
>
> (4) Allow the Lead Agency to consider broad policy alternatives and programwide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and
>
> (5) Allow reduction in paperwork.

The analysis in this program EIR is considered the first tier of environmental review and creates the foundation upon which future, project-specific CEQA documents can build. Tiering refers to the concept of a multi-level approach to preparing environmental documents set forth in the PRC Section 21083.3 and the State CEQA Guidelines Section 15152.

Project-level environmental analysis can be streamlined to limit the scope of site-specific approvals following the preparation of an EIR for a general plan.[1] This streamlining provision applies to site-specific approvals for projects that are consistent with the general plan. This program EIR will, in practice, help determine the need for subsequent environmental documentation, as well as dictate the scope of project level CEQA review.

A program EIR can be incorporated by reference into subsequently prepared environmental documents to address cumulative impacts and growth-inducing impacts, allowing the subsequent documents to focus on new or site-specific impacts (State CEQA Guidelines Section 15168[d]).

Public Resources Code Section 21083.3 allows a lead agency to narrow the focus of project level analysis to effects upon the environment which are peculiar to the parcel or project (PRC Section 21083.3.(a)) The Code also limits the effects that can be considered peculiar in project-level analysis under the program EIR.

Section 15152 of the CEQA Guidelines provides that where a first-tier EIR has "adequately addressed" the subject of cumulative impacts, such impacts need not be revisited in second- and/or third-tier documents. According to Section 15152(f)(3), significant effects identified in a first-tier EIR are adequately addressed, for purposes of later approvals, if the lead agency determines that such effects have been either:

> "mitigated or avoided as a result of the prior [EIR] and findings adopted in connection with that prior [EIR]"; or
>
> "examined at a sufficient level of detail in the prior [EIR] to enable those effects to be mitigated or avoided by site-specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project."

[1] This section of the Public Resources Code also refers to consistency with community plans and zoning, but the above discussion is tailored to this General Plan EIR.

The PRC provides streamlining coverage to the County and other public agencies that have authority to implement General Plan EIR mitigation measures. Public agencies can use uniformly applied policies or standards to mitigate effects of future projects, avoiding the need to analyze these effects, unless new information arises that changes the impact analysis (PRC Section 21083.3 (d)). For this reason, this EIR includes references to draft General Plan policy and actions, where appropriate, to address environmental impacts. Future CEQA documents can reference the same General Plan policies and actions, where appropriate, to demonstrate less-than-significant impacts.

The County will consider specific plans, area plans, corridor plans, or other documents to implement the General Plan. Later adopted plans are also provided streamlining potential:

> "(e) Where a community plan is the basis for application … any rezoning action consistent with the community plan shall be a project subject to exemption from this division [CEQA]… a "community plan" means a part of the general plan of a city or county which (1) applies to a defined geographic portion of the total area included in the general plan… and (3) contains specific development policies adopted for the area included in the community plan..." (PRC Section 21083.3. (c))

1.2 PURPOSE AND INTENDED USES OF THE EIR

This EIR was prepared in compliance with the CEQA of 1970 (PRC Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). The programmatic draft environmental impact report (DEIR) evaluates the environmental impacts that could result from implementation of the 2030 General Plan.

The purpose of an EIR is neither to recommend approval nor denial of a project. An EIR is an informational document used in the planning and decision-making process by the lead agency and responsible and trustee agencies. An EIR describes the significant environmental impacts of a project, potentially feasible measures to mitigate significant impacts are identified, and potentially feasible alternatives to the project that can reduce or avoid significant environmental effects. CEQA requires decision-makers to balance the benefits of a project against its unavoidable environmental effects in deciding whether to carry out a project.

The State CEQA Guidelines charge public agencies with the responsibility of avoiding or minimizing environmental damage that could result from implementation of a project, where feasible. As part of this responsibility, public agencies are required to balance various public objectives, including economic, environmental, and social issues.

The lead agency is the public agency with primary responsibility over the proposed project. In accordance with State CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The County, as the lead agency, has prepared this EIR to evaluate the environmental impacts of implementation of the 2030 General Plan.

The EIR was prepared under the direction of the County and is provided for review by both the public and public agencies, as required by CEQA. The County Board of Supervisors must certify the final EIR (FEIR) before adopting the 2030 General Plan.

If significant environmental effects are identified, the lead agency must adopt "Findings" indicating whether feasible mitigation measures or alternatives exist that can avoid or reduce those effects. If the significant environmental impacts are identified as significant and unavoidable, the lead agency may still approve the project if it determines that social, economic, legal, technological, or other factors override the unavoidable impacts. The lead agency would then be required to prepare a "Statement of Overriding Considerations" that discusses the specific reasons for approving the project, based on information in the EIR and other information in the record.

In making its decision about the proposed project, the County considers the information in this EIR, comments received on the DEIR, and responses to those comments, along with other available information and technical analysis.

1.3 SCOPE OF THE EIR

1.3.1 GEOGRAPHIC SCOPE

The "project site," as defined by CEQA) includes all areas within the County, with a focus on unincorporated areas. Impact analysis is keyed, to some extent, to the Valley Growth Boundary and rural community areas. The 2030 General Plan addresses development and conservation within new growth areas, as well as land use change and reinvestment within the existing developed areas.

This EIR analyzes impacts of the 2030 General Plan relative to current conditions, including possible land use changes from existing conditions within unincorporated County areas. In some instances, this analysis of impacts in Marysville and Wheatland will be included in the EIR. For example, the transportation analysis conducted to support this EIR made use of a regional traffic model, and impacts outside the unincorporated areas were studied and are reported. The geographic scope of analysis, in summary, is dependent upon the topic being analyzed. While geologic and soils impacts are generally localized, air pollutant emissions can have regional or even global impacts. Please refer to the topic-specific chapters of this EIR for a detailed description of the geographic scope of analysis.

1.3.2 ENVIRONMENTAL ISSUES ADDRESSED

Environmental review in compliance with CEQA (PRC Sections 21000 et seq.) is required as part of the County's consideration of the 2030 General Plan. The EIR has been prepared in accordance with CEQA, including the CEQA statutes (Public Resources Code Sections 21000–21178.1), State CEQA Guidelines (14 CCR Sections 15000–15387), and relevant court decisions. This EIR includes an evaluation of all required environmental resource areas, as well as other CEQA-mandated sections and climate change, as presented below:

- 4.1 Aesthetics
- 4.2 Agricultural and Forest Resources
- 4.3 Air Quality
- 4.4 Biological Resources
- 4.5 Cultural Resources
- 4.6 Geologic, Soils, Mineral, and Paleontological Resources
- 4.7 Climate Change
- 4.8 Hazards and Hazardous Materials
- 4.9 Hydrology and Water Quality
- 4.10 Land Use Planning, Population, and Housing
- 4.11 Noise and Vibration
- 4.12 Public Services and Facilities
- 4.13 Transportation and Traffic
- 4.14 Utilities and Service Systems
- 4.15 Energy
- 5 Alternatives to the Proposed Project
- 6 Other CEQA Considerations

Chapter 5 includes an analysis of alternatives to the proposed project (which is also referred to as the "Preferred Plan" and "2030 General Plan"), as required by Section 15126.6 of the State CEQA Guidelines. Other CEQA-mandated issues discussed within the context of this EIR are cumulative impacts, growth-inducing impacts, and significant and unavoidable adverse impacts (Chapter 6). Chapter 7 lists the preparers of the EIR and Chapter 8

identifies the references and citations used in drafting the EIR. Chapter 9 includes all comments on the DEIR and the County's written responses to comments that pertain to environmental impacts.

To assist the County in determining the focus and scope of analysis for this EIR, the County sent a Notice of Preparation (NOP) dated June 18, 2010 to government agencies, special service districts, organizations, and individuals with an interest in or jurisdiction over the project. This step ensured early consultation on the scope of the EIR. The County held a public scoping meeting for the project on July 7th, 2010. Please see Appendix A for the NOP and responses to the NOP.

1.4 ENVIRONMENTAL REVIEW PROCESS

The State CEQA Guidelines has specific requirements for EIRs related to descriptions of the project, the environmental setting, and certain types of impacts. Table 1-1 identifies the required elements of an EIR (with State CEQA Guidelines sections referenced) and the corresponding chapters or sections in which each element is discussed in this document.

Table 1-1
Analyses Required by the State CEQA Guidelines

Required Description and Analysis	EIR Chapter or Section
Summary (Section 15123)	2
Description of the Project (Section 15124)	3
Description of the Existing Setting (Section 15125)	3
Environmental Impacts (Sections 15126 and 15143)	4
Alternatives to the Proposed Project (Section 15126.6)	5
Cumulative Impacts (Section 15355)	6
Growth-Inducing Impacts (Section 15126[d])	6
Irreversible Environmental Effects (Section 15126.2[c])	6
Significant Environmental Effects Which Cannot be Avoided (Section 15126.2[b])	6

1.5 NOTICE OF PREPARATION

As noted, pursuant to the provision of Section 15082 of the CEQA Guidelines, the County circulated a NOP of the General Plan EIR to public agencies and interested members of the public. The NOP was delivered to the Governor's Office of Planning and Research State Clearinghouse on June 17, 2010, anticipating a NOP review period starting June 18, 2010. The NOP is a brief notice sent by the lead agency to inform responsible agencies, trustee agencies, and potentially affected federal, state, and local agencies that the lead agency plans to prepare an EIR. The NOP also seeks comments regarding the scope and content of the EIR. The NOP and all comments received on the NOP are included as Appendix A to this DEIR.

The County received NOP comment letters from the following:

- California Emergency Management Agency
- California Department of Transportation (Caltrans)
- Jenny Cavaliere (resident of Oregon House)
- California Public Utilities Commission (CPUC)
- California Rural Legal Assistance (CRLA)
- California Department of Fish and Game (DFG)

- Dobbins/Oregon House Action Committee
- D/OH Planning Committee
- Gregory A. Forest (representative of Magnolia Ranch Specific Plan proponent)
- Erik Johnson
- Yuba Local Agency Formation Commission (LAFCO)
- Wheatland Fire Authority
- City of Marysville
- Laurie Oberholtzer (representative of No on Yuba Highlands Committee)
- Olivehurst Public Utilities District (OPUD)
- Placer County
- Nicholas Spaulding
- Central Valley Regional Water Quality Control Board
- City of Wheatland

The County held a scoping meeting on July 7, 2010, to receive comments on the NOP. The County has also conducted public outreach in various formats and settings to support the 2030 General Plan and has received substantial email and website input from citizens and agencies. Although social and economic issues were raised during this outreach, many environmental issues were also raised.

The NOP comment letters and comments at the scoping meeting suggest that the following topics related to adverse physical environmental impacts are particular areas of focus for the EIR (please refer to Appendix A for a complete summary):

- flood hazards;
- hazardous materials;
- access management for state highway system;
- alternatives to the state highway system for local trips;
- impacts to state highway system intersections, ramps, ramp intersections, mainline segments;
- land use strategies to reduce travel demand;
- wildfire risk in foothill areas;
- soil stability and erosion;
- water quality;
- transportation safety related to conflicts between travel modes;
- safety at at-grade railroad crossings;
- loss of agricultural and forest lands;
- air quality, including airborne toxics, and greenhouse gas emissions;
- availability of public transportation;
- water supply;

- waste disposal;
- drainage, including impacts to OPUD facilities;
- direct, indirect, and cumulative impacts to biological resources, including rare species;
- evacuation in the case of wildfire;
- effects of extending utilities to the Magnolia Ranch Specific Plan Area;
- energy conservation measures;
- deer herds;
- orderly provision of urban services in the unincorporated areas;
- analysis of environmental impacts associated with providing public services;
- traffic impacts to Marysville;
- impacts to the Highway 70 bridge;
- impacts to the Spenceville Recreation and Wildlife Preserve;
- visual impacts of foothills development;
- encroachment on existing mining operations;
- incorporating low impact development and smart growth concepts in order to mitigate impacts related to urbanization;
- provision of fire, emergency medical, and other public safety services;
- traffic impacts within Wheatland Fire Authority's service area that could impact emergency response;
- fire flow;
- impacts related to increased vehicle miles traveled;
- land use planning and population and housing impacts;
- traffic impacts to major roads in and around the City of Wheatland;
- groundwater supplies;
- impacts of future wastewater treatment needs;
- solid waste and landfill capacity;
- alternative that focuses on areas with existing municipal services;
- impacts to mineral resources, especially aggregate operations; and

- impacts to species using rice lands.

The County received a letter on the NOP from the Native American Heritage Commission (NAHC) dated August 23, 2007. This letter offers guidance and direction to the County regarding cultural resource regulations and consultation. The NAHC letter specifies Native American contacts for the County to use in consultation. The County used this same contact list (based on correspondence from NAHC earlier in the General Plan process) to circulate a letter providing the opportunity to participate in the local land use planning process to ensure consideration of cultural places in the context of broad local land use policy. As of December 7, 2010, none of the Native American contacts responded.

1.6 ORGANIZATION OF THE EIR

This EIR is organized as follows:

- **Chapter 1, "Introduction,"** describes the type of EIR prepared for the 2030 General Plan; the purpose, intended uses, and geographic and environmental scope of the EIR; the environmental review process; the relationship of the EIR to other County plans and zoning; subsequent actions required; the type of mitigation proposed in this EIR; the EIR comment process; and other agencies expected to use this EIR.

- **Chapter 2, "Executive Summary,"** provides an overview of the findings and conclusions of this EIR.

- **Chapter 3, "Project Description,"** describes the project's location, purpose, and history; the framework of the 2030 General Plan; and the relationship of the 2030 General Plan to area and regional plans.

- **Chapter 4, "Environmental Impact Analysis,"** evaluates the topics listed above in Section 1.3.2, "Environmental Issues Addressed," and includes a discussion of the existing conditions; regulatory framework; less than significant, potentially significant, and significant environmental effects; mitigation for potentially significant and significant effects; and a discussion of impacts remaining after incorporation of mitigation.

- **Chapter 5, "Alternatives Analysis,"** provides a comparative analysis between the 2030 General Plan as described in Chapter 3, "Project Description," and three alternatives. This chapter also describes alternatives that were considered but eliminated from detailed consideration in the EIR and identifies the "environmentally superior" alternative.

- **Chapter 6, "Other CEQA Considerations,"** describes the impacts of implementing the 2030 General Plan in combination with the impacts of related past, present, and reasonably foreseeable projects. Chapter 6 also discusses the growth inducement potential of the 2030 General Plan, significant irreversible environmental changes associated with the plan, and significant and unavoidable effects of the plan.

- **Chapter 7, "Report Preparation,"** lists the individuals who contributed to preparation of the EIR.

- **Chapter 8, "References,"** lists the sources of information cited throughout the EIR.

- **Chapter 9, Comments and Responses to Environmental Issues,"** includes all comments on the DEIR and the County's written responses to comments that pertain to environmental impacts.

- **Appendices** provide background and technical information.

1.7 RELATIONSHIP TO OTHER PLANS AND REGULATIONS

The adoption of the 2030 General Plan may lead to revisions to the County's Codes, including the zoning, grading, subdivision, and environmental health regulations, as well as other existing plans and programs. A number of future actions may be based, in whole or in part, on the environmental evaluation undertaken as part of the 2030 General Plan and this EIR.

Review and approval of subsequent development projects may require review and approval by agencies, including, but not limited to:

- the County, which has jurisdiction over amendments to 2030 General Plan, zoning changes, property subdivisions, conditional use permits, and other discretionary development approvals;
- U.S. Fish and Wildlife Service (Section 7 consultation or Section 10a Habitat Conservation Plan/Section 9 incidental take permit pursuant to the federal Endangered Species Act);
- the federal Department of Defense for decisions affecting Beale Air Force Base (Beale AFB);
- Yuba LAFCO, which would approve the establishment or updates of spheres of influence, changes of organization for special districts and cities throughout Yuba County;
- the U.S. Army Corps of Engineers, which issues federal Section 404 permits for individual development projects and public works projects;
- the California Department of Transportation (Caltrans) for changes related to the State Highway system, as well as collaborative land use and transportation planning efforts between the County and Caltrans;
- California Public Utilities Commission for approval of activities related to provision of electricity, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation;
- the Sacramento Area Council of Governments (SACOG) for regional plans, transportation improvements, housing allocations, and other actions;
- the Feather River Air Quality Management District (FRAQMD) for plans, regulations, rules, permits, and other actions related to regional air quality;
- the Central Valley Regional Water Quality Control Board, which issue state National Pollutant Discharge Elimination System permits for individual private development projects and public projects;
- the California Department of Fish and Game, which issues state Section 1600 et seq. permits for individual private development projects and public works projects; and
- other agencies and private organizations.

1.7.1 COUNTY PLANS, POLICIES, ACTIONS, AND REGULATIONS

State law places the General Plan atop the hierarchy of land use planning regulations. Several local ordinances and other County plans must conform to General Plan policy direction and work to implement the General Plan. The General Plan provides a governing basis for all other plans and planning documents of the County and all codes, ordinances, and policies of the County related to land use change, transportation, environmental resources, infrastructure, and other related topics.

Cities and counties must make a "consistency" finding with the general plan for any subdivision map, zoning action, public facility plans, and other functions of local government. Court decisions have concluded that these "consistency" determinations cannot be made if the local jurisdiction does not have a legally adequate general plan. In effect, local governments cannot issue development permits or perform many vital public functions without a legally adequate general plan.

The 2030 General Plan and the accompanying General Plan EIR both make reference to laws, plans, and regulations administered by other public agencies. In many instances, the County's policies are specifically designed to achieve consistency with regulations of another public agency. In other cases, the County commits to seeking input from other agencies on issues that may arise over the course of implementing the 2030 General Plan.

Various other federal, state, regional, and local plans and other laws will affect the land use and development consistent with the 2030 General Plan. In some cases, compliance with these plans and/or laws will provide additional reduction of the impacts of future land uses and development.

1.7.2 FEDERAL GOVERNMENT

There are no federal plans that directly affect local land use decisions, but federal laws, such as the Endangered Species Act, can affect individual land uses in a significant way. When federal approval is involved regarding road and highway projects or other public infrastructure, the projects must comply with the National Environmental Policy Act, as well as the federal Endangered Species Act. The U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the U.S. Department of Housing and Urban Development are examples of federal agencies that exercise jurisdiction over many such projects.

Although no federal plans directly control local land use policies, a number of federal laws have significant impacts on land use decisions at the municipal and private levels. Examples of such regulations include the Endangered Species Act, Section 404 of the Clean Water Act, and in the case of federally funded transportation and infrastructure projects, the National Environmental Policy Act. Numerous agencies have jurisdiction and exert influence on local land use processes.

Beale AFB is located in southern Yuba County 13 miles east of Marysville. Beale AFB is situated on 22,944 acres of federally-owned land consisting of base buildings, base housing, and one active concrete runway. The General Plan includes several important areas of communication and coordination between the County and the AFB related to ensuring compatibility of surrounding land uses, as well as pursuing mutual goals for infrastructure and economic development.

1.7.3 STATE GOVERNMENT

The State of California influences local policy decisions through a variety of regulations and procedures. Individual topic areas of this EIR will include a discussion of relevant state plans, policies, and regulations. However, only two agencies review and certify general plans. The California Department of Housing and Community Development assess the contents of the County's housing element. The Central Valley Flood Protection Board (CVFPB) has jurisdiction over flood control issues within the Sacramento-San Joaquin Drainage District, which includes the portions of the County. The updated Safety Element is subject to review and comment by the CVFPB prior to adoption.

The General Plan is closely linked to the State's environmental laws. CEQA recognizes the authority of the local general planning process in several areas. In law and in practice, the environmental review process is an integral part of the local planning, development review, and decision making process. Defined as a "project" under CEQA, the general plan adoption process is subject to environmental analysis and disclosure. As a policy

document, the general plan provides guidance and sets standards for several areas of mandatory environmental review for other "projects" undertaken by local governments and the private sector.

1.7.4 STATE AND REGIONAL GOVERNMENT

State and regional agencies also exert strong influence on local land use and development decisions. In some cases, these agencies have adopted plans. In other situations, the influence is accomplished primarily through funding of public infrastructure. In some matters, however, the State of California exercises direct control. An example is the requirement for certification of housing elements by the California Department of Housing and Community Development. State law also dictates much of the content of general plans and related zoning regulations.

In addition, state requirements are often implemented through regional planning and regulatory agencies. Examples include:

- the regional water quality control boards' Basin Plans and point- and nonpoint-source water quality regulations;
- the Sacramento Area Council of Governments' Metropolitan Transportation Plan;
- the Sacramento Area Council of Governments' distribution of regional housing needs allocations;
- the Feather River Air Quality Management District's attainment planning efforts, control measures, and permit requirements;
- Yuba County Local Agency Formation Commission (LAFCo) decisions on the formation and organization of special districts that provide public services and regarding the geographical area served by special districts and cities through spheres of influence and annexation.

1.7.5 REGIONAL PLANS AND REGULATIONS

Regional governmental agencies, such as the Sacramento Area Council of Governments (SACOG), the Feather River Air Quality Management District (FRAQMD), and the Regional Water Quality Control Board (RWQCB), have been established in recognition of the fact that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues, such as air and water quality, transportation, affordable housing, and habitat conservation have resulted in the adoption of regional plans. The policies adopted by Yuba County will be affected by these plans, and will in turn have effects on these other plans.

1.7.6 WHEATLAND AND MARYSVILLE

The incorporated cities of Marysville (the County seat), and Wheatland are located in Yuba County. As noted elsewhere, the 2030 General Plan applies only to unincorporated areas of the County. However, coordination with the cities will be required to implement several General Plan policies and actions.

1.8 SUBSEQUENT ACTIONS REQUIRED

Further actions or procedures required to allow implementation of the 2030 General Plan would include revisions to zoning, tentative maps, site plans, building permits, grading permits, and other actions. Future development project proposals, public investments, and other actions, would also be subject to CEQA requirements.

1.9 MITIGATION MEASURES

The State CEQA Guidelines define mitigation to include:

- avoiding the impact altogether by not taking a certain action or parts of an action;
- minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
- compensating for the impact by replacing or providing substitute resources or environments.

In this case, because the proposed project is the 2030 General Plan, mitigation to accomplish the above outcomes could take the form of:

- goals, policies, or actions included as part of the 2030 General Plan;
- land use, circulation, or other policy diagrams in the 2030 General Plan capable of minimizing or eliminating a potentially significant impact; and
- other actions (e.g., actions performed by another agency).

The 2030 General Plan's policies take into account many of the impacts discussed in this EIR, and many potential mitigation measures are included as part of the proposed project itself, with the intention that the General Plan would be self-mitigating.

CEQA requires the adoption of a mitigation monitoring program for all adopted mitigation measures. The mitigation monitoring plan must be designed to ensure compliance during project implementation (PRC Section 21081.6, State CEQA Guidelines Section 15097). Many mitigation measures identified for the 2030 General Plan take the form of goals, policies, and implementation programs.

Mitigation measures that are built into the General Plan are adopted by the County and will be implemented and enforced through the application of the 2030 General Plan to land use and planning decisions and the implementation of actions directed by the plan. The County is required by Section 65400 of the Government Code to monitor and report on an annual basis to the Board of Supervisors and to the Governor's Office of Planning and Research and the State Department of Housing and Community Development on General Plan implementation. The monitoring plan for policies in the General Plan that mitigate impacts is the General Plan itself. The reporting program for these mitigating policies is the County's annual reporting process (see CEQA Guidelines Section 15097 (b)).

1.10 AVAILABILITY OF THE EIR

Copies of the 2030 General Plan and this EIR were made available through the Yuba County Community Development Department.

The County has circulated the document widely to public agencies, other public and private organizations, property owners, developers, and other interested individuals. Information on the General Plan and EIR is also available on the County's website (http://www.yubavision2030.org/).

Comments on the EIR were invited in writing or via email to:

Yuba County Planning Department
Dan Cucchi, Project Planner
915 8th Street, Suite 123
Marysville, CA 95901
Phone: (530) 749-5470
E-mail: DCucchi@co.yuba.ca.us

To keep the document succinct and useful as a decision-making tool, the State CEQA Guidelines charge that an EIR focus on a project's significant environmental impacts and not address every imaginable less-than-significant effect. Comments should be focused on the adequacy and completeness of the DEIR, or should address questions about the environmental consequences of project implementation. In this case, "adequacy" is defined as the thoroughness of the EIR in addressing significant environmental effects, identifying mitigation measures for those impacts, and supplying enough information for public officials to make decisions about the merits of the project.

After the close of the public review period, a Final Environmental Impact Report (FEIR) is prepared, containing all the comments received by the County during the public review period and responses to those comments. This document is made available to public agencies and the general public so those parties can review the FEIR before the County certifies it as complete.

1.11 AGENCIES EXPECTED TO USE THIS EIR

As the lead agency for this "project," the County is responsible for considering certification of the EIR and adoption of the 2030 General Plan. The County may utilize this EIR as a program EIR, tiered EIR, or project EIR in subsequent actions on 2030 General Plan implementing programs, general plan amendments or elements, the County's Codes, community plans, other area plans, or other relevant County actions.

The County is the CEQA lead agency for the proposed project. In conformance with Sections 15050 and 15367 of the State CEQA Guidelines, the lead agency is the "public agency which has the principal responsibility for carrying out or disapproving a project." The County is responsible for approving the 2030 General Plan.

In addition to the lead agency, State CEQA Guidelines Section 15124 states that an EIR should contain a statement briefly describing the intended uses of the EIR and, to the extent that it is known to the lead agency, a list of agencies expected to use the EIR in their decision making, permits or other approvals implementing the project, and related environmental review and consultation required by law or regulation.

A wide variety of federal, state, regional, and local agencies may use this EIR in their planning process, issuance of their permits, or exercise of their regulatory authority over resources or jurisdictional actions within the County. Agencies may use the EIR as a program EIR for subsequent parts of their program actions subject to CEQA, tiering their project CEQA studies to the EIR, or utilizing the EIR in whole or part to apply to a required CEQA study in conjunction with specific agencies' project approval actions.

A number of other jurisdictional and permit-granting agencies have control over specific environmental concerns in the County. The following is a listing of agencies that may utilize this EIR. Because it is not practical or possible for the County to know or ascertain all of the possible specific uses for which other agencies may subsequently utilize this EIR, the listing attempts to provide a brief summary disclosure of the applicable types of actions or authorities for which the cited agency may use this EIR as follows:

- Feather River Air Quality Management District (monitors air quality and has permit authority over certain types of facilities);

- California Department of Conservation, Division of Mines and Geology (expertise in evaluating geologic and seismic hazards, as well as mineral resource issues);
- California Department of Fish and Game (streambed alteration agreement pursuant to Section 1600 of the California Fish and Game Code);
- California Department of Transportation (encroachment permits);
- California Department of Housing and Community Development (reviews the adequacy of housing elements and funding for affordable housing programs);
- California Public Utilities Commission (certificate of public convenience and necessity);
- Central Valley Regional Water Quality Control Board (water quality certification pursuant to Section 401 of the Clean Water Act, National Pollutant Discharge Elimination System permit);
- Yuba Local Agency Formation Commission (annexations or other service boundary changes);
- Sacramento Area Council of Governments (transportation planning and financing); and
- Native American Heritage Commission (mandated to preserve and protect places of special religious or cultural significance pursuant to Section 5097 et seq. of the Public Resources Code).

In addition to these agencies, the following federal agencies may use environmental information in the EIR for permitting decisions, in addition to other federal agencies:

- U.S. Army Corps of Engineers (Section 404 of the Clean Water Act permit), and
- U.S. Fish and Wildlife Service (Section 7 consultation or Section 10a Habitat Conservation Plan/Section 9 incidental take permit pursuant to the federal Endangered Species Act).

2 EXECUTIVE SUMMARY

2.1 INTRODUCTION

This summary provides an overview of the EIR for the 2030 Yuba County General Plan (the project). The 2030 General Plan is summarized here (with more detail in Chapter 3, "Project Description"), along with alternatives to the project, which are described in detail in Chapter 5, "Alternatives to the Proposed Project." Table 2-1, at the end of this chapter, summarizes the environmental impacts identified for the project in each of the environmental issue sections of this draft environmental impact report (DEIR). These impacts are described in detail throughout Chapter 4, "Environmental Analysis." The summary table at the end of this chapter outlines environmental impacts, the significance without mitigation, proposed mitigation measure(s), and the significance of the impact with implementation of identified mitigation measures.

2.2 SUMMARY OF THE PROJECT DESCRIPTION

The "project site," as defined by CEQA, consists of the unincorporated areas of Yuba County. The 2030 General Plan proposes an update of the County's existing 1996 General Plan. The updated General Plan has been significantly revised and reorganized. The overarching purpose of the updated plan is to provide policy guidelines for future development and conservation in and adapt to issues that have emerged since the creation of the previously written elements. The General Plan provides the framework for decisions guiding where and how development should occur and the priorities given to the County's natural resources in order to achieve the highest quality of life possible for its residents. The General Plan is comprehensive in scope, addressing land use, transportation, housing, conservation of resources, economic development, public facilities and infrastructure, public safety, and open space, among many other subjects.

Although the General Plan is a policy document that does not directly propose construction projects, assumptions must be made for the purposes of analysis. It is estimated that the updated General Plan could accommodate the construction of between 32,000 and 42,000 housing units and 80,000 to 100,000 additional people living in unincorporated areas of Yuba County at full buildout. Between 47,000 and 67,000 jobs could be located in the County at full buildout of the 2030 General Plan. The presentation of broad ranges for buildout of the General Plan is appropriate for a long-range planning document. The actual population and number of jobs added between present and buildout will depend on changes in the local economy, demographic trends, and other factors, many of which are beyond the direct control of the County. Please refer to the 2030 General Plan for more detail regarding buildout assumptions.

2.3 SUMMARY OF PROJECT ALTERNATIVES

Project alternatives are intended to reduce or eliminate the potentially significant adverse environmental effects of the project, while attempting to meet the project objectives. An EIR is required to contain a discussion of a reasonable range of alternatives to the proposed project that could feasibly attain the basic objectives of the project (California Environmental Quality Act (CEQA) Guidelines, Section 15126.6[a]).

The following sections summarize the alternatives to the 2030 General Plan that are addressed in this DEIR. Chapter 5, "Alternatives to the Proposed Project" provides a more detailed description of these alternatives, as well as any alternatives that were originally considered, but then rejected.

2.3.1 ALTERNATIVE 1: NO PROJECT (1996 GENERAL PLAN).

This alternative assumes that the 2030 General Plan would not be implemented and instead the County would build out as provided in the 1996 General Plan.

2.3.2 ALTERNATIVE 2: GROWTH SCENARIO 1.

This alternative would have a smaller, more compact overall development footprint compared to the 2030 General Plan. This alternative describes land use change that would be anticipated for unincorporated areas if the county grew at a rate similar to high growth rates experienced in places such as Placer County during the 1990s and between 2000 and 2009. Development under this alternative would occur in areas with access to existing water, wastewater, transportation, and drainage facilities. This alternative would place a higher proportion of housing within close proximity to destination land uses, such as retail, services, and jobs. With the more compact footprint and a greater focus on infill development and redevelopment, public transit, bicycling, and walking will be viable for a greater proportion of residents for meeting daily travel needs.

2.3.3 ALTERNATIVE 3: BLUEPRINT PREFERRED ALTERNATIVE.

The Sacramento Area Council of Governments (SACOG) Board of Directors adopted the Blueprint Preferred Scenario in December 2004. The Blueprint represents an approach to land use and transportation investments that promotes more compact, mixed-use development, access to transit, improves air quality, and preserves open space, as an alternative to low-density and dispersed development patterns. SACOG used the Blueprint Preferred Scenario to guide preparation of the 2035 Metropolitan Transportation Plan, which identifies priority regional transportation investments. This alternative is guided by the level and mix of development in unincorporated Yuba County included in the Blueprint Preferred Scenario. Relative to the project, this alternative includes a reduced amount of population and employment growth. The land use mix with this alternative is similar to the 2030 General Plan. This alternative reduces the overall footprint of development compared to the 2030 General Plan.

2.3.4 ALTERNATIVE 4: GROWTH SCENARIO 2.

Like Alternatives 2 and 3, this alternative would have a smaller, more compact overall development footprint compared to the 2030 General Plan. This alternative describes land use change that would be anticipated for unincorporated areas if the county grew at a high rate between present and 2030, including buildout of some areas along the Highway 65 corridor between Ostrom Road and South Beale Road.

2.3.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In addition to the discussion and comparison of impacts of the alternatives to the proposed project, CEQA requires that an "environmentally superior" alternative among the alternatives considered be selected and the reasons for such selection disclosed. In general, the environmentally superior alternative is the alternative that would generate the fewest or least severe adverse impacts.

For the purposes of this EIR, Alternative 3 is environmentally superior. Alternative 3 would reduce environmental impacts, compared to the 2030 General Plan, for each of the environmental topic areas analyzed. Alternatives 2 and 4 would also reduce impacts in the same number of topic areas as Alternative 3. In addition to the impacts that would be reduced without changing the impact conclusion, Alternative 3 would also result in one impact area becoming less than significant (Land Use, Population, and Housing).

2.4 SUMMARY OF KNOWN CONTROVERSIAL ISSUES

The CEQA Guidelines require that the summary of an EIR include a synopsis of known issues of controversy that have been raised by agencies and the public (CEQA Guidelines Section 15123). A Notice of Preparation (NOP) was delivered to the Governor's Office of Planning and Research State Clearinghouse on June 17, 2010, anticipating a NOP review period starting June 18, 2010. The County held a scoping meeting on July 7, 2010, to receive comments on the NOP. The County has also conducted public outreach in various formats and settings to

support the 2030 General Plan and has received substantial email and website input from citizens and agencies. Although social and economic issues were raised during this outreach, many environmental issues were also raised. The following is a summary of the issues raised during this scoping process:

- flood hazards;
- hazardous materials;
- access management for state highway system;
- alternatives to the state highway system for local trips;
- impacts to state highway system intersections, ramps, ramp intersections, mainline segments;
- land use strategies to reduce travel demand;
- wildfire risk in foothill areas;
- soil stability and erosion;
- water quality;
- transportation safety related to conflicts between travel modes;
- safety at at-grade railroad crossings;
- loss of agricultural and forest lands;
- air quality, including airborne toxics, and greenhouse gas emissions;
- availability of public transportation;
- water supply;
- waste disposal;
- drainage, including impacts to OPUD facilities;
- direct, indirect, and cumulative impacts to biological resources, including rare species;
- evacuation in the case of wildfire;
- effects of extending utilities to the Magnolia Ranch Specific Plan Area;
- energy conservation measures;
- deer herds;
- orderly provision of urban services in the unincorporated areas;
- analysis of environmental impacts associated with providing public services;
- traffic impacts to Marysville;

- impacts to the Highway 70 bridge;
- impacts to the Spenceville Recreation and Wildlife Preserve;
- visual impacts of foothills development;
- encroachment on existing mining operations;
- incorporating low impact development and smart growth concepts in order to mitigate impacts related to urbanization;
- provision of fire, emergency medical, and other public safety services;
- traffic impacts within Wheatland Fire Authority's service area that could impact emergency response;
- fire flow;
- impacts related to increased vehicle miles traveled;
- land use planning and population and housing impacts;
- traffic impacts to major roads in and around the City of Wheatland;
- groundwater supplies;
- impacts of future wastewater treatment needs;
- solid waste and landfill capacity;
- alternative that focuses on areas with existing municipal services;
- impacts to mineral resources, especially aggregate operations; and
- impacts to species using rice lands.

A copy of the NOP and a complete listing of the letters received during the comment periods are provided in Appendix A.

2.5 SUMMARY TABLE

Information in Table 2-1, "Summary of Environmental Impacts and Mitigation Measures," has been organized to correspond with the environmental issues discussed in Chapter 4, "Environmental Analysis," of this document. The summary table is arranged in four columns: environmental impacts; level of significance without mitigation; recommended mitigation measures; and level of significance with implementation of mitigation measures.

A series of mitigation measures are noted when more than one mitigation measure is required to reduce an impact to a less-than-significant level.

2.6 SUMMARY OF CUMULATIVE IMPACTS

The following provides a summary of the project's cumulative environmental impacts. A detailed discussion of the project cumulative impacts is provided in Section 6.2, "Cumulative Impacts," of this EIR.

2.6.1 AESTHETICS

Development in Sutter County, Butte County, Nevada County, and Yuba County and cities in the region would cause substantial changes to the exiting visual character. Important visual resources present in Yuba County (agricultural lands, views of the Sutter Buttes and the Sierra Nevada, waterways, etc.) would be affected by land use change under the cumulative scenario by related projects and plans. As development occurs in the unincorporated County and surrounding areas, substantial changes in visual conditions would continue as open viewsheds are replaced by urban development. Increased urban development would also lead to increased nighttime light and glare in the region and more limited views of the night sky and sky glow effects, and would disrupt the rural nature of the area. The effect of these changes, when considering the related projects, on aesthetic resources from past and planned future projects is a cumulatively **significant** impact.

Despite the range of policies and programs in the 2030 General Plan that would reduce or avoid adverse aesthetics impacts throughout Yuba County, urban development of agricultural lands and open space would occur. Growth and development in adjacent counties (Sutter County, Butte County, Nevada County and Placer County) would involve similar conversion of former agricultural lands, open space, and elements of the rural landscape. Given the large scale of this development and the rural nature of the regional setting, the impacts on visual resources from implementing projects accommodated under the 2030 General Plan is **cumulatively considerable**.

2.6.2 AGRICULTURAL AND FOREST RESOURCES

Conversion of Important Farmland in the Sacramento Valley is a **significant** cumulative impact resulting from urbanization. The cumulative loss of forestland through development in the region is considered a **significant** cumulative impact, also. The loss of Important Farmland is a cumulatively considerable impact when considered in connection with the **significant** cumulative losses that would occur through implementation of the proposed project, past farmland conversions, and planned future development.

The forest land areas that could potentially be affected by implementation of the General Plan are within the existing (1996) Rural Community Boundary Areas. The conversion of forestland in Yuba County combined with timberland conversion in adjacent counties as a result of rural community development and rural subdivisions is a **significant** cumulative impact. The 2030 General Plan, while maintaining existing (1996) rural community boundaries, would make a **considerable contribution** to this significant cumulative impact.

2.6.3 AIR QUALITY

Air quality in the region does not meet State of California standards. Construction and operation of projects accommodated under regional plans could have a long-term impact on a region's emission profile and ability to attain and maintain NAAQS and CAAQS. The cumulative effects from short- and long-term criteria pollutants generated from the proposed 2030 General Plan, combined with related projects, creates a **significant** cumulative impact.

Construction-related and operational criteria air pollutant emissions associated with General Plan buildout would exceed FRAQMD significance thresholds. Therefore, the 2030 General Plan would have a **cumulatively considerable** contribution to air pollutants in the region.

Toxic air contaminants are considered in land use planning in association with sensitive land uses. Projects and plans throughout the region would contribute roadway and railway traffic that could occur near sensitive receptors, resulting in a **significant** cumulative impact. The County considers the contribution of the 2030 General Plan to be **cumulatively considerable**.

2.6.4 BIOLOGICAL RESOURCES

Past development in Yuba County, ranging from conversion of land to agricultural production to recent expansion of urban development, has resulted in a substantial loss of native habitat to other uses. This is a **significant cumulative impact**. Implementing the 2030 General Plan could result in further loss of special status species and their habitat. Continued development of natural resources areas will result in the incremental decline in the amount of habitat remaining to support special-status species and sensitive natural communities. The 2030 General Plan would contribute to an ongoing decline of special status species and habitats. The 2030 General Plan policies and actions require avoidance of impacts to special-status species and their habitats. The Natural Resources Element also designates various types of open space, including open space required to protect critical habitat and other important biological resources. Therefore, the 2030 General Plan's contribution to a significant cumulative impact would be reduced by implementing the General Plan policies and actions. However, it may not be feasible to completely avoid direct and indirect impacts, while still allowing full build out of the designated land uses and therefore the 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact.

In Yuba County, most established riparian vegetation occurs along the largest rivers; the Feather River, Yuba River, and Bear River, and south Honcut Creek. Important riparian corridors also occur along Dry Creek and other tributaries to Honcut Creek and the Yuba River. Riparian vegetation is present in the surrounding region along the Sacramento River and in the Sutter Bypass. Agricultural, residential, and industrial water use and land development have resulted in **a significant cumulativ**e reduction in the extent of riparian habitats in the county and surrounding region. The 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact.

The alteration of the hydrologic condition supporting long-term soil saturation and conversion to other uses, primarily agriculture, has resulted in a **significant cumulative impact** to freshwater emergent wetlands in Yuba County and the surrounding region. Implementing the 2030 General Plan could result in the loss of freshwater emergent wetland and vernal pool complex with vernal pools and swales. Implementing the General Plan policies and actions listed above, along with the additional mitigation measures, is expected to reduce significant impacts on wetland and other waters of the United States requiring delineation and avoidance of these habitats to the maximum extent feasible, establishment of wetland habitat buffers, and by providing compensation for unavoidable impacts in a manner that would ensure no net loss of overall wetland habitat in the County. Complete avoidance would not be possible while still allowing full build out of the designated land uses. Therefore, the 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact.

2.6.5 CULTURAL RESOURCES

Cultural resources in the region generally consist of prehistoric sites, historic sites, historic structures, and isolated artifacts. During the 19th and 20th centuries, localized urbanization and intensive agricultural use in the region caused the destruction or disturbance of numerous prehistoric sites, while many structures now considered to be historic were erected. Development of projects and plans assumed in the cumulative scenario has the potential to result in the discovery of undocumented subsurface cultural resources or unmarked historic-era or prehistoric Native American burials. Cumulative gains in population, households, and jobs would require a commensurate increase in infrastructure, capital facilities, services, housing, and commercial uses in Yuba County, its incorporated cities, and areas adjacent counties. The impact on archaeological deposits, human remains, and paleontological resources would be substantial given the past extent of urban development, and anticipated gains in population, jobs, and housing. There is a **significant** cumulative impact to cultural resources. Full buildout of the 2030 General Plan would involve substantial development and earth disturbance and the impact is **cumulatively considerable**.

2.6.6 GEOLOGY AND SOILS

The cumulative loss of access to mineral resources is a **significant** cumulative impact resulting from encroachment by development into areas with mineral resources. Implementation of the proposed policies and actions of the 2030 General Plan and implementation of existing regulations for SMARA Mineral Resource Zones, would reduce the impacts of buildout of the 2030 General Plan on mineral resources. Nonetheless, it is possible that development of the County's Rural Community Boundary Areas could preclude extraction of important County mineral resources along the Yuba River. One of the key objectives of the 2030 General Plan is to proactively guide development of rural areas of the County, including those that could be within areas of important mineral resources. The County has included all feasible mitigation as a part of the 2030 General Plan. The 2030 General Plan would have a **cumulatively considerable** contribution to a significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan.

The fact that vertebrate fossils have been recovered throughout the Sacramento and San Joaquin Valleys in these sediments suggests that there is a potential for uncovering additional similar fossil remains during construction-related earthmoving activities. Development under the cumulative scenario could adversely affect these resources, resulting in a **significant** cumulative impact. Implementation of the policies and actions of the 2030 General Plan would reduce the impacts of buildout of the 2030 General Plan on paleontological resources. However, the 2030 General Plan would have a **cumulatively considerable** contribution to a significant cumulative impact.

2.6.7 GREENHOUSE GAS EMISSIONS

Greenhouse gas (GHG) emissions have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Global climate change has the potential to result in sea level rise (resulting in flooding of low-lying areas), to affect rainfall and snowfall (leading to changes in water supply), to affect temperatures and habitats (affecting biological resources), and to result in many other adverse effects. Global GHG emissions represent a **significant** cumulative impact.

Because the 2030 General Plan would generate higher GHG emissions per service population than is needed at the state level to achieve the AB 32 target, and since a substantial quantity of GHG emissions would be generated through buildout of the General Plan, this impact is considered a **cumulatively considerable** contribution to the significant cumulative impact of global climate change.

In addition to GHG emissions from implementation of the 2030 General Plan, another cumulative impact of climate change includes increased global average temperatures (global warming) through the intensification of the greenhouse effect, and associated changes in local climatic conditions. This is a **significant** cumulative impact. Policies and actions in the in the 2030 General Plan would reduce the extent and severity of climate change–associated impacts by proactively planning for changes in climate and conditions, and providing methods for adapting to these changes. For the purposes of this EIR, the impact is considered **cumulatively considerable**.

2.6.8 HYDROLOGY AND WATER QUALITY

The 2030 General Plan would potentially combine with development in the region to create **significant** cumulative hydrologic and water resource impacts. However, the General Plan's Public Health & Safety Element policies are designed to reduce the rate of runoff, filter out pollutants, and/or facilitate groundwater infiltration. Implementation of existing regulations and laws, along with the policies and actions of the 2030 General Plan would reduce the 2030 General Plan's contribution to this potentially significant cumulative impact to water quality. The 2030 General Plan would have a **less than cumulatively considerable** contribution to a significant cumulative impact related to water quality impacts assuming application of existing regulations and policies and actions of the 2030 General Plan.

Development and land use change in Yuba County and in the surrounding region could result in additional impervious surfaces, and the diversion of groundwater to surface water through subsurface drainage features or localized dewatering measures. As a result, levels of groundwater recharge in the underlying groundwater basin would decline. Reductions in groundwater recharge in a given area could affect groundwater levels and the yield of hydrologically connected wells. This is considered a **significant cumulative impact**. 2030 General Plan policies would be implemented in coordination with the Yuba County Groundwater Management Plan on a regional level to ensure conjunctive use, perennial yield, and avoidance of groundwater overdraft within the County and in surrounding areas that are hydrologically connected to it. The impact is **less than cumulatively considerable**.

Much of the floodplain area of Yuba County and adjacent Sutter County is protected by levees along the Feather River, Yuba River, Bear River, and Honcut Creek. Riverine flooding can overwhelm the integrity of the local or regional levee system. This is a potentially **significant** cumulative impact. Adoption and implementation of the proposed policies in the 2030 General Plan, as well as existing state and local regulations, would reduce the risk for people and structures involving flooding that could result from failure of a levee. Implementation of the 2030 General Plan policies and actions, the 2030 General Plan would have a **less than cumulatively considerable** contribution to a significant cumulative impact.

2.6.9 LAND USE, HOUSING, AND POPULATION

General plans in the region, along with specific plans that are outside the development assumptions from local general plans, would potentially accommodate substantially greater population and employment growth compared to regional forecasts and planning efforts. Population and employment growth beyond those included in local and regional land use and transportation plans could induce population growth, which could have a **significant** cumulative impact.

The County has designed the 2030 General Plan to balance land uses in order to avoid growth inducement elsewhere. However, the 2030 General Plan could accommodate a substantially greater population and employment growth than is included in existing forecasts and plans. The 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact.

Regional growth could displace existing housing and population, requiring the construction of housing elsewhere, representing a **significant** cumulative impact. The 2030 General Plan does not propose to remove existing housing or displace existing population or housing units. However, it is possible that some housing could be removed during buildout. The 2030 General Plan could have a **cumulatively considerable** contribution to this significant cumulative impact.

2.6.10 NOISE

Traffic noise levels will increase along major regional roadway corridors as a result of the additional traffic generated by buildout of the 2030 General Plan, coupled with regional growth. This represents a **significant** cumulative impact. The primary factor for a cumulative noise impact analysis is the consideration of future traffic volumes. Implementation of the 2030 General Plan, along with regional growth and traffic conditions, would cause changes in traffic noise levels over existing traffic noise levels. The 2030 General Plan would make a **cumulatively considerable** contribution to this significant cumulative impact.

2.6.11 PUBLIC SERVICES AND FACILITIES

Development and operation of new parks that may be needed to serve additional population accommodated under the General Plan could result in adverse impacts on the physical environment. The 2030 General Plan establishes the overall parkland standard as “a diversity of park types at a ratio of at least 5 acres for every 1,000 residents.” Implementation of this standard will require land dedication and/or fees and planning for parkland of different

types that is integrated into new growth areas, as well as redevelopment areas. The County, however, is not the primary provider of developed park facilities or recreational programming for all unincorporated areas. Because the County cannot guarantee the full implementation of parkland and recreational policies and actions, and because it is possible that parkland and recreational facilities may not be provided at an adequate rate to avoid overuse of existing facilities, a **potentially significant** cumulative impact related to park facilities would occur. The 2030 General Plan would make a **cumulatively considerable** contribution to a significant cumulative impact.

2.6.12 TRANSPORTATION AND TRAFFIC

Regional population and employment growth is anticipated to result in traffic volumes along regional roadways, such as SR 70, that could exceed acceptable levels of service. This represents a **significant** cumulative impact.

While the 2030 General Plan includes various policies to reduce traffic demand and mitigation for roadway segments and intersections, traffic is anticipated to exceed level of service standards at certain roadway segments and intersections. The 2030 General Plan would make a **cumulatively considerable** contribution to this significant cumulative impact.

Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.1 Aesthetics			
4.1-1: Adverse Impacts on Scenic Vistas. Yuba County contains varying topography and land cover that provides many different types of views and scenic vistas. Prominent aesthetic resources visible within Yuba County include the Sutter Buttes, Sierra Nevada foothills and mountains, the valley floor, expansive agricultural lands, rivers and river valleys, and lakes and reservoirs. Future development anticipated under the General Plan could potentially block or result in changes to certain scenic views. This impact would be potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.1-2: Damage to Scenic Resources within a State Scenic Highway. There are no officially-designated State Scenic Highways in Yuba County, although SR 49 is an eligible highway. There would be no impact.	NI	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	NI
4.1-3: Degradation of Visual Character. Implementation of the 2030 General Plan would substantially alter the visual character of the unincorporated communities in Yuba County through conversion of agricultural and other open space lands to developed urban uses. This impact would be potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.1-4: Increase in Nighttime Lighting and Daytime Glare. Development projects would require nighttime lighting and could include construction of buildings with reflective surfaces that inadvertently cast light and glare toward motorists the County's highways and roadways. Development under the 2030 General Plan would increase the amount of daytime and nighttime light and glare and would introduce a new source of nighttime lighting in an existing rural area. This impact would be potentially significant.	PS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	SU

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Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.2 Agriculture and Forestry Resources			
4.2-1: Loss of Important Farmland and Conversion of Agricultural Land to Non-Agricultural Uses. Buildout of the 2030 General Plan could result in the conversion of as many as 5,682 acres of Important Farmland and 44,901 acres of grazing land to nonagricultural uses. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.2-2: Loss of Forest Land or Conversion of Forest Land to Non-Forest Use. Implementation of the 2030 General Plan would not result in large-scale conversion of forest lands to non-forest uses, but some timberland areas in Rural Community Boundary Areas could be affected by implementation of the 2030 General Plan. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.3 Air Quality			
4.3-1: Generation of Long-Term Operational, Regional Emissions of Criteria Air Pollutants and Precursors and Consistency with Air Quality Planning Efforts. Future development in Yuba County would generate emissions of criteria air pollutants (PM_{10} and $PM_{2.5}$) and ozone precursors, both of which affect regional air quality. The 2030 General Plan would accommodate additional population and employment development, which would lead to operational (mobile-source and area-source) emissions that are not accounted for in the current applicable air quality plan and would exceed FRAQMD thresholds. This impact is considered significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.3-2: Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors. Emissions of Criteria Air Pollutants and precursors resulting from construction activities accommodated under the 2030 General Plan would exceed FRAQMD's significance thresholds of 25 lb/day for ROG and NO_X and 80 lb/day for PM_{10}. Policies in the 2030 General Plan would support compliance with FRAQMD-recommended standard construction mitigation practices. This would appreciably reduce construction-generated air pollutant emissions from buildout of the	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU

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Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
2030 General Plan. However, due to the large amount of total development proposed over the buildout period, construction-generated emissions of criteria air pollutants and precursors is considered substantial, and could violate an ambient air quality standard, contribute substantially to an existing or predicted air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. As a result, this impact is considered significant.			
4.3-3: Generation of Long-Term, Operational, Local Mobile-Source Emissions of CO. Local mobile-source emissions of CO would not be expected to substantially contribute to emissions concentrations that would exceed the 1-hour ambient air quality standard of 20 ppm or the 8-hour standard of 9 ppm. As a result, this impact would be less than significant.	LTS	No mitigation is required.	LTS
4.3-4: Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants. Implementation of the 2030 General Plan would reduce the potential for exposure of sensitive land uses to substantial concentrations of TACs. This impact is considered significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.3-5: Exposure of Sensitive Receptors to Emissions of Odors. Implementation of the 2030 General Plan could result in the exposure of sensitive receptors to emissions of objectionable odors. As a result, this impact is considered significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.4 Biological Resources			
4.4-1: Impacts to Special Status Wildlife and Fish Species. 37 special-status wildlife and fish species are known to occur within areas that could be affected by implementation of the 2030 General Plan. Special-status species could occur in suitable habitats throughout areas that could be affected by implementation of the 2030 General Plan. Implementation of the 2030 General Plan would result in loss or degradation of existing populations or of suitable habitat for these species. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU

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Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.4-2: Impacts to Special-Status Plants. Adopting and implementing the 2030 General Plan would accommodate development in areas of the County that support habitat for special-status plant species, which could result in loss of special-status plants either through direct removal or through habitat degradation, if they are present. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.4-3: Loss and Degradation of Sensitive Habitats. Implementation of the 2030 General Plan would accommodate development in areas that support oak woodland and riparian habitats. Development in these areas would result in direct impacts on these sensitive habitats through vegetation removal. Loss and degradation of these habitat types could also result from indirect effects, such as altered hydrology, introduction of invasive species, and habitat fragmentation. This impact is considered potentially significant.	PS	**4.4-3a: Oak Woodland Habitats.** The following measures shall be implemented until the County has adopted an oak woodland preservation and mitigation ordinance. The County oak woodland preservation and mitigation plan may incorporate many of the measures listed below. ► During evaluation of development proposals, require that impacts on oak woodlands such as direct conversions, habitat fragmentation and adverse effects from adjacent land uses be avoided to the greatest extent feasible through project design and modification. This shall be accomplished through mapping oak woodland resources on the project site and establishing buffers around existing stands to prevent adverse effects. ► Require implementation of BMPs while working near oak woodlands to avoid inadvertent damage to oak trees. BMPs should include establishment of buffers to prevent root and crown damage, soil compaction, introduction and spread of invasive species and other indirect effects. ► For those impacts on oak woodland that cannot be avoided, the County shall require the project applicant to minimize adverse affects. All impacts that cannot be avoided shall be mitigated to ensure that loss of oak woodland habitat in the county is reduced to the maximum extent feasible. Mitigation shall include the following steps: mapping of oak woodlands on the project site, quantification of oak woodland impacts resulting from project implementation, determination of appropriate mitigation measures (avoidance, minimization, compensation), development of an oak woodland mitigation plan, and implementation of the plan including monitoring and remedial measures.	SU

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Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		► Measures proposed in the oak woodland mitigation plan may include planting acorns and container stock from a local seed source; however planting may not account for more than 50% of the required mitigation and must occur on lands that are protected in perpetuity. Other measures to be included in the mitigation plan may include the enhancement of degraded stands of oak woodland, purchase of fee title of land and transfer to a public agency for management, and purchase of conservation easements. ► Oak woodland habitat placed under conservation easements should be at appropriate ratios to offset the loss of habitat functions and values of the oak woodland to be lost. Oak woodland habitat preserved this way should have similar tree sizes and densities, species composition, site condition, and landscape context to the oak woodland to be removed to serve the same function and have similar habitat value. The County may also consider the establishment of an oak woodland conservation fund which project applicants may contribute to for a percentage of their mitigation requirements, however a cap should be established for fund contributions, similar to the cap for replacement planting; fund moneys would be used solely for purchase of conservation easements or for public lands to protect oak woodland resources. ► Wherever possible, mitigation lands shall be contiguous with lands already protected and managed for the long term protection of oak woodland and the associated plant and wildlife species to maximize the likelihood of mitigation success. The oak woodland plan shall be developed by a qualified professional such as a professional biologist, arborist or registered forester using the best available science and shall clearly state all mitigation measures required. ► The plan shall designate responsible parties for funding, implementing mitigation, monitoring, reporting and annual review, and shall include remedial action measures if the initial plan fails or if success levels fall below the thresholds specified in the plan. The County shall require the mitigation plan and	

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Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		proof of sufficient means to implement the plan prior to project approval and shall require annual reports for the implementation timeframe of the plan. **4.4-3b: Riparian Habitats** The following measures shall be implemented as necessary to avoid significant impacts to riparian habitats. ► If complete avoidance is not feasible, and projects require encroachment into the riparian habitat, project applicants shall be required to develop a riparian habitat mitigation plan resulting in a no- net- loss of riparian habitat functions and values. ► Mitigation may be accomplished through replacement, enhancement of degraded habitat, or off -site mitigation at an established mitigation bank. ► If a proposed project requires work on the bed and bank of a stream or other water body, the project applicant shall also obtain a streambed alteration agreement under Section 1600 et al. of the Fish and Game Code from DFG prior to project implementation, and shall implement all requirements of the agreement in the timeframes required therein.	
4.4-4: Interference with Movement or Migratory Patterns of Fish or Wildlife Species. Construction of infrastructure, roadways, or developments as part of the buildout of the 2030 General Plan could result in modifications to potential migratory routes or resting locations for fish or wildlife species. In addition, buildout of the 2030 General Plan would accommodate land use change that could alter migratory patterns for wildlife species. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.4-5: Potential for Direct and Indirect Impacts on Federally Protected Wetlands and Other Waters of the United States. Implementation of the 2030 General Plan could result in direct impacts to federally protected wetlands and other waters of the United States, including vernal pools, freshwater emergent wetlands, and rivers, streams, and other water bodies. Impacts could occur	PS	**4.4-5: Waters of the United States.** The following measures shall be implemented, in addition to the 2030 General Plan policies and actions, to reduce significant impacts on wetlands and other waters of the United States: ► A permit from the USACE will be require for any activity resulting in impacts of "fill" of wetlands and other waters of the	LTS

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Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
through habitat conversion, encroachment, routine maintenance, or other activities in the immediate vicinity of rivers and other water bodies and in habitat supporting wetlands. Indirect impacts could result from adjacent development that leads to habitat modifications such as changes in hydrology. This impact is considered potentially significant.		United States. If the impact acreage is below one half acre, the project may qualify for a Nationwide Permit. If impacts exceed one half acre, a letter of permission or individual permit from the USACE will be required prior. Project applicants shall be required to obtain this permit prior to project initiation. A wetland mitigation plan that satisfies USACE requirements will be needed as part of the permit application. ► Projects applicants that obtain a Section 404 permit will also be required to obtain certification from the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA. If the project involves work on the bed and bank of a river, stream or lake, a Streambed Alteration Agreement for CDFG pursuant to Section 1600 et al. of the Fish and Game Code will also be needed. Project applicants shall be required to obtain all needed permits prior to project implementation, to abide by the conditions of the permits, including all mitigation requirements, and to implement all requirements of the permits in the timeframes required therein.	
4.4-6: Conflict with an Adopted HCP/NCCP or Local Policies Protecting Biological Resources. Yuba and Sutter Counties are currently in the process of developing a combined Natural Community Conservation Plan (NCCP) / Habitat Conservation Plan (HCP). This plan has yet to be adopted. During the planning horizon of the 2030 General Plan, if the NCCP/HCP is adopted, policies within the 2030 General Plan will ensure consistency with the NCCP/HCP. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.5 Cultural Resources			
4.5-1: Damage to Identified Historical Resources and Unique Archaeological Resources. The 2030 General Plan contains policies and a growth template that would allow construction and development, as depicted in the Land Use Diagram. Yuba County has a high density of identified cultural resources. Many of these resources, upon evaluation, are likely to qualify as historical resources or unique archaeological resources under CEQA.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU

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Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Construction activity under the General Plan could affect one or more of these resources, resulting in significant impacts by either direct disturbance through excavation or by changes to the setting. These impacts are potentially significant.			
4.5-2: Damage of Previously Unidentified Cultural Resources. Buildout of the areas designated for development within the planning area identified 2030 General Plan has the potential to damage or disturb previously unidentified cultural resources. The density of known cultural resources within Yuba County is high; indicating that additional resources occur that have not been recorded and which could be damaged by construction prior to discovery. This impact is potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.5-3: Disturbance and Damage to Human Remains. Buildout of the 2030 General Plan would allow construction in areas that could contain previously undiscovered buried human remains. Previously identified cultural resources within the County include prehistoric archaeological sites with human burials. In addition, historic archaeological deposits may include human remains and cemeteries. It is possible that ground-disturbing work that would be performed during buildout of the General Plan will encounter such remains, and potentially result in damage. This impact is potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.6 Geology, Soils, Mineral Resources, and Paleontological Resources			
4.6-1: Potential for Exposure to Seismic Ground Shaking. Buildout of the 2030 General Plan would not result in development of areas prone to strong seismic ground shaking. Implementation of policies and actions in the 2030 General Plan and compliance with existing regulations would reduce the potential for substantial adverse effects due to exposure to seismic ground shaking. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.6-2: Potential for Seismic Ground Failure or Other Unstable Soil Conditions. Buildout of the 2030 General Plan could accommodate development of areas located on a geologic unit or soil that is unstable or that could become unstable with moderate potential for seismic-related ground failure, including liquefaction or landslides and subsidence.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS

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Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of policies and actions in the 2030 General Plan and existing regulations would reduce the potential for substantial adverse effects due to exposure to seismic ground failure or other unstable soil conditions. This impact is considered less than significant.			
4.6-3: Soil Erosion or Loss of Topsoil. Buildout of the 2030 General Plan could accommodate substantial construction and development, which could potentially cause soil erosion or the loss of topsoil. Implementation of policies and actions in the 2030 General Plan and existing regulations would reduce potential soil erosion and topsoil loss. This impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.6-4: Construction in Areas with Expansive Soils. Buildout of the 2030 General Plan would result in construction of occupied structures in areas with expansive soils. General Plan policies and existing regulations will require measures to reduce impacts related to expansive soils. This impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.6-5: Construction in Areas with Soils with Poor Septic Suitability. Buildout of the 2030 General Plan would result in construction of occupied structures in areas with soils poorly suited to septic systems. Should septic systems be used, implementation of policies and programs in the 2030 General Plan and existing regulations would require use of best practices for septic systems. This impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.6-6: Loss of Availability of Known Mineral Resources. Buildout of the 2030 General Plan could result in construction in areas near existing or potential future mineral resource development. While regionally significant mineral deposits located within Yuba County, including MRZ-2 zones located along the Yuba River between Marysville and Smartsville, will be preserved, it is possible that development under the 2030 General Plan would encroach on mining operations. However, narrative policy of the 2030 General Plan is structured to reduce impacts to areas with substantial mineral resources. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU

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Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.6-7: Possible Damage to Unknown, Potentially Unique Paleontological Resources. Construction activities could disturb previously unknown paleontological resources in areas addressed by the 2030 General Plan. This impact would be potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.6-8: Potential damage from a seiche. The 2030 General Plan Land Use Diagram and Open Space Diagram indicate that new development would be limited around Collins Reservoir and substantial new development would not be consistent with the General Plan around New Bullards Bar Reservoir. However, it is possible that buildout of the 2030 General Plan could accommodate a very limited amount development in areas located at risk of damage from a seiche. Enclosed water bodies within the County are potential locations for a seiche to occur as a result of an earthquake and lake users, lake shorelines, and areas downstream of dams are at risk of potential damage from a seiche. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures.	LTS
4.7 Climate Change			
4.7-1: Increase in Greenhouse Gas Emissions. The 2030 General Plan would accommodate land use change that would increase GHG emissions. Buildout of the 2030 General Plan Update would result in substantially higher GHG emissions compared with existing levels. Climate change attributable to human-caused GHG emissions is a significant cumulative impact. 2030 General Plan GHG mass emissions could be cumulatively considerable when compared to existing mass emissions in. For this reason, this impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.7-2: Impacts of Climate Change on Yuba County. Climate change is expected to result in a variety of effects that could potentially impact Yuba County: alterations to agricultural production; changes to terrestrial and aquatic ecosystems; increased energy demand; decreased water supply; increased risk of flooding; and increased frequency and intensity of wildfire. Substantial negative effects on residents, resources, structures, and the economy could result. This impact would be potentially significant.	PS	The 2030 General Plan Update contains many goals, policies, and programs which have the potential to aid the County's adaptation to climate change (reducing energy demand, reducing flood potential, decreasing wildfire risk, ensuring adequate water supply, increasing water conservation, preserving important habitat and open space areas). These policies and actions are shown in Table 4.7-4 and included throughout the 2030 General Plan.	SU

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Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.8 Hazards and Hazardous Materials			
4.8-1: Routine Transport, Use, or Disposal and Possible Release of Hazardous Materials from Upset or Accident Conditions. Future population growth through buildout of the 2030 General Plan would result in an increase in the routine transport, use, and/or disposal of hazardous materials, which could result in greater exposure of the public to such materials and exposure of increasing numbers of people through either routine use or accidental release. Implementation of 2030 General Plan policies, in combination with existing federal and state regulations, would reduce the potential impacts related to the routine transportation of hazardous materials. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policy but not technically EIR mitigation measures	LTS
4.8-2: Emission or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School. Implementation of the 2030 General Plan could result in development of uses that would emit or handle hazardous waste in proximity to new or existing schools. However, implementation of 2030 General Plan policies and compliance with existing regulations would ensure that the impact is less than significant.	LTS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS
4.8-3: Public Health Hazards from Project Development on a Known Hazardous Materials Site Compiled Pursuant to Government Code Section 65962.5. Several sites within the County are listed on the Cortese List as known hazardous materials sites. Implementation of the proposed project could expose construction workers to hazards and hazardous materials from these sites during construction activities, and hazardous materials on-site could create an environmental or health hazard if left in place. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS

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Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.8-4: Safety Hazards Associated with Public and Private Airports. Implementation of the 2030 General Plan could locate development within the vicinity of a public-use or private airstrip, potentially resulting in a safety hazard for people residing or working in the area. Policies and actions included in the 2030 General Plan, along with existing state local regulations associated with development in the vicinity of airports, would address these hazards. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.8-5: Interference with an Adopted Emergency Response Plan and Evacuation Plan. Implementation of the 2030 General Plan would add additional traffic and residences requiring evacuation in case of an emergency. Implementation of 2030 General Plan policies would ensure conformance with local emergency-response programs and continued cooperation with emergency-response service providers. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.8-6: Exposure of People and Structures to Urban and Wildland Fires. Development of the 2030 General Plan could potentially increase risk to fire for both people and property. However, implementation of 2030 General Plan policies and actions, along with existing regulations would ensure that people and structures would not be exposed to a significant risk of loss of injury involving fires. This impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.9 Hydrology and Water Quality			
4.9-1: Violation of Water Quality Standards. Development anticipated under the 2030 General Plan would result in additional discharges of pollutants to receiving water bodies from nonpoint sources. Such pollutants would result in adverse changes to the water quality of local water bodies. However, with adoption and implementation of the proposed policies and actions in the 2030 General Plan, combined with current land use, stormwater, grading, and erosion control regulations, this impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS

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Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.9-2: On-Site and Downstream Erosion and Sedimentation and Alteration of Drainage Patterns. Development and land use change consistent with the 2030 General Plan would increase the amount of impervious surfaces, thereby increasing the total volume and peak discharge rate of stormwater runoff. This could alter local drainage patterns, increasing watershed flow rates above the natural background level (i.e., peak flow rates). Increased peak flow rates may exceed drainage system capacities, exacerbate erosion in overland flow and drainage swales and creeks, and result in downstream sedimentation. Sedimentation, in turn, could increase the rate of deposition in natural receiving waters and reduce conveyance capacities, resulting in an increased risk of flooding. Erosion of upstream areas and related downstream sedimentation typically leads to adverse changes to water quality and hydrology. However, with adoption and implementation of the proposed policies and actions in the 2030 General Plan, combined with current grading, erosion, and flood control regulations, this impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.9-3: Construction-Related Water Quality Impacts. Construction and grading activities during development consistent with the 2030 General Plan could result in excess runoff, soil erosion, and stormwater discharges of suspended solids and increased turbidity. Such activities could mobilize other pollutants from project construction sites as contaminated runoff to on-site and ultimately off-site drainage channels. Many construction-related wastes have the potential to degrade existing water quality. Project construction activities that are implemented without mitigation could violate water quality standards or cause direct harm to aquatic organisms. However, with implementation of existing regulations and water quality policies and actions contained in the 2030 General Plan, this impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.9-4: Interference with Groundwater Recharge or Substantial Depletion of Groundwater Supplies. Development and land use change consistent with the 2030 General Plan could result in additional impervious surfaces and the diversion of groundwater to surface water. Resulting reductions in groundwater recharge in the groundwater basins underlying the Planning Area could affect groundwater levels and the yield of hydrologically connected wells. However, with implementation of the proposed policies and actions in the 2030 General Plan, this impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan but not technically EIR mitigation measures	LTS
4.9-5: Exposure of People or Structures to Flood Hazards. Development and land use changes consistent with the 2030 General Plan could result in the development of residential or commercial structures in floodplains, thereby exposing people and structures to flood hazards. However, implementation of the proposed policies and programs in the 2030 General Plan, combined with enforcement of existing flood control regulations would reduce this impact to a less-than-significant level. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.9-6: Potential for Failure of a Levee. Levees can fail because of earthquake-induced slumping, landslides, liquefaction, overtopping, and high volume flows. Levee failure results in exposure of people and structures to inundation, and death, injury, or loss of property could result. The Feather River Levee system protects the Sutter Basin area, which includes much of Western Yuba County. Extensive levee systems have been constructed along the Yuba, and Bear Rivers, and Western Pacific Interceptor Canal to provide flood protection. Implementation of the proposed policies and programs in the 2030 General Plan, combined with other relevant state and local regulations, would reduce the potential for effects on the area from levee failure. The impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS

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Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.9-7: Potential for Failure of a Dam. The Yuba County Water Agency Multi-Hazard Mitigation Plan has identified five dams in or outside the County where dam inundation has the potential to result in major loss of life and property in Yuba County in the unlikely event of dam failure, and three dams that would result in major damage on a smaller scale. Implementation of the proposed policies and programs in the 2030 General Plan, combined with other relevant state and local regulations, would minimize the potential for effects from dam failure. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.10 Land Use Planning, Population, and Housing			
4.10-1: Disrupt or Divide an Established Community. Compliance with goals and policies in the 2030 General Plan would ensure that development pursuant to the 2030 General Plan would not disrupt or divide established communities. This impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS
4.10-2: Conflicts with Other Plans. The goals, policies, and actions proposed in the 2030 General Plan would not conflict with other land use plans, policies, or agency regulations with jurisdiction over projects that could be developed under the 2030 General Plan. The impact is less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.10-3: Potential Conflict with Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). Implementation of the 2030 General Plan would not conflict with an adopted habitat conservation plan or natural community conservation plan. There would be no impact.	NI	EIR references mitigating 2030 General Plan policy but not technically EIR mitigation measures	LTS
4.10-4: Induce Population Growth. Implementation of the 2030 General Plan could induce population growth in unincorporated Yuba County. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policy but not technically EIR mitigation measures	SU

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4.10-5: Displacement of Existing Population and Housing. The 2030 General Plan provides overarching guidance for development and conservation. The 2030 General Plan does not propose to remove existing housing or displace existing population or housing units. However, it is possible that areas designated for development could involve removal of existing housing. The impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.11 Noise and Vibration			
4.11-1: Potential for Temporary, Short-Term Exposure of Sensitive Receptors to Construction Noise. Short-term construction source noise levels could exceed the applicable County standards at nearby noise-sensitive receptors. In addition, if construction activities were to occur during more noise-sensitive hours, construction source noise levels could also result in annoyance and/or sleep disruption to occupants of existing and proposed noise-sensitive land uses and create a substantial temporary increase in ambient noise levels. However, the 2030 General Plan would include policies to ensure construction noise levels do not exceed established standards. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policy but not technically EIR mitigation measures	LTS
4.11-2: Exposure to or Generation of Noise Levels in Excess of Local Standards. Future development of new noise-sensitive land uses would occur under the 2030 General Plan within areas that either are currently affected by noise from both transportation and non-transportation noise sources, or will be in the future. Uses allowed under the General Plan could potentially expose existing or planned noise-sensitive uses to noise levels that exceed local standards. However, the 2030 General Plan would include policies and actions to reduce the potential for noise levels to exceed established standards .Nevertheless, even with the implementation of these General Plan policies and actions, this impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.11-3: Increases in Ambient Noise Levels. Under the 2030 General Plan, future development of new noise-generating land uses	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
could occur within areas containing noise-sensitive land uses. The impact is considered potentially significant.			
4.11-4: Increases in Vibration Levels. Construction of projects accommodated under the 2030 General Plan could cause a temporary, short-term disruptive vibration if construction activities were to occur near sensitive receptors. Under the 2030 General Plan, future development of new vibration-sensitive land uses could occur within vibration-generating areas (e.g., railroads). However, the 2030 General Plan would also include policies and actions to reduce the potential for vibration levels to exceed established standards. This impact would be potentially significant.	PS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS
4.11-5: Noise Levels Near Airports. Future development of noise-sensitive land uses would occur under the 2030 General Plan within areas that are affected by noise from airport operations. However, the 2030 General Plan would also include policies and actions to reduce the potential for noise levels to exceed established standards at noise-sensitive receptors. This impact would be potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.12 Public Services and Facilities			
4.12-1: Demand for Additional Fire Protection and Emergency Services Facilities. Implementation of the 2030 General Plan would result in an increase in population in Yuba County and increase the demand for fire protection services, which would result in the need for additional and/or expanded fire protection facilities. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.12-2: Demand for Additional Law Enforcement Facilities. Implementation of the 2030 General Plan would accommodate an increase in population and commerce in Yuba County, thereby increasing the demand for police protection and law enforcement services, which could result in the need for additional and/or expanded police protection facilities. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.12-3: Demand for Additional School Facilities. Implementation of the 2030 General Plan would accommodate a population increase in the unincorporated areas of Yuba County, which also increase the number of school-aged children requiring educational services. The increased demand for services could result in the need for new or expanded school facilities. However, the environmental effects of such facilities expansion are analyzed throughout the environmental subsections of Section 4.0 of this EIR and there are no additional significant impacts beyond that which is already fully addressed. In addition, school impact fees will be required to address increased demand for educational services. This impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS
4.12-4: Need for New or Expanded Parks and/or Recreation Facilities and Potential for Accelerated Deterioration of Existing Parks. Implementation of the 2030 General Plan would result in an increase in population in Yuba County, which would result in an increase in demand for parks and recreation services and require the construction of additional and/or expanded parks and recreation facilities. The construction of facilities could potentially have adverse impacts on the physical environment. Increased population in the unincorporated County could result in heavier use of existing parks within and outside of the unincorporated County, which could lead to accelerated deterioration of such facilities. The General Plan provides the policy direction necessary to fund and construct parks and recreational facilities needed to respond to increased demand. However, this would depend on the cooperation of agencies outside the County's direct control. Therefore, the impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.12-5: Demand for Additional Library Facilities. Implementation of the 2030 General Plan would generate new population in Yuba County, which would create an increase in demand for library services, which could potentially result in the need for new or expanded library facilities. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4.13 Transportation and Traffic			
4.13-1: Increase in Traffic Levels. Implementation of the 2030 General Plan would result in increases in traffic levels on roadways within Yuba County. This impact is considered significant.	S	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.13-2: Degradation of Roadway Levels of Service. Implementation of the 2030 General Plan would result in roadways and intersections degrading below their current operations. Increased congestion is not in and of itself an adverse physical environmental impact under CEQA. Indirect impacts associated with increased traffic and congestion are analyzed in other sections of this EIR. This impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.13-3: Potential Traffic Impacts in Other Jurisdictions. Implementation of the 2030 General Plan would contribute to roadways and intersections degrading below the applicable LOS standard of the incorporated Cities of Wheatland, Marysville, and Yuba City, and the adjacent Counties of Sutter, Placer, Butte, and Nevada. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.13-4: Traffic Impacts on Caltrans' Facilities. Implementation of the 2030 General Plan would result in Caltrans' facilities degrading below the applicable LOS standard. This impact would be significant.	S	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	SU
4.13-5: Increased Vehicle Miles of Travel (VMT). Implementation of the 2030 General Plan would result in greater VMT compared to existing conditions. This impact is considered potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.13-6: Result in Change in Air Traffic Patterns. Implementation of the 2030 General Plan would not result in a change in air traffic patterns that would result in substantial safety risks. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.13-7: Introduce New Traffic Hazards. Implementation of the 2030 General Plan would not introduce new traffic hazards due to a design feature or incompatible use. The General Plan, however, would add traffic across existing at-grade railroad crossings and to areas where the County anticipates ongoing movement of	PS	**4.13-7: Railroad Crossings** ► For developments that would add substantial traffic, defined as adding 5,000 or more daily trips, across existing at-grade railroad crossings, traffic analysis shall be submitted to the County for review. This analysis and report shall estimate daily	SU

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agricultural equipment. This impact would be potentially significant.		and peak-hour traffic at the subject at-grade crossing, as well as accident data; estimates of train, vehicle, bicycle, and pedestrian travel at the crossing; and a description of existing and planned and funded equipment at at-grade rail crossings. ► The County will review traffic data in communication with the California PUC to identify improvements needed to ensure the public safety. ► As appropriate and feasible, the County will condition approval of projects and plans that add substantial traffic across at-grade crossings to participate in the funding for improvements needed to ensure the public safety as determined by the County. Such improvements may include coordinated highway/rail traffic signals, enhanced rail crossing signage, warning equipment, and markings, and grade-separations. ► Depending on the outcome of these studies, the County may include improvements in future updates to its Capital Improvement Program.	
4.13-8: Adverse Effects on Emergency Access. Implementation of the 2030 General Plan would not adversely affect access to emergency services. This impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies but not technically EIR mitigation measures	LTS
4.13-9: Conflicts with Policies Supporting Alternative Transportation. Implementation of the 2030 General Plan would not conflict with adopted plans, policies, or programs supporting alternative transportation. This impact would be less than significant.	LTS	No mitigation is required.	LTS
4.14 Utilities and Service Systems			
4.14-1: Exceed Wastewater Treatment Requirements. Implementation of the 2030 General Plan would result in the development of new residential, commercial, industrial, and civic uses, which would increase local demand for wastewater treatment facilities. It is possible that land use change could exceed the capacity of wastewater treatment facilities. It is possible that, depending on the specific uses developed under the 2030 General	PS	**4.14-1: Wastewater Treatment Verification.** The County shall implement the following measures to ensure the availability of adequate wastewater collection and removal systems for land development projects in the unincorporated county under the 2030 General Plan: ► Before approval of any tentative subdivision map for a proposed residential project, the County shall formally consult with the	LTS

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Plan, wastewater treatment requirements may be exceeded. This impact is considered potentially significant.		appropriate wastewater system provider that would serve the proposed subdivision to make a factual showing or impose conditions to ensure the availability of an adequate wastewater removal system for the proposed development. ► Before recordation of any final subdivision map, or before County approval of any project-specific discretionary approval or entitlement for nonresidential land uses, the project applicant shall demonstrate, based on substantial evidence, the availability of a long-term, reliable wastewater collection and treatment system for the amount of development that would be authorized by the final subdivision map or project-specific discretionary nonresidential approval or entitlement. Such a demonstration shall consist of a written verification that existing treatment capacity is, or will be available and that needed physical improvements for treating wastewater from the project site will be in place before occupancy.	
4.14-2: Construction of New or Expanded Water or Wastewater Facilities. Implementation of the 2030 General Plan would result in the development of new residential, commercial, industrial, and civic uses, which would increase local demand for water conveyance and wastewater collection, conveyance, and treatment facilities. In addition, implementation of the 2030 General Plan could accommodate development in areas that currently are not served by water systems or a wastewater treatment provider. Construction of new or expanded water and wastewater facilities could have adverse effects on the physical environment. This impact is potentially significant.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU
4.14-3: New or Expanded Storm Water Drainage Facilities. Buildout of the 2030 General Plan would accommodate an expansion of the urbanized landscape and construction of new impermeable surfaces that would generate additional stormwater runoff compared to baseline conditions. New land uses would be expected to include residential, commercial, industrial, and civic uses. Each of these land uses could involve addition of impermeable surfaces, with associated increases in stormwater runoff. The	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
construction of new facilities and conveyance infrastructure or the expansion of existing facilities and infrastructure to handle this runoff could generate significant environmental effects. This impact is considered potentially significant.			
4.14-4: Insufficient Water Supplies to Meet the Future Water Demand in Unincorporated Areas Served by the County. Implementation of the 2030 General Plan would designate land uses that, if developed to full buildout, would increase water demand. Reductions in agricultural cultivation caused by conversion of agricultural land would decrease water consumption within Yuba County. Existing regulations require additional water conservation measures in new development and for large developments to demonstrate ongoing reliable water supply. Considering existing regulations that require conservation and demonstration of water supply and that the overall change in water demand compared to existing supply is not substantial, the impact is considered less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.14-5: Increased Demand for Solid Waste Disposal and Compliance with Solid Waste Requirements. Buildout of the 2030 General Plan would accommodate an increase in population and commerce. This would result in an associated increase in solid waste streams of approximately 82,125 tons of solid waste per year, conservatively estimated. Because available capacity can meet this demand, no new facilities would need to be constructed to serve 2030 General Plan buildout. For these reasons this impact would be less than significant.	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS
4.15 Energy			
4.15-1: Effects on Energy Consumption from Land Use Locations and Patterns. Implementation of the 2030 General Plan would result in an increased demand for energy. New residential, commercial, industrial, and civic uses will increase local energy demands. However, the policies and actions of the General Plan that guide growth and development are designed to avoid wasteful, inefficient, and unnecessary consumption of energy. This impact	LTS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	LTS

NI = No Impact LTS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable

Table 2-1
Summary of Environmental Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
would be less than significant.			
4.15-2: Increased Energy Demand and Need for Additional Energy Infrastructure. Implementation of the2030 General Plan would increases energy demand and would result in the need to extend services and infrastructure to new users in Yuba County. Policies of the 2030 General Plan, as well as existing regulations and project-level review would reduce energy demand. However, the future energy demand would require construction and operation of energy-related facilities that would have potentially significant impacts.	PS	EIR references mitigating 2030 General Plan policies and actions but not technically EIR mitigation measures	SU

NI = No Impact LTS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable

3 PROJECT DESCRIPTION

The following describes the proposed project that is the subject of analysis in this EIR, the Yuba County 2030 General Plan (2030 General Plan), including the location, history, and objectives of the proposed project and the relationship of the proposed project to related plans and regulations. The 2030 General Plan includes policy for development of new growth areas throughout the unincorporated County, areas for long-term conservation, as well as land use change and reinvestment in existing developed areas.

3.1 PROJECT LOCATION

The "project site," as defined by CEQA, consists of the unincorporated areas of Yuba County. Yuba County's boundaries are defined by the Feather River on the west, the Bear River on the south, and Honcut Creek on the north. The easterly boundary is not defined by natural features, but is generally located along the alignment of State Highway 49. Approximately 644 square miles of land is included within the County.

Yuba County has three general physiographic regions: the valley, foothills and mountains. The valley includes Marysville, Wheatland, and urbanized unincorporated areas, as well as agricultural lands and Beale Air Force Base (AFB). The foothills and mountain areas include land used for grazing, timber production, and mining. Rural residential development is an increasing part of the foothill and mountain landscape. Existing land uses are illustrated in Exhibit 3-1.

The nearest major metropolitan area to Yuba County is Sacramento, which lies approximately 30 miles south of the southern edge of the County, by way of State Highways 70 and 65. Located in Yuba County are the incorporated cities of Marysville, the county seat, and Wheatland. Major unincorporated communities include Linda, Olivehurst-Plumas Lake, and Hallwood on the valley floor and Loma Rica, Browns Valley, Challenge, Brownsville, Oregon House, Dobbins, Camptonville, Smartsville, and Camp Far West in the foothill and mountain region. Bordering counties include Sutter County, Placer County, Nevada County, Sierra County, Plumas County, and Butte County.

The county's diverse geography, with access to water and food, provided an ideal place for the settlement of Native Americans. The Gold Rush brought population to the area and established many of the existing communities in Yuba County. As a result of the development boom during and following the Gold Rush, the reclamation of land with flood control structures allowed for the development of a substantial local agricultural industry and enabled settlement in areas that would otherwise be undevelopable.

Yuba County's population as of January 1, 2010, was estimated by the California Department of Finance to be 73,380. Population centers are the incorporated cities of Marysville and Wheatland, as well as the unincorporated communities of Olivehurst-Plumas Lake, Linda, Beale AFB, Challenge-Brownsville, and Loma Rica. The unincorporated population in 2010 was estimated to be 56,955.

Traditionally, Yuba County has attracted agricultural-based industries and has relied on these types of industries for employment. Also, since the 1940s, Beale AFB has been a major employer of both military and civilian personnel. According to the Yuba Sutter Economic Development Corporation (YSEDC), in the Yuba-Sutter County area, agriculture is the largest component of the local economy. Agriculture is a billion-dollar industry for the region. One out of every four people in the region is employed either directly or indirectly in agriculture. Almost 75 percent of all the land in Yuba and Sutter counties is used for some sort of agricultural purpose. The largest use of agricultural land was for field crops and vegetables. Fruit and nut crops accounted for the second highest use of acreage. Recently, the employment base and local economic activity has started to diversify. In the last decade, many of the new jobs that have been created are in the service sector, government, retail, transportation, public utilities and construction.

The Yuba-Sutter region is served by State Highways 70, 65, 20, and 49, and U.S. Highway 99. The region is just north of the intersection of two major interstates, I-5 and I-80. Approximately 11 million people now live within a two-hour drive of the Yuba City/Marysville area. Union Pacific connects the Yuba-Sutter area to the nation's railway system. The rail system is used primarily to transport agricultural goods and other goods produced in the region. Amtrak serves passenger travel needs.

Sierran mixed conifer forest, ponderosa pine forest, and Douglas-fir forest cover most of the mountain areas of the County (above roughly 2,800 feet). Shrub-dominated habitats exist at scattered locations throughout the County and are described in the county vegetation data as mixed chaparral occurring at the lower elevations and montane chaparral occurring at the higher elevations. Montane hardwood-conifer, montane hardwood, blue oak–foothill pine, and blue oak woodland are located primarily at middle and lower elevations in the western half of Yuba County. Annual grassland covers approximately 42,701 acres and is the primary herbaceous-dominated habitat in Yuba County. Annual grassland is common at lower elevations (i.e., at elevations below roughly 2,500 feet) in the western region of the County. This habitat comprises mostly nonnative annuals, primarily of Mediterranean origin, but can also include a variety of native herbaceous species. Nonnative grasslands have replaced most native perennial grasslands in Yuba County and throughout most of California.

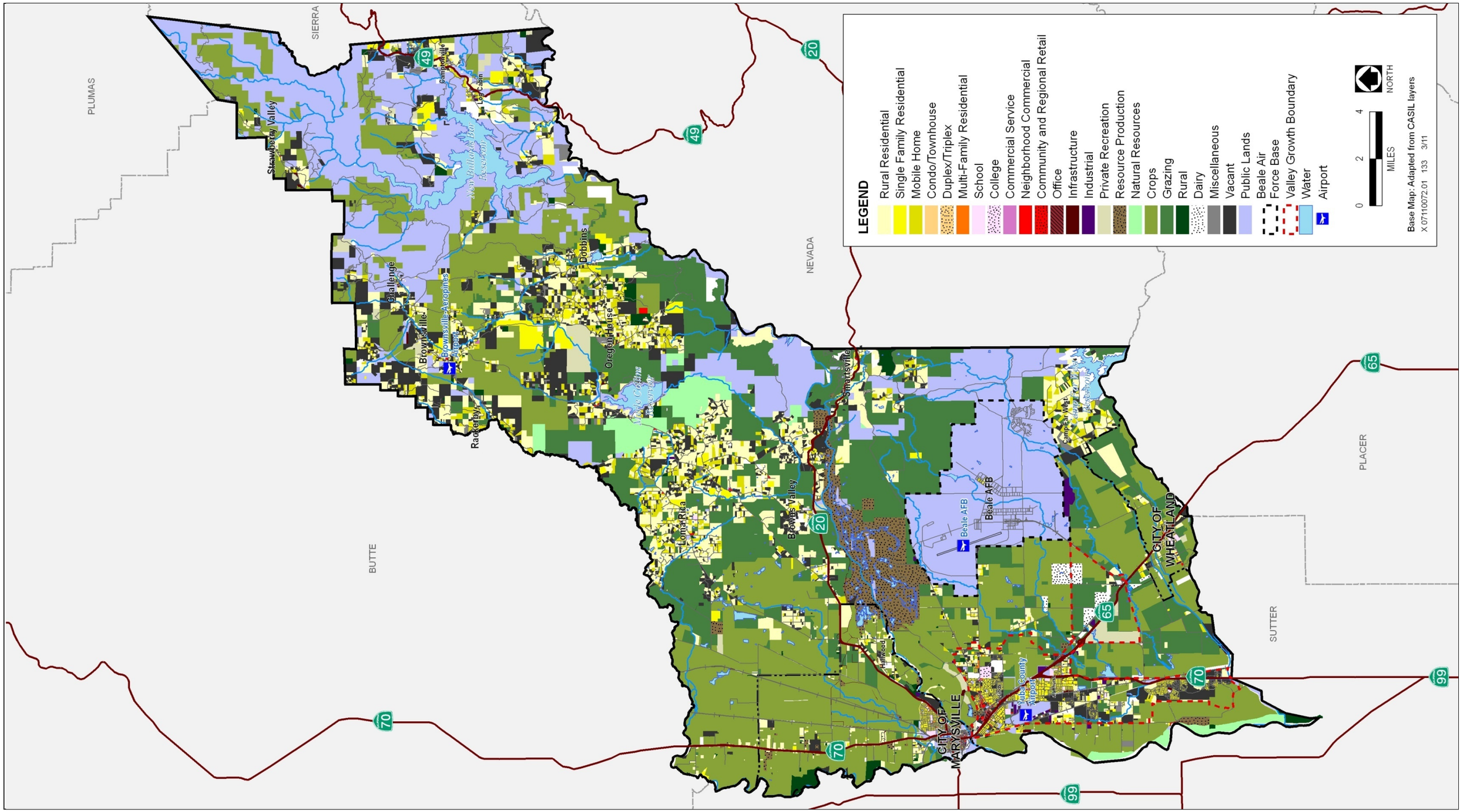
Yuba County is located in the northern portion of California along the eastern edge of the Sacramento Valley within the Sacramento River Basin. It is one of the largest basins in California, encompassing approximately 26,500 square miles. The County is predominantly drained by the Feather, Yuba, and Bear Rivers, which flow into the Sacramento River and ultimately into the Pacific Ocean through San Francisco Bay. The melting snow pack in the Sierra Nevada, in combination with the operation of numerous reservoirs within the system, maintains flows in Sacramento year round. The primary drainages in Yuba County are the Bear River, North, Middle, and mainstem Yuba Rivers, Dry Creek, Honcut and South Honcut Creeks, and the Feather River. Reservoirs include Englebright, Merle Collins, New Bullards Bar, Lake Francis, and Camp Far West.

Some parts of Yuba County have changed substantially since the last General Plan update in 1996, including Olivehurst - Plumas Lake, Linda, and the City of Wheatland. Large areas along State Route (SR) SR-65 and SR-70 have been developed or approved for development. Most foothill areas of the County have not experienced substantial development, with most land use change occurring through minor subdivisions and small projects. Many foothill and mountain areas are publicly held open space, grazing lands, or otherwise rural and agricultural in nature, and would be expected to continue in this manner indefinitely.

A conceptual diagram of existing land use in the County is included as Exhibit 3-1.

3.2 PROJECT HISTORY

The County initiated the General Plan Update process in 2007. The County has solicited input from citizens, public agencies, and decision makers in this long-range planning process. County staff has held 15 meetings with the community, 12 workshops with the Board of Supervisors and Planning Commission, and two workshops with local high school students. In addition, the County has conducted eight meetings with the General Plan Update Advisory Committee (Advisory Committee). In addition to these meetings, the County has solicited and received many comments and requests involving hundreds of combined participants. This input has helped to identify important issues, propose solutions, and ultimately create a vision for the future of the County. Many of the issues identified during this outreach process relate to environmental topics that will be addressed in the program EIR.



Source: Yuba county Assessor's Office 2007, adapted by AECOM 2010

Existing Land Use **Exhibit 3-1**

3.3 PROJECT OBJECTIVES

An EIR must provide a statement of project objectives (CEQA Guidelines Section 15124). This statement of objectives is used to guide the environmental impact analysis and to evaluate alternatives to the proposed project (the 2030 General Plan, in this case).

The 2030 General Plan proposes an update of the County's existing 1996 General Plan. The updated General Plan has been significantly revised and reorganized. The overarching purpose of the updated plan is to provide policy guidelines for future development and conservation in and adapt to issues that have emerged since the creation of the previously written elements.

The General Plan provides the framework for decisions guiding where and how development should occur and the priorities given to the County's natural resources in order to achieve the highest quality of life possible for its residents. The quality of life provided truly drives the sustainability of the County by encouraging people to live, work and play in Yuba County.

As noted in Section 3 of this EIR, "Project Description," the 2030 General Plan objectives include:

- Proactively direct long-term development in the unincorporated County according to the General Plan Update Vision, Goals, and Strategies.
- Revitalize existing communities, neighborhoods and primary transportation corridors.
- Offer a variety of housing types to meet "lifecycle" needs (young adulthood through retirement), freedom of choice, and affordability to local workers.
- Protect agricultural lands, rural landscapes, air and water quality, and natural resource areas that prove to be positive characteristics of Yuba County.
- Strive for a balance between jobs and housing—both numerically and demographically—by promoting jobs for our residents.
- Promote and encourage new commercial and industrial development to balance the recent residential development, generate revenues, and create local jobs and services for residents.
- Through efficient infrastructure planning and prudent financing mechanisms, keep impact fees as low and competitive as possible in order to attract employment opportunities to the County.
- Promote existing growth areas as the engines of the economy by focusing on existing cities, downtown areas, and primary corridors.
- Continue to promote our recreational and tourism opportunities.
- Encourage retail, services, and jobs conveniently located for residents in order to reduce travel demand, reduce vehicle miles traveled and associated air pollution, lower household transportation costs, and reduce transportation infrastructure costs.
- Encourage the ability for future incorporation and/or annexation of unincorporated areas by establishing realistic and manageable growth boundaries.
- Focus on build out of the partially built existing specific plans and promote modification to those plans consistent with the vision and goals of the General Plan when opportunities arise.

- Preserve foothill community boundaries that will continue to enhance and allow for open space, grazing lands, deer herds and oak woodlands which define the rural character of the foothills and the County as a whole.

- Guide long-term development and conservation within the County's rural communities, in order to make them more environmentally and economically sustainable places.

- Protect prime agricultural lands, rural landscapes, and other natural resources.

3.4 PROJECT SUMMARY

The General Plan is the County's overarching policy and planning document. The General Plan indicates the County's long-range objectives for physical development and conservation. The General Plan provides decision makers, County staff, property owners, interested property developers and builders, and the public-at-large with the County's policy direction for managing land use change. The General Plan is comprehensive in scope, addressing land use, transportation, housing, conservation of resources, economic development, public facilities and infrastructure, public safety, and open space, among many other subjects.

3.4.1 PURPOSE

The 2030 General Plan Update process provides the necessary information and analysis to allow decision makers and the public to identify consensus goals for the future. The General Plan also identifies the policies and actions that are necessary to achieve these goals between the present and 2030, while also fulfilling legal requirements in California for comprehensive planning. The combined narrative and diagrammatic information in the General Plan represents the County's overarching policy direction for physical development and conservation. The General Plan puts decision makers, County staff, property owners, property developers and builders, and the general public on notice regarding the County's approach to managing land use change. Basic functions of the General Plan include:

- **A clear vision for the future**. The General Plan describes the desired future of Yuba County. Based on consensus developed during the Update process, the General Plan establishes the vision for the type, amount, character, and location of development, priorities for conservation, and the overall quality of life that should be enjoyed locally.

- **Guide for decision making and proactive measures**. The General Plan provides educational material and background information to help the reader understand planning issues and provide context to help the reader understand the policy guidance. A thorough understanding of the policy guidance in the General Plan will help the County in daily and longer-term decision making that moves toward the General Plan's goals. The County will review the General Plan in correlation with decisions on private development projects, public investments, and other important decisions, making any necessary revisions to plans and projects to achieve consistency with the General Plan. The General Plan process offers the County the opportunity to plan proactively, based on the vision for Yuba County, rather than simply reacting to individual development proposals. The General Plan describes several areas where proactive measures must be taken on economic development, community revitalization, and other priority areas in order to achieve Countywide planning goals.

- **Legal requirement**. The General Plan has been prepared to fulfill the requirements of State law and guidelines adopted by the California Office of Planning and Research. State law not only requires adoption of the General Plan, but also that zoning, subdivision regulations, specific plans, capital improvement programs, and other local measures be consistent with the General Plan. The General Plan provides the framework for the County to exercise its land use entitlement authority in unincorporated areas.

The framework for land use change provided in the General Plan allows the County and other public service providers (such as the community services districts, public utility districts, fire districts, water and irrigation districts, and school districts) to plan for services and facilities consistent with the Plan. The General Plan is also the basis for all other planning efforts, such as specific plans, community plans and redevelopment plans.

3.4.2 GENERAL PLAN UPDATE PROCESS

Yuba County, through an urban planning grant from the Department of Housing and Urban Development (HUD), prepared its first General Plan which was adopted by the Board of Supervisors on January 21, 1969. Over the years the State Legislature has added the following mandated elements, which Yuba County added to its General Plan: 1967 Housing Element (effective 1969); 1970 Conservation & Open Space Elements (effective 1973); and 1971 Safety/Seismic Safety & Noise. The County's Housing Element (originally adopted in 1972) has been updated the most frequently with updates adopted in 1980, 1985, 1991, 2004, and 2009. With the exception of the Noise and Safety Elements which were adopted in 1980, other sections of the General Plan have periodically been updated to address changes in the County's character and vision for the future. The last major General Plan update was the 1996 General Plan which included updates to the Land Use, Circulation, Open Space, and Conservation Elements.

The 2030 General Plan is the County's first comprehensive update. This update allowed the County to ensure consistency between elements and ensure that each element reflects the current character and future vision of the County. While the 2030 General Plan addresses all of the mandatory components and elements of the Government Code, this General Plan has been organized into three broad elements which address the built environment (Community Development Element), Natural Resources, and Public Health & Safety.

The County initiated the General Plan Update process in 2007. The County has solicited input from citizens, public agencies, and decision makers in this long-range planning process. County staff has held 15 meetings with the community, 12 workshops with the Board of Supervisors and Planning Commission, and two workshops with local high school students. In addition, the County has conducted eight meetings with the General Plan Update Advisory Committee (Advisory Committee). In addition to these meetings, the County has solicited and received many comments and requests involving hundreds of combined participants. This input has helped to identify important issues, propose solutions, and ultimately create a vision for the future of the County. Many of the issues identified during this outreach process relate to environmental topics that will be addressed in the program EIR.

The Yuba County Board of Supervisors directed staff to prepare an update to the General Plan to achieve what the County desires for the next 20 years and beyond. County staff circulated a request for proposals to assist with the General Plan Update in November of 2006.

Between 2007 and 2010, the Board of Supervisors and staff have been engaged in the development of a comprehensive update to all the Plan's elements (a comprehensive update of all elements has never occurred since the County's first General Plan was adopted in the 1960's). Adoption of a comprehensive update will provide for consistency and cohesiveness of all the elements and a "road-map" towards achieving the County's vision for our future.

3.4.3 BACKGROUND REPORTS

Through the update process an abundance of information was gathered from both technical studies, as well as the input mentioned previously. The County prepared a series of General Plan Update Background Reports (under separate cover) to summarize existing conditions and trends, addressing:

- Agricultural Resources;
- Air Quality;
- Biological Resources;

- Cultural Resources;
- Demographics and Housing;
- Local Economy;
- Geology and Soils;
- Health and Safety
- Hydrology and Water Quality;
- Infrastructure, Public Facilities, and Public Services;
- Land Use;
- Noise; and
- Transportation.

Each background report was made broadly available via the County's General Plan Update website, at the County Government Center, and at various General Plan related public hearings and meetings.

3.4.4 ALTERNATIVES

A fundamental part of the process of preparing or updating a general plan is the selection of a possible course of action for future growth, development, conservation, and reinvestment in a community. According to California general plan guidelines, alternative concepts for the future of the community should be developed and examined before writing the general plan. This process enables the community to weigh the pros and cons of a variety of possible directions for the future. The County considered several diverse land use and circulation alternatives. These alternatives represented distinct approaches to achieving long-range planning and environmental goals, as defined through decision maker and public input.

A Preferred Alternative was approved by the Board of Supervisors in August and October of 2009. The Preferred Alternative included narrative guidance in a document entitled Yuba County General Plan Update Vision, Goals & Strategies and a diagram called Sustainable Yuba County: Economy, People & Natural Resources (Exhibit Process-2). Please refer to the "Vision for the 2030 General Plan" chapter for more details.

Prior to drafting the 2030 General Plan, the County approved a document entitled, "Yuba County General Plan Update Vision, Goals, and Strategies." The Board of Supervisors provided consensus direction to County staff that this document was to be used to guide preparation of the 2030 General Plan. Following are excerpts from this guiding document.

IMPROVE THE OVERALL QUALITY OF LIFE

To achieve this goal, we will:

- Have safe neighborhoods/communities that preserve community character and meet resident's service needs.
- Create a healthy economy with a balance between the number/types of jobs and the needs of working residents.
- Revitalize existing communities, neighborhoods and primary transportation corridors.
- Have schools, parks, and public gathering places that provide a safe enjoyable environment and promote active, healthy lifestyles.
- Provide public services such as law enforcement, fire protection, public transportation and civic facilities at appropriate levels for urban and rural communities.
- Provide the highest level of flood protection possible for our residents.

- Encourage efficient, cost-effective, and sustainable infrastructure.
- Offer a variety of housing types to meet "lifecycle" needs (young adulthood through retirement), freedom of choice, and affordability to local workers.
- Protect agricultural lands, rural landscapes, air and water quality, and natural resource areas that prove to be positive characteristics of Yuba County.

ECONOMIC INDEPENDENCE

To achieve this goal, we will:

- Strive for a balance between jobs and housing—both numerically and demographically—by promoting jobs for our residents.
- Promote and encourage new commercial and industrial development to balance the recent residential development, generate revenues, and create local jobs and services for residents.
- Through efficient infrastructure planning and prudent financing mechanisms, keep impact fees as low and competitive as possible in order to attract employment opportunities to the County.
- Promote appropriate home business opportunities which utilize advances in electronic technology and have minimal impacts on residential areas.
- Continue to support and take advantage of our existing economic assets such as Beale AFB, Yuba College, Yuba County Airport, agriculture, and existing local businesses.
- Promote existing growth areas as the engines of the economy by focusing on existing cities, downtown areas, and primary corridors.
- Continue to promote our recreational and tourism opportunities.

SUSTAINABLE AND VIBRANT VALLEY COMMUNITIES

To achieve this goal, we will:

- Encourage retail, services, and jobs conveniently located for residents in order to reduce travel demand, reduce vehicle miles traveled and associated air pollution, lower household transportation costs, and reduce transportation infrastructure costs.
- Support the vision, goals and policies of the cities of Marysville and Wheatland in order to achieve their future sustainability.
- Encourage the ability for future incorporation and/or annexation of unincorporated areas by establishing realistic and manageable growth boundaries.
- Focus on build out of the partially built existing specific plans and promote modification to those plans consistent with the vision and goals of the General Plan when opportunities arise.
- Provide flexibility for a property owner to sell their land development entitlement to another property owner (Transfer of Development Rights) if the transfer does not result in impacts to either the receiving or transferring community that cannot be adequately mitigated.

- Link new transportation, water and sewer infrastructure to sound and sustainable policies.
- Efficiently provide public improvements and services. Consider lifecycle costs– long-term operation and maintenance costs in addition to initial construction costs. Strive for regionalized facilities.
- Ensure that existing and future communities are healthy places to live by promoting a physically active lifestyle with clean air to breathe and safe facilities to meet the community's needs.
- Invest in the physical infrastructure of existing communities through infill, reuse, and intensification of well-serviced centers and corridors.
- Build communities that respond to the social and cultural needs of existing and new residents.
- Strive to create a distinctive sense of place, character, and vibrancy for every community that attracts people and investment.

PRESERVATION OF RURAL LIFESTYLE

To achieve this goal, we will:

- Reexamine existing plans in the foothills that provide for urban or suburban levels of density that may no longer be preferred for the County and should be re-evaluated in light of infrastructure feasibility, interests of the community, etc.
- Preserve foothill community boundaries that will continue to enhance and allow for open space, grazing lands, deer herds and oak woodlands which define the rural character of the foothills and the County as a whole.
- Reexamine feasibility of continued subdivision into five acre parcels within the foothill community boundaries based on water availability, adequate soil for waste disposal, and other environmental or physical constraints.
- Ensure that existing residences and resources are protected in the process of evaluating future subdivisions.

RESOURCE PROTECTION

To achieve this goal, we will:

- Protect prime agricultural lands, rural landscapes, and other natural resources. Consider importance of these lands to the County's quality of life.
- Increase the viability of our agricultural areas by allowing for compatible agricultural related businesses such as, but not limited to, processing facilities, agro-tourism, and boutique farming.
- Encourage and promote the use and harvesting of natural resources in ways that benefit the County as a whole.
- Protect agricultural lands from residential encroachment.
- Protect our air and water quality by implementing responsible and realistic policies that protect these precious resources.

3.4.5 GENERAL PLAN CONTENTS

The General Plan consists of the following chapters and elements:

- Vision for the 2030 General Plan
- Purpose and Contents
- Context
- General Plan Update Process
- Community Development Element
- Public Health & Safety Element
- Natural Resources Element
- Housing Element (adopted separately)
- General Plan Implementation

State law specifies that each general plan address seven issue areas, known as "elements," which must be consistent with one another. According to OPR's General Plan Guidelines, topics from different elements may be combined, but all must be addressed within the general plan. The seven required elements include:

1. Land use: The land use element must designate the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan.

2. Circulation: A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan (Yuba County's 2030 General Plan addresses non-transportation related public facilities and infrastructure in the Community Development Element).

3. Open space: The open-space element details plans and measures for the preservation of open space for natural resources, for the managed production of resources, for outdoor recreation, and for public health and safety.

4. Conservation: A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The conservation element may also cover: reclamation of land and waters; prevention and control of the pollution of streams and other waters; regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan; prevention, control, and correction of the erosion of soils, beaches, and shores; protection of watersheds; the location, quantity and quality of the rock, sand and gravel resources; and, flood control.

5. Housing: The housing element provides standards for the improvement of housing and the provision of adequate sites for housing to meet the needs of all economic segments of the community.

6. Noise: The noise element shall identify and appraise noise problems in the community. The noise element shall address noise sources, such as highways and freeways; primary arterials and major local streets; passenger and freight on-line railroad operations and ground rapid transit systems; commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation; industrial plants, including, but not limited to, railroad classification yards; and, other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

7. Safety. A safety element for the protection of the community from risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards, and other geologic hazards known to the legislative body; flooding; and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

Yuba County's 2030 General Plan combines the seven mandatory topic areas and addresses optional elements in four elements, organized as follows:

Yuba County 2030 General Plan Element	Mandatory Elements/Topics	Optional Elements/Topics
Community Development Element	Land Use, Transportation	Community Design; Infrastructure, Facilities & Services; and Economic Development
Public Health and Safety	Safety, Noise	Air Quality, Greenhouse Gas Emissions & Climate Change, Healthy Communities
Natural Resources Element	Open Space, Conservation	
Housing Element	Housing	

The Elements of the General Plan present some background and context to help the reader understand the focus and content of goals, policies, and actions. Goals are a description of a future desired state. Policies are a decision-making guide. Actions are proactive measures or programs that will be undertaken, as necessary, to achieve General Plan goals.

The 2030 General Plan is supported by a substantial amount of public outreach and input, analysis of existing conditions and trends, and comprehensive analysis of different alternatives to County growth patterns. The 2030 General Plan was also developed in careful coordination with comprehensive environmental analysis, the results of which are summarized in this EIR.

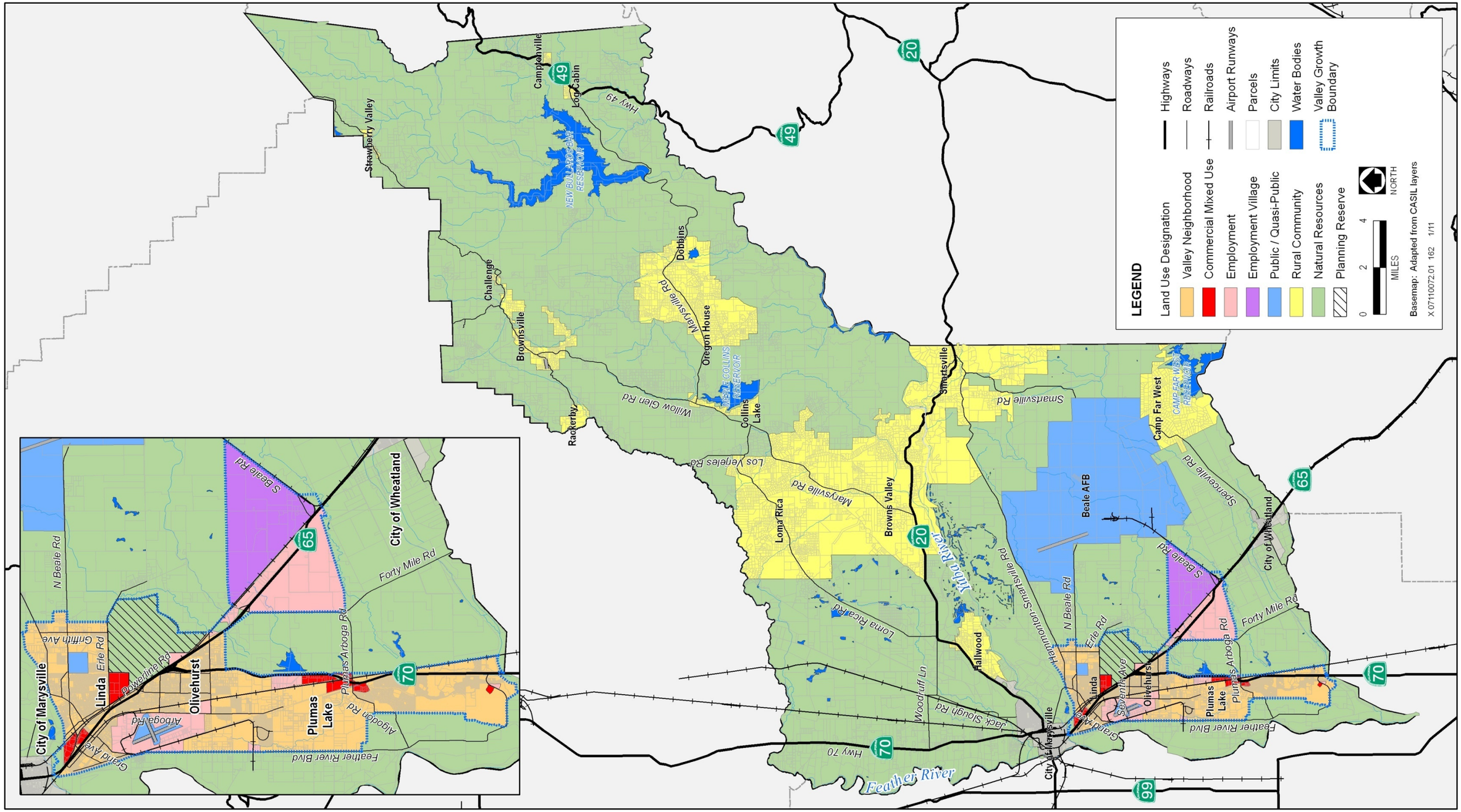
The 2030 General Plan framework is defined through a series of narrative policies and actions, as well as several policy diagrams. The County's Land Use Diagram (see Exhibit 3-2), Land Use Designations, and land use policies describe reinvestment in existing developed portions of Linda and Olivehurst, along with new developments in designated specific plan and community plan areas. Along with development, the County has provided for conservation of important land-based natural resources, as described in this Element and in the Natural Resources Element.

3.5 POPULATION, HOUSING, AND DEVELOPMENT ESTIMATES

Although the General Plan is a policy document that does not directly propose construction projects, assumptions must be made for the purposes of analysis.

It is estimated that the updated General Plan could accommodate the construction of between 32,000 and 42,000 housing units and 80,000 to 100,000 additional people living in unincorporated areas of Yuba County at full buildout. Between 47,000 and 67,000 jobs could be located in the County at full buildout of the 2030 General Plan.

The presentation of broad ranges for buildout of the General Plan is appropriate for a long-range planning document. The actual population and number of jobs added between present and buildout will depend on changes in the local economy, demographic trends, and other factors, many of which are beyond the direct control of the County. Please refer to the 2030 General Plan for more detail regarding buildout assumptions.



Source: AECOM 2010

Land Use Diagram **Exhibit 3-2**

3.6 RELATIONSHIP TO AREA AND REGIONAL PLANS

Regional governmental agencies, such as the Sacramento Area Council of Governments (SACOG), the Feather River Air Quality Management District (FRAQMD), and the Regional Water Quality Control Board (RWQCB), have been established in recognition of the fact that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues, such as air and water quality, transportation, affordable housing, and habitat conservation have resulted in the adoption of regional plans. The policies adopted by Yuba County will be affected by these plans, and will in turn have effects on these other plans.

The 2030 General Plan and the accompanying General Plan EIR both make reference to laws, plans, and regulations administered by other public agencies. In many instances, the County's policies are specifically designed to achieve consistency with regulations of another public agency. In other cases, the County commits to seeking input from other agencies on issues that may arise over the course of implementing the 2030 General Plan. Unless otherwise specified, any reference to "consulting with" or "coordinating with" other agencies in no way delegates the County's responsibility for land use entitlement or lead agency responsibilities for managing land use change. Some of the key areas of interaction with other agencies are described below.

The General Plan is closely linked to the State's environmental laws. CEQA recognizes the authority of the local general planning process in several areas. In law and in practice, the environmental review process is an integral part of the local planning, development review, and decision making process. Defined as a "project" under CEQA, the general plan adoption process is subject to environmental analysis and disclosure. As a policy document, the general plan provides guidance and sets standards for several areas of mandatory environmental review for other "projects" undertaken by local governments and the private sector. In recognition of this close relationship between general plan policy and the environmental review process, the 2030 General Plan has been prepared to respond to changes in the State's CEQA regulations, CEQA Guidelines, and relevant and applicable CEQA case law. It is possible that CEQA review administered by the County would have one or more responsible agencies or even co-lead agencies, as appropriate.

3.6.1 FEDERAL GOVERNMENT

Although no federal plans directly control local land use policies, a number of federal laws have significant impacts on land use decisions at the municipal and private levels. Examples of such regulations include the Endangered Species Act, Section 404 of the Clean Water Act, and in the case of federally funded transportation and infrastructure projects, the National Environmental Policy Act. Numerous agencies have jurisdiction and exert influence on local land use processes.

3.6.2 STATE GOVERNMENT

The State of California influences local policy decisions through a variety of regulations and procedures. Individual topic areas of this EIR will include a discussion of relevant state plans, policies, and regulations. However, only two agencies review and certify general plans. The California Department of Housing and Community Development assesses the contents of the County's housing element. The Central Valley Flood Protection Board (CVFPB) has jurisdiction over flood control issues within the Sacramento-San Joaquin Drainage District, which includes the portions of the County. The updated Safety Element is subject to review and comment by the CVFPB prior to adoption.

3.6.3 RELATIONSHIP TO LAFCO POLICY

The provisions of California's Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 set forth procedures for LAFCOs throughout the state to review annexation applications. The Act was adopted to:

- encourage orderly development;
- ensure that populations receive efficient and high quality governmental services; and
- guide development away from open space and prime agricultural lands, unless such action promotes planned, orderly, and efficient development.

Yuba County LAFCO must adhere to adopted guidelines pursuant to State law in its review of proposed changes to service boundaries and spheres of influence. Responsibilities of LAFCO include annexations and detachments of land to cities or special districts, the formation and dissolution of governmental agencies including cities and districts and the establishment and update of spheres of influence which identify the probable future boundaries of governmental agencies.

3.6.4 REGIONAL WATER QUALITY CONTROL BOARD

The Central Valley Regional Water Quality Control Board (CVRWQCB) is a nine-member state board with the primary duty of protecting the quality of the waters within the Central Valley Region for all beneficial uses. This duty is performed by formulating and adopting water quality control plans for specific ground and surface water basins and by prescribing and enforcing requirements on waste discharges. The CVRWQCB will be responsible for approving storm drain and wastewater discharge permits required by the County to implement stormwater management plans.

3.6.5 CALIFORNIA DEPARTMENT OF TRANSPORTATION

California Department of Transportation (Caltrans) plans and oversees the state highway system and works with other governmental agencies and local jurisdictions to plan, develop, manage, and maintain California's transportation system. The state is divided into 12 Caltrans planning districts. Yuba County is located in District 3 which also includes the Sacramento Valley counties of Sutter, Yolo, Yuba, Colusa, Glenn, Butte, Sacramento, and four mountain counties (Placer, El Dorado, Nevada, and Sierra). Caltrans has permitting authority for all access to and from state highways and therefore works closely with the County to ensure the safe and efficient function of state routes.

3.6.6 FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT

The Feather River Air Quality Management District (FRAQMD) attains and maintains air quality conditions in Yuba and Sutter counties through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean-air strategy of FRAQMD includes the preparation of plans and programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. FRAQMD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations.

FRAQMD and the other air districts in the air basin have jointly prepared and adopted air quality attainment plans (AQAP) and reports. The most recent AQAP, adopted in 2010, addresses all of the following:

- air quality modeling to identify the reductions needed and design strategies to effectively reduce emissions;
- programs to comprehensively reduce emissions and to take advantage of zero- and near-zero- emission technologies; and
- the impacts of pollutant transport air quality planning efforts.

3.6.7 SACRAMENTO AREA COUNCIL OF GOVERNMENTS

Sacramento Area Council of Governments (SACOG) is an association of all the local governments within the six-county SACOG region (Sacramento, Yolo, El Dorado, Placer, Sutter, and Yuba counties). The County's General Plan will be used as the basis for several different regional planning efforts led by SACOG.

SACOG is responsible for development of federal and state transportation plans and programs that secure transportation funding for the region's highways, transit, streets and roads, pedestrian, and other transportation system improvements. SACOG is required also to coordinate transportation planning with state and federal air quality laws and regulations.

SACOG is also charged with distributing the local share of the regional housing needs among the cities and unincorporated areas of the County. The regional housing needs allocation (RHNA) is used as a critical measure of compliance with state housing law. The purpose of the RHNA is to allocate to the cities and county their "fair share" of the region's projected housing need by household income group. The RHNA will also be required to be consistent with assumptions used in development of the regional transportation plan.

3.6.8 CITIES OF WHEATLAND AND MARYSVILLE

The incorporated cities of Marysville (the County seat), and Wheatland are located in Yuba County. As noted elsewhere, the 2030 General Plan applies only to unincorporated areas of the County. However, coordination with the cities will be required to implement several General Plan policies and actions.

3.6.9 BEALE AIR FORCE BASE

Beale Air Force Base (AFB) is located in southern Yuba County 13 miles east of Marysville. Beale AFB is situated on 22,944 acres of federally-owned land consisting of base buildings, base housing, and one active concrete runway. The General Plan includes several important areas of communication and coordination between the County and the AFB related to ensuring compatibility of surrounding land uses, as well as pursuing mutual goals for infrastructure and economic development.

3.6.10 SPECIFIC PLANS

In accordance with State law, the County may adopt specific plans for properties within the boundaries of the Planning Area. All property owners in a specific plan are encouraged to participate in the specific planning process. If properly designed and implemented, a specific plan, as set forth in California Government Code, is a helpful tool for providing a transition between Countywide goals and policies contained in the 2030 General Plan and subsequent entitlement requests (e.g., tentative maps, conditional use permits).

The specific plan is essentially a complete "blueprint" for the development of a defined area. Specific plans must be consistent with the 2030 General Plan, relevant County codes and standards, and must contain, at a minimum:

- land use diagram and description;
- open space diagram and description;
- circulation system diagram and description;
- policies, design guidelines, and development standards;
- parks and recreation diagram and description;

- affordable housing strategy;
- public facility plan, including the location and sizing of major infrastructure (e.g., water, wastewater, storm drainage) and other public facilities (e.g., parks, schools) consistent with the General Plan, master plans, and standards;
- phasing and financing of all public infrastructure and facilities;
- description of the requirements, entitlements, and process for specific plan implementation; and
- analysis of consistency with General Plan goals, policies (including diagrams), and actions, as relevant.

In addition to providing well-coordinated land use and infrastructure planning, specific plans may be required to provide the information necessary to support applications to the Local Agency Formation Commission and coordination with relevant special districts.

3.6.11 RURAL COMMUNITY PLANS

Yuba County has several unincorporated rural communities, including:

- Rackerby,
- Camptonville,
- Log Cabin,
- Brownsville-Challenge,
- Oregon House-Dobbins,
- Collins Lake,
- Loma Rica-Browns Valley,
- Smartsville,
- Hallwood, and
- Camp Far West.

The 2030 General Plan recognizes that each of these rural communities has unique characteristics, and that the residents of some of these areas have a desire to create plans specific to their community. The 2030 General Plan provides these communities the direction necessary to preserve the rural lifestyle that has shaped where they are today. The General Plan also includes overarching guidance to allow these rural communities, in conjunction with the County, to prepare community-based plans that would guide future land use change, if they so choose.

3.6.12 THE GENERAL PLAN AND OTHER COUNTY REGULATIONS

State law places the General Plan atop the hierarchy of land use planning regulations. Several local ordinances and other County plans must conform to General Plan policy direction and work to implement the General Plan. The General Plan provides a governing basis for all other plans and planning documents of the County and all codes, ordinances, and policies of the County related to land use change, transportation, environmental resources, infrastructure, and other related topics.

Cities and counties must make a "consistency" finding with the general plan for any subdivision map, zoning action, public facility plans, and other functions of local government. Court decisions have concluded that these "consistency" determinations cannot be made if the local jurisdiction does not have a legally adequate general plan. In effect, local governments cannot issue development permits or perform many vital public functions without a legally adequate general plan.

In California, general plans are cities' and counties' guiding policy documents. Local agencies implement general plans in part through the adoption and enforcement of zoning codes, subdivision ordinances, and other regulations. General plan land use designations and planning policy provide a framework for zoning designations and development standards. Cities and counties' design regulations and guidelines are also governed by general plans. General plans often contain policy that guides any municipal code sections and ordinances that regulate grading, building permits, open space dedications, landscaping requirements, parkland dedication, off-street parking requirements, transportation infrastructure, signage, and other planning-related codes and ordinances.

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4 ENVIRONMENTAL IMPACT ANALYSIS

4.0 APPROACH TO THE ENVIRONMENTAL IMPACT ANALYSIS

4.0.1 SCOPE

Sections 4.1 through 4.15 of this EIR present the environmental impact analysis for the anticipated effects of implementation of the 2030 General Plan. Topics evaluated in these sections were identified in the notice of preparation (NOP) (Appendix A). The environmental topics are:

4.1 Aesthetics
4.2 Agricultural and Forest Resources
4.3 Air Quality
4.4 Biological Resources
4.5 Cultural Resources
4.6 Geologic, Soils, Mineral, and Paleontological Resources
4.7 Climate Change
4.8 Hazards and Hazardous Materials
4.9 Hydrology and Water Quality
4.10 Land Use Planning, Population, and Housing
4.11 Noise and Vibration
4.12 Public Services and Facilities
4.13 Transportation and Traffic
4.14 Utilities and Service Systems
4.15 Energy
5 Alternatives to the Proposed Project
6 Other CEQA Considerations

In addition to the topics listed above, this DEIR presents a discussion of other analyses required under CEQA (including cumulative and growth-inducing impacts). These analyses are presented in Chapter 6, "Other CEQA Considerations," of this EIR. Alternatives analysis is presented in Chapter 5.

4.0.2 STRUCTURE

Each section in this chapter presents a detailed evaluation of a particular environmental topic and includes a description of existing conditions (both physical and regulatory), potential environmental impacts, mitigation measures proposed to reduce significant environmental impacts (where necessary), and a determination of the level of significance after mitigation measures are implemented.

REGULATORY SETTING

This subsection describes federal, state, and regional and local plans, policies, regulations, and laws that may apply to the environmental topic being evaluated with implementation of the 2030 General Plan.

ENVIRONMENTAL SETTING

This subsection provides relevant information about the existing physical environment related to the particular environmental topic. In accordance with Section 15125 of the State CEQA Guidelines, the discussion of the physical environment describes existing conditions within the County at the time the NOP was filed—unless otherwise noted.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This subsection focuses on an analysis of the potential environmental impacts of the project described in Chapter 3, "Project Description," of this EIR. First, where applicable, the subsection describes the methods, process, procedures, and/or assumptions used to formulate and conduct the impact analysis. Next, it presents the thresholds of significance used to identify the potential environmental impacts of the 2030 General Plan. Following this is an analysis of the potential environmental impacts themselves. Specifically, this analysis uses the following format:

- An impact statement at the beginning of each impact discussion summarizes the potential impact of the 2030 General Plan and its level of significance under CEQA, based on the identified thresholds of significance.
- The potential impact is explained in greater detail, using sufficient technical information to further characterize the impact as previously summarized and to formulate a conclusion about its level of significance.
- Relevant General Plan policies and implementation programs that would reduce or avoid impacts are summarized.
- When necessary and feasible, the analysis of the impact is followed by a description of one or more proposed mitigation measures. Mitigation measures are required by the State CEQA Guidelines when a significant impact is identified. All mitigation measures must be enforceable through legally binding instruments. Section 15370 of the State CEQA Guidelines defines mitigation as:
    - avoiding the impact altogether by not taking a certain action or parts of an action;
    - minimizing impacts by limiting the degree of magnitude of the action and its implementation;
    - rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
    - reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
    - compensating for the impact over time by replacing or providing substitute resources or environments.

RESIDUAL SIGNIFICANT IMPACTS

This subsection describes the significance of the potential impact after incorporation of the relevant 2030 General Plan goals, policies, and actions, as well as any necessary mitigation measures. Impacts are described as either less than significant or significant and unavoidable. Significant and unavoidable impacts are identified here and summarized in Chapter 6, "Other CEQA Considerations."

4.0.3 DETERMINING LEVEL OF SIGNIFICANCE

For each potential environmental impact identified in this EIR, a statement of the level of significance of the impact is provided. Impacts are assessed as one of the following categories:

- The term "no impact" is used when the environmental resource being discussed would or may not be adversely affected by implementation of the 2030 General Plan. It means no change from existing conditions. This impact level does not need mitigation.

- A "less-than-significant impact" would or may cause a minor, but acceptable adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.

- A "significant impact" would or may have a substantial adverse effect on the physical environment, but could be reduced to a less-than-significant level with mitigation. Impacts may also be considered "potentially significant" if the analysis cannot definitively conclude that an impact would occur as a result of the implementation of the 2030 General Plan. Under CEQA, mitigation measures must be provided, where feasible, to reduce the magnitude of significant or potentially significant impacts.

- A "significant and unavoidable impact" would or may cause a substantial adverse effect on the environment, and no known feasible mitigation measures are available to reduce the impact to a less-than-significant level. Under CEQA, a project with significant and unavoidable impacts could proceed, but the lead agency (in this case, the County) would be required to prepare a "statement of overriding considerations" in accordance with Section 15093 of the State CEQA Guidelines, explaining why the lead agency would proceed with the project in spite of the potential for significant impacts.

4.0.4 FORMAT OF IMPACTS AND MITIGATION MEASURES

Throughout the discussion, impacts are identified numerically and sequentially. For example, impacts discussed in Section 4.1 are identified as 4.1-1, 4.1-2, and so on. Mitigation measures, where needed, are identified numerically to correspond with the number of the impact being reduced by the measure. For example, Mitigation Measure 4.1-1 would mitigate Impact 4.1-1.

The format used to present the evaluation of impacts and mitigation measures is as follows:

IMPACT 4.0-1 Impact Title. *An impact summary heading appears before the impact discussion. The heading contains the impact number and title. The impact statement briefly summarizes the findings of the impact discussion below. The level of significance is included at the end of the summary heading. Levels of significance listed in this EIR (as described above) are* ***no impact, less than significant, potentially significant,*** *or* ***significant****.*

The impact discussion is contained in the paragraphs following the impact statement and describes the impact in detail. The analysis compares full buildout of the 2030 General Plan to existing conditions. The discussion does the following:

- identifies federal, state, regional, and local regulations that would fully or partially mitigate the impact;

- identifies 2030 General Plan goals, policies, and actions that would partially or fully mitigate the impact; and,

- describes the potential impact after the various regulations and goals, policies, and actions are taken into account.

Mitigation Measure

After the impact discussion, if necessary, feasible mitigation measures are identified that would reduce the impact. If no mitigation is necessary or feasible, this is stated.

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4.1 AESTHETICS

This section includes an explanation of the criteria and methods used to evaluate the significance and quality of aesthetics and visual resources in, and viewable from Yuba County; a description of existing visual resources; and an evaluation of how implementation of the 2030 General Plan would affect visual resources.

4.1.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws pertaining to visual resources are applicable.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Scenic Highway Program

The California Department of Transportation (Caltrans) manages the California Scenic Highway Program. The goal of the program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of land adjacent to highways. For designated highways, Caltrans requires that local jurisdictions implement a monitoring program that reviews and enforces scenic-corridor protection measures to preserve scenic views. The local agency is required to report to Caltrans once every 5 years on the success and continued enforcement of the protection measures. Caltrans requires developers of projects located adjacent to a state scenic highway to consult with the agency to determine whether the project would constitute a minor, moderate, or major intrusion to the scenic quality of the corridor, defined as follows.

- A **minor** intrusion is one that either is complementary to the landscape or is recognized for its cultural or historical significance (e.g., widely dispersed buildings with visual screenings).
- A **moderate** intrusion is one that is integrated into the landscape and does not degrade or obstruct scenic views (e.g., orderly and well-landscaped developments with or without roadway screening).
- A **major** intrusion is one that dominates the landscape and degrades or obstructs views (e.g., dense and continuous development that dominates the view).

There are not any designated scenic highways in or within view of Yuba County. State Route (SR) 49, which is located in the eastern portion of the County, is an Eligible State Scenic Highway (Caltrans 2009).

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Other than the 1996 General Plan, which would be comprehensively revised by the 2030 General Plan, there are no regional or local policies, regulations, or ordinances that apply to visual resources.

4.1.2 ENVIRONMENTAL SETTING

VISUAL CHARACTER OF YUBA COUNTY

Yuba County has three physiographic regions. The Sacramento Valley makes up the western part of the County, the Sierra Nevada foothills comprise the central part, and the Sierra Nevada Mountains are in the eastern part. The visual character of each region is described below.

Urban development that has occurred in the County has placed structures between viewpoints and distant views, effectively obstructing these views – whether of the Sutter Buttes, the Coastal Range, the Sierra Nevada Mountain

range, or other prominent visual features. Urban development creates an existing, prominent source of daytime glare and nighttime lighting. There are bridges, agricultural structures, and other private structures scattered throughout other valley portions of the County. But, other than Linda, Olivehurst-Plumas Lake, Camp Far West, and Beale Air Force Base, there is limited development in the unincorporated valley areas. In the foothill and mountain areas, rural communities and rural subdivisions intrude on views of natural vegetation and topographic features. Some aspects of the built environment, however, provide visual interest. Historic structures from the early era of mining and ranching provide points of visual interest within the County (Refer to Section 4.5 "Cultural Resources").

Valley

One of the most prominent visual features in the northern Sacramento Valley is the Sutter Buttes, a small, isolated mountain range that rises out of the valley floor to an elevation of approximately 2,000 feet above sea level. Although the Sutter Buttes are located in Sutter County (west of Yuba County), this mountain range is a distinctive visual feature visible from many developed and undeveloped areas of the County, including both valley and foothill areas.

Most of the northern Sacramento Valley is flat, agricultural land. From many viewpoints within the valley, the Coastal Range to the west and the Sierra Foothills in the east are visible in the distance. From the valley floor, undeveloped lands provide views that are dominated by agricultural and open space lands. Annual grassland, common in the on the valley floor (i.e., below 2,500 feet) in the western region of the County, provide views of open expanses. Vernal pools, found in the western portion of the County, occur in mosaics with annual grassland on low mounding hill topography. In the spring, wild flowers bloom in abundance among the vernal pools and grasslands. Riparian forest and woodland habitats exist as scattered remnant patches along Feather, Yuba, and lower Bear rivers and other watercourses in the valley. These watercourses provide views of dense closed-canopied, multi-layered forest dominated by cottonwood, sycamore and willow, and open woodlands dominated by valley oak.

Many viewpoints in western and central Yuba County are terminated by the Sutter Buttes. Distant views to the east are terminated by the Sierra Nevada foothills and mountains. Most of the County's developed areas are in the valley floor along the major transportation routes, including State Routes (SR) 65, 70, and 20. Developed areas include the incorporated cities of Marysville and Wheatland, as well as the unincorporated communities of Olivehurst-Plumas Lake and Linda and Beale Air Force Base. Visual character of these communities is dominated by urban development and infrastructure. Rural residential development in the foothills of the County is not noticeable from the valley floor.

Foothills

Blue-oak woodland and blue oak-foothill pine woodland are the dominant vegetation types in the foothills of Yuba County. Woodlands range in structure from open savanna to dense forest, with riparian forests along the tributaries and main stems of the Yuba and Bear Rivers. County roadways and state highways provide views of these diverse natural areas, which are interspersed with rural residential subdivisions, orchards, and small rural communities. From certain public viewpoints in foothill and mountain areas, there are distant views of the valley floor below, with the Sutter Buttes in the distance. On clear days, the Coastal Range is visible further to the west, as are the Cascades, Mt. Lassen, and Mt. Shasta to the north.

Mountains

Coniferous forest habitats dominate the eastern portion of Yuba County above 2,500 feet in elevation. These forests are composed of mixed conifer forest (hardwood and conifers) between 2,500–6,000 feet in elevation; Douglas fir forest at higher elevations; and ponderosa pine forest at elevations of 4,000–7,000 feet. These forest types intermix depending upon topographic and environmental factors such as elevation, soil types, and slope aspect. Views of these forests are provided by county roads and State Routes 20 and 49. Rural communities and

mountain subdivisions are interspersed among the coniferous forests. The eastern portion of the County surrounding New Bullards Bar Reservoir is public land where there are uninterrupted views of mixed conifer and Douglas fir forests.

VIEWER GROUPS AND VIEWER SENSITIVITY

Yuba County is characterized by landscapes that are marked by transitions, including topographic transitions from valley to foothills to mountains, and land use transitions from agricultural to rural residential to urban density. Viewer awareness is usually heightened in areas of transition, and travelers would be aware of their surroundings and sensitive to changes in the landscape in these areas.

The main viewer groups that have views of scenic areas consist of travelers on roadways located in the County, including SR 49, SR 20, SR 65, SR 70, and county roadways. Other viewer groups would be composed of people engaged in recreational activities such as sight-seeing, boating or fishing on reservoirs and rivers, hiking and camping, and bicycling on roadways or trails. Travelers could be residents of the County or visitors engaged in business or recreational travel. Residents of an area tend to have a higher concern and awareness of visual change taking place near to where they live. People engaged in recreational pursuits such as sight-seeing, fishing, boating, hiking or bicycling would have a heightened awareness of their surroundings and would be sensitive to changes in the visual environment. People engaged in work related activities tend to focus on their immediate visual environment, rather than distant views.

4.1.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

This analysis evaluates the visual changes that would occur with implementation of the 2030 General Plan. Existing, on-the-ground visual resources and scenic resources are compared to the visual environment under buildout of the 2030 General Plan. Visual impacts were compared against the County's thresholds of significance, which are listed below.

The process used for this analysis is derived from established procedures for visual assessment developed by federal agencies. Criteria developed by the Federal Highway Administration (USDOT 1988), which are used in this analysis, include the concepts of vividness, intactness, and unity. All three factors are considered in determining visual quality, and are defined as follows:

- "Vividness" is the visual power or memorability of landscape components (landform, vegetation, and built environment) as they combine in striking and distinctive visual patterns.
- "Intactness" is the visual integrity of the natural and built landscape and its freedom from encroaching elements.
- "Unity" is the visual coherence and compositional harmony of the landscape considered as a whole and the degree to which all visual elements combine to form a coherent, harmonious visual pattern. One aspect of unity can be the unity between natural and human-built elements.

The evaluation also identifies major viewer groups and viewer sensitivity. Viewer sensitivity is defined as the relative importance of views to members of the viewing public. Using the factors of *visual quality* and *viewer sensitivity*, the impact analysis qualitatively evaluates the visual resource change that would occur for selected viewpoints after implementation of the proposed project.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact on visual resources is considered significant if the proposed project would:

- have a substantial adverse effect on a scenic vista; or
- substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway; or
- substantially degrade the existing 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.

IMPACT ANALYSIS

IMPACT 4.1-1 Adverse Impacts on Scenic Vistas. *Yuba County contains varying topography and land cover that provides many different types of views and scenic vistas. Prominent aesthetic resources visible within Yuba County include the Sutter Buttes, Sierra Nevada foothills and mountains, the valley floor, expansive agricultural lands, rivers and river valleys, and lakes and reservoirs. Future development anticipated under the General Plan could potentially block or result in changes to certain scenic views. This impact would be* ***potentially significant.***

Yuba County contains many areas with significant unique and picturesque views. From the valley floor, there are views of the expanses of agricultural lands crossed by rivers and canals, and the Sierra Nevada foothills to the east. The mountainous areas provide scenic views of peaks, forests, rivers, and lakes. The most prominent scenic vista in the region is experienced from the foothills, along east-west highways and roads where there are sweeping views of the valley below, with distant views of the Sutter Buttes. Highway 20, Hammonton-Smartsville Road and other roadways in the foothills provide views of the Valley and Sutter Buttes. There are local-scale scenic views of the Feather, Yuba and Bear rivers at bridge crossings and where roads parallel these rivers.

For westbound travelers on SR 20, rural community development in the Browns Valley area could intrude upon and potentially block scenic vistas of the Sutter Buttes, which are located in the Sacramento Valley in Sutter County. New development could introduce structural elements such as signage, utility poles and buildings that would reduce the vividness or memorability of scenic vistas or reduce intactness and unity of views. Travelers on SR 20 could have heightened sensitivity to visual change because of the transition between valley and foothills, and because this route is often used by recreational travelers.

Development in the rural communities adjacent to the Bear and Yuba Rivers could potentially block scenic views of these visual resources. Buildings, signage, paving would detract from intactness and unity of natural views. Residents in these communities would have heightened sensitivity to visual change in the vicinity of their place of residence. Recreational visitors would also have high sensitivity to the visual environment because of their engagement with the environment. Development would intrude upon scenic views provided by agricultural, grazing, forests lands and other open space lands in unincorporated areas of the County.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes the following policies and actions that are intended to reduce adverse impacts on scenic vistas in Yuba County:

- **Policy NR9.1:** New developments near the Yuba, Bear, and Feather Rivers should be designed and located in a way that retains or enhances scenic views of these important visual resources.
- **Policy NR9.2:** New plans and projects in western Yuba County should be designed to provide view corridors to the Sutter Buttes, where practical.
- **Policy NR9.3:** Development in Rural Communities should be designed to preserve important scenic resources, landmarks, and icons that positively contribute to the rural character.
- **Policy NR9.4:** New buildings in areas of natural and scenic beauty should be placed and designed in a way that preserves scenic vistas available from public rights-of-way, parks, and other public viewing areas.
- **Policy NR9.5:** The County supports the designation of State Route 49 as a State Scenic Highway, and will guide land use change in areas visible from this highway in a way that preserves important aspects of the visual character.
- **Policy NR9.6:** Grading and drainage for new developments in foothill and mountain areas should preserve and take advantage of the natural landforms and vegetation (see Exhibit Natural Resources-8).
- **Policy NR9.7:** New construction should be designed to avoid excessive cut and fill shall by following the natural contour of the subject site.
- **Policy NR10.1:** Building placement, grading, and circulation should be planned to retain as much existing native vegetation as feasible, with a priority on preserving existing oak trees that have a diameter at breast height (dbh) of 6 inches or greater and all other trees that have a dbh of 30 inches or greater. The County's policies and standards for fire safety may override consideration of retaining existing vegetation in certain circumstances.
- **Policy NR10.2:** The County will encourage the preservation of healthy, attractive native vegetation during land development. Where this is not feasible, the County will require site landscaping that uses appropriate native plant materials.
- **Action NR10.1:** Oak Woodlands and Tree Preservation. Following adoption of the 2030 General Plan, the County will adopt and implement a tree preservation and mitigation ordinance. This ordinance will implement state requirements for oak woodlands mitigation (as required by Public Resources Code Section 21083.4, including certain exemptions). The tree preservation ordinance will address native oak trees measuring 6 inches or more in diameter at breast height (dbh) and all other trees greater than 30 inches dbh. The ordinance will describe the process by which the County determines the significance of impacts related to tree removal. For oak woodlands, mitigation can occur through: conservation easements; planting (up to 50% of mitigation requirement); restoration; contribution to the Oak Woodlands Conservation Fund; or equally effective mitigation formulated by the County during development of this ordinance.

    - Related Goals: Goal NR4, Goal NR5, Goal NR9, Goal NR10, Goal HS7
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General fund
    - Time Frame: Adopt ordinance by 2015

- **Policy NR11.1:** New developments are encouraged to include architectural styles that complement local historic styles including, but not limited to gold rush, agrarian, craftsman, bungalow, American cottage, mountain or rustic styles, and other appropriate styles (Exhibit Natural Resources-9).

- **Policy NR11.2:** In new development areas, service, utility, loading areas, roof-mounted equipment, and noise-generating equipment shall be screened, designed, and located to reduce visibility, odor, and noise as experienced at surrounding properties and pedestrian areas.

- **Policy NR11.3:** New utilities should generally be placed underground, where feasible. New utilities in rural areas outside the Valley growth Boundary shall avoid ridge lines and blocking expansive views from public viewing locations, where feasible.

- **Policy NR11.5:** The County will review and condition nonresidential, multi-family, large single-family projects, and projects located in historically significant areas for compliance with General Plan policy and design guidelines, once guidelines are developed. Large single-family projects are those that propose more than 10 units.

Conclusion

The 2030 General Plan policies listed above would ensure that urban development is limited to areas within the County's Valley Growth Boundary, which would help to maintain sweeping views of agricultural lands currently available from foothill and mountain areas. The policies would also ensure that new development is designed to take advantage of and protect visual resources with the least amount of interference with existing views as feasible. While this approach would reduce adverse impacts on scenic vistas, development associated with implementation of the 2030 General Plan would still result in the permanent degradation of some of the County's scenic views, both partially and wholly. Therefore, this impact is considered **potentially significant**.

Mitigation Measure

No additional feasible mitigation beyond that included as policy under the 2030 General Plan is available to reduce this impact. The proposed project's purpose is to provide a framework governing development of long-term development in Yuba County.

Implementation of policies in the 2030 General Plan would ensure that subsequent projects are designed so that they do not interfere with and, where feasible, they enhance scenic views available in the County. However, development would permanently change the visual character and scenic vistas. No feasible mitigation measures or policies are available that could fully preserve the existing views of scenic vistas while also providing for long-term growth needs. This impact would remain **significant and unavoidable**.

IMPACT 4.1-2 Damage to Scenic Resources within a State Scenic Highway. *There are no officially-designated State Scenic Highways in Yuba County, although SR 49 is an eligible highway. There would be no impact.*

There are no officially designated state scenic highways located within Yuba County. SR 49, located in the eastern portion of the County is eligible for such a designation, according to Caltrans. As part of the 2030 General Plan, the County would pursue designation of this highway. With this designation, the County would review proposed development projects and public investments with a higher level of scrutiny regarding visual impacts along this future-designated scenic route. The County's review and conditioning of projects and public investments would dictate certain approaches to the design and location of buildings within the SR 49 corridor to reduce adverse visual impacts from public viewing locations.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes a policy to promote the designation of SR 49 as a State Scenic Highway and protect visual resources along that roadway, as well as policies designed to preserve aesthetic resources, including those that may be available for viewing along SR 49:

- **Policy NR9.5:** The County supports the designation of State Route 49 as a State Scenic Highway, and will guide land use change in areas visible from this highway in a way that preserves important aspects of the visual character.

- **Policy NR9.3:** Development in Rural Communities should be designed to preserve important scenic resources, landmarks, and icons that positively contribute to the rural character.

- **Policy NR9.4:** New buildings in areas of natural and scenic beauty should be placed and designed in a way that preserves scenic vistas available from public rights-of-way, parks, and other public viewing areas.

- **Policy NR9.6:** Grading and drainage for new developments in foothill and mountain areas should preserve and take advantage of the natural landforms and vegetation (see Exhibit Natural Resources-8).

- **Policy NR9.7:** New construction should be designed to avoid excessive cut and fill by following the natural contour of the subject site.

- **Policy NR10.1:** Building placement, grading, and circulation should be planned to retain as much existing native vegetation as feasible, with a priority on preserving existing oak trees that have a diameter at breast height (dbh) of 6 inches or greater and all other trees that have a dbh of 30 inches or greater. The County's policies and standards for fire safety may override consideration of retaining existing vegetation in certain circumstances.

- **Policy NR10.2:** The County will encourage the preservation of healthy, attractive native vegetation during land development. Where this is not feasible, the County will require landscaping that uses climate-appropriate plant materials.

- **Action NR10.1:** Oak Woodlands and Tree Preservation. Following adoption of the 2030 General Plan, the County will adopt and implement a tree preservation and mitigation ordinance. This ordinance will implement state requirements for oak woodlands mitigation (as required by Public Resources Code Section 21083.4, including certain exemptions). The tree preservation ordinance will address native oak trees measuring 6 inches or more in diameter at breast height (dbh) and all other trees greater than 30 inches dbh. The ordinance will describe the process by which the County determines the significance of impacts related to tree removal. For oak woodlands, mitigation can occur through: conservation easements; planting (up to 50% of mitigation requirement); restoration; contribution to the Oak Woodlands Conservation Fund; or equally effective mitigation formulated by the County during development of this ordinance.

    - Related Goals: Goal NR4, Goal NR5, Goal NR9, Goal NR10, Goal HS8
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General fund and/or fees
    - Time Frame: Adopt ordinance by 2015

- **Policy NR11.1:** New developments are encouraged to include architectural styles that complement local historic styles including, but not limited to gold rush, agrarian, craftsman, bungalow, American cottage, mountain or rustic styles, and other appropriate styles (Exhibit Natural Resources-9).

- **Policy NR11.2:** In new development areas, service, utility, loading areas, roof-mounted equipment, and noise-generating equipment shall be screened, designed, and located to reduce visibility, odor, and noise as experienced at surrounding properties and pedestrian areas.

- **Policy NR11.4:** To the maximum extent feasible, new developments shall avoid adverse light and glare effects on adjacent roads, neighboring properties, and pedestrian areas through careful location of on-site lighting, use of non-reflective paint and building materials, screening or shielding light at the source, use of vegetation screening, use of directional lighting, use of lower intensity lighting, use of timing devices or sound/motion-controlled lighting, or other equally effective means.

- **Policy NR11.5:** The County will review and condition nonresidential, multi-family, large single-family projects, and projects located in historically significant areas for compliance with General Plan policy and design guidelines, once guidelines are developed. Large single-family projects are those that propose more than 10 units.

- **Policy NR11.6:** The County's standards for installation of telecommunications facilities will ensure an efficient permitting process, as well as encourage locations and designs that take into consideration visibility from public rights-of-way, co-location, blending with the visual environment, and aviation safety.

As noted previously, if SR 49 does in the future receive a State Scenic Highway designation, the County would prepare and implement a monitoring program designed to preserve and protect the corridor from changes that would affect the aesthetic value of the corridor. Caltrans would require developers of projects located adjacent to a state scenic highway to consult with the County to determine whether the project would constitute a minor, moderate, or major intrusion to the scenic quality of the corridor.

Conclusion

There are no officially designated state scenic highways within the County, but SR 49 is an eligible highway and other roadways may be suitable to be designated as local scenic routes. However, since there are currently no designated scenic highways, there would be **no impact** associated with adverse impacts on visual resources within a state scenic highway.

Mitigation Measure

No mitigation is required.

IMPACT 4.1-3 Degradation of Visual Character. *Implementation of the 2030 General Plan would substantially alter the visual character of the unincorporated communities in Yuba County through conversion of agricultural and other open space lands to developed urban uses. This impact would be potentially significant.*

Prominent visual resources visible from unincorporated areas include agricultural landscapes of the valley, oak woodlands and rolling topography of the foothills, and forested mountainous areas. Implementation of the 2030 General Plan would accommodate development that would change the visual character of some of these important visual resources. Development under the General Plan would place structures in areas of scenic beauty, would potentially alter the existing topography and obscure rock outcroppings or other prominent visual resources, and increase light and glare. The effects of the General Plan would be particularly widespread in valley portions of the County, where most development will be focused. Expansion of urban and rural development in unincorporated valley communities would occur primarily along SR 65 and SR 70. Urban and rural development would be anticipated to include construction of large buildings, housing, parks, schools, parking lots, and visible infrastructure improvements, such as roadways and open drainage conveyances. Development allowed under the 2030 General Plan could degrade the visual character of these areas.

Views for travelers along SR 70 just north of the southern county line would be altered by the expansion of low density residential development in the Plumas Lake Specific Plan. Low-density residential development would result in fragmentation of open space, and introduce elements, such as houses, fences, roads and utilities that would intrude upon agricultural open space, reducing the intactness and unity of the views. Views for travelers along SR 65 would be altered by the development of jobs-producing land uses in an area that is currently agricultural. Surrounding lands would remain in agriculture; the contrast between agricultural and industrial land uses would reduce the unity and intactness of the views provided by agricultural open space. Viewer sensitivity to these changes would be moderate since travelers along these routes would be engaged in driving and views would be peripheral in many cases.

Limited development allowed under the 2030 General Plan could substantially change views of important aesthetic resources in foothill and mountain communities including Challenge, Brownsville, Rackerby, Browns Valley, Loma Rica, Oregon House, Dobbins, Camp Far West, and the Smartsville area. The visual character of these areas would be degraded by topographic modification, soil disturbance, vegetation removal and construction of structures that would detract from unity and intactness of the views. Residents would have a heightened sensitivity to visual changes within their communities.

Since rural development would be focused around "Rural Centers," the location of structures and design of developments in these areas will be important for preservation of important positive elements of the visual environment.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes the following policies and actions that are intended to reduce adverse impacts on visual character in Yuba County:

- **Policy NR9.1:** New developments near the Yuba, Bear, and Feather Rivers should be designed and located in a way that retains or enhances scenic views of these important visual resources.
- **Policy NR9.2:** New plans and projects in western Yuba County should be designed to provide view corridors to the Sutter Buttes, where practical.
- **Policy NR9.3:** Development in Rural Communities should be designed to preserve important scenic resources, landmarks, and icons that positively contribute to the rural character.
- **Policy NR9.4:** New buildings in areas of natural and scenic beauty should be placed and designed in a way that preserves scenic vistas available from public rights-of-way, parks, and other public viewing areas.
- **Policy NR9.5:** The County supports the designation of State Route 49 as a State Scenic Highway, and will guide land use change in areas visible from this highway in a way that preserves important aspects of the visual character.
- **Policy NR9.6:** Grading and drainage for new developments in foothill and mountain areas should preserve and take advantage of the natural landforms and vegetation (see Exhibit Natural Resources-8).
- **Policy NR9.7:** New construction should be designed to avoid excessive cut and fill shall by following the natural contour of the subject site.
- **Policy NR10.1:** Building placement, grading, and circulation should be planned to retain as much existing native vegetation as feasible, with a priority on preserving existing oak trees that have a diameter at breast height (dbh) of 6 inches or greater and all other trees that have a dbh of 30 inches or greater. The County's policies and standards for fire safety may override consideration of retaining existing vegetation in certain circumstances.

- **Policy NR10.2:** The County will encourage the preservation of healthy, attractive native vegetation during land development. Where this is not feasible, the County will require landscaping that uses climate-appropriate plant materials.

- **Action NR10.1:** Oak Woodlands and Tree Preservation. Following adoption of the 2030 General Plan, the County will adopt and implement a tree preservation and mitigation ordinance. This ordinance will implement state requirements for oak woodlands mitigation (as required by Public Resources Code Section 21083.4, including certain exemptions). The tree preservation ordinance will address native oak trees measuring 6 inches or more in diameter at breast height (dbh) and all other trees greater than 30 inches dbh. The ordinance will describe the process by which the County determines the significance of impacts related to tree removal. For oak woodlands, mitigation can occur through: conservation easements; planting (up to 50% of mitigation requirement); restoration; contribution to the Oak Woodlands Conservation Fund; or equally effective mitigation formulated by the County during development of this ordinance.

    - Related Goals: Goal NR4, Goal NR5, Goal NR9, Goal NR10, Goal HS7
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General fund and/or fees
    - Time Frame: Adopt ordinance by 2015

- **Policy NR11.1:** New developments are encouraged to include architectural styles that complement local historic styles including, but not limited to gold rush, agrarian, craftsman, bungalow, American cottage, mountain or rustic styles, and other appropriate styles (Exhibit Natural Resources-9).

- **Policy NR11.2:** In new development areas, service, utility, loading areas, roof-mounted equipment, and noise-generating equipment shall be screened, designed, and located to reduce visibility, odor, and noise as experienced at surrounding properties and pedestrian areas.

- **Policy NR11.3:** New utilities constructed within the Valley Growth Boundary shall be placed underground, where feasible. New utilities in rural areas outside the Valley Growth Boundary shall avoid ridge lines and blocking expansive views from public viewing locations, where feasible.

- **Policy NR11.5:** The County will review and condition nonresidential, multi-family, large single-family projects, and projects located in historically significant areas for compliance with General Plan policy and design guidelines, once guidelines are developed. Large single-family projects are those that propose more than 10 units.

Conclusion

Policies of the 2030 General Plan are intended to maintain or improve the visual character of Yuba County and promote compact development around existing developed areas, thereby preserving visual character of open space and natural visual landscapes in the unincorporated county. However, the purpose of the 2030 General Plan is to accommodate long-term development needs. It is inevitable that structures developed under the General Plan to accommodate long-term population and employment growth will result in changes to the visual character of the County. There are no feasible policies or actions that could maintain existing visual resources (e.g., agricultural lands, open spaces) while also accommodating long-term population and employment growth. This impact is considered **potentially significant**.

Mitigation Measure

The proposed project's purpose is to provide a framework governing long-term development within the unincorporated county. No additional feasible mitigation beyond 2030 General Plan policies and actions is available to reduce this impact to a less-than-significant level while also addressing the basic purpose of the General Plan.

Views of important visual resources from publicly accessible areas would change as a result of full buildout of the 2030 General Plan. The 2030 General Plan includes policies intended to maintain and improve visual character in the unincorporated county, and reduce the impact to change in visual character, where feasible. But, there is no mechanism to allow implementation of development projects while also avoiding the conversion of agricultural land uses, other types of open spaces to urban development. This impact would remain **significant and unavoidable**.

IMPACT 4.1-4 Increase in Nighttime Lighting and Daytime Glare. *Development projects would require nighttime lighting and could include construction of buildings with reflective surfaces that inadvertently cast light and glare toward motorists on the County's highways and roadways. Development under the 2030 General Plan would increase the amount of daytime and nighttime light and glare and would introduce a new source of nighttime lighting in an existing rural area. This impact would be potentially significant.*

Developed areas of Yuba County (e.g., the cities of Marysville and Wheatland, and the unincorporated communities) generate sources of light, glare, and light trespass into the night sky. Most development under the 2030 General Plan is adjacent to existing developed communities, where the addition of new light sources would not create drastically noticeable differences in nighttime views. However, there are undeveloped areas that could be the subject of development projects under the General Plan. The impact could depend on the type of development – large parking lots with lots of lighting or large structures can change the visual character and add substantial daytime and nighttime lighting and glare, for example.

Development of greenfield areas, such as the Highway 65 corridor, the area south of Erle Road and east of Highway 70, and certain portions of Rural Communities would add substantial sources of light and glare compared to current conditions. New sources of nighttime light and glare (e.g., lighting of roadways, parks, schools, and other facilities) would be located in an area currently void of significant sources of nighttime lighting.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes the following policies that are intended to reduce impacts from lighting and glare in Yuba County:

- **Policy NR11.4:** To the maximum extent feasible, new developments shall avoid adverse light and glare effects on adjacent roads, neighboring properties, and pedestrian areas through careful location of on-site lighting, use of non-reflective paint and building materials, screening or shielding light at the source, use of vegetation screening, use of directional lighting, use of lower intensity lighting, use of timing devices or sound/motion-controlled lighting, or other equally effective means.

A substantial increase in the amount of nighttime light and glare could result from development of urban land uses throughout Yuba County, potentially obscuring views of stars and other features of the nighttime sky. Lighting and reflective surfaces on buildings (e.g., reflective window glazing) in planned development areas could result in light and glare shining onto motorists traveling along highways and roadways.

Policies of the 2030 General Plan focus on reducing impacts from lighting and providing proper buffers to ensure light intrusion does not cause adverse lighting and glare issues.

Development anticipated under the 2030 General Plan would require substantial new lighting and could result in construction of buildings with reflective surfaces that could cast glare toward motorists on local roadways. The 2030 General Plan anticipates development of currently undeveloped areas, such as croplands and grazing lands that are currently void of substantial lighting sources. Development of urban land uses identified in the 2030 General Plan would introduce substantial new light sources adjacent to existing urban communities and new lighting sources in rural portions of Yuba County. This could potentially cause light trespass into the night sky

and would create new sources of skyglow. Development under the General Plan could obscure views of stars and other features of the nighttime sky, as viewed from some portions of the unincorporated County. This impact is considered **potentially significant**.

Mitigation Measure

The proposed project's purpose is to provide a framework governing long-term development within the unincorporated county. No additional feasible mitigation beyond General Plan policies and actions is available to reduce this impact to a less-than-significant level while also addressing the basic purpose of the General Plan.

With implementation of policies in the 2030 General Plan, potential light and glare impacts of future development projects would be reduced to the maximum extent practicable. Although implementation of policies in the 2030 General Plan would reduce impacts related to light and glare, new urban development under the plan would permanently add daytime glare and nighttime lighting into areas that are currently relatively void of daytime glare and nighttime lighting. No mitigation measures beyond the policies and programs of the General Plan are feasible that would fully preserve existing nighttime views while at the same time allowing urban development. Therefore, this impact would be **significant and unavoidable**.

4.2 AGRICULTURE AND FORESTRY RESOURCES

This section includes an explanation of the criteria and methods used to evaluate the significance and quality of agricultural land in Yuba County, a description of the existing agricultural resources, and an evaluation of how implementation of the 2030 General Plan would affect agriculture and forestry resources.

4.2.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal Farmland Protection Act

The Natural Resources Conservation Service (NRCS), an agency of the U.S. Department of Agriculture (USDA), is the agency primarily responsible for implementing the federal Farmland Protection Policy Act (FPPA). The purpose of the FPPA is to minimize federal contributions to the conversion of farmland to nonagricultural land uses by ensuring that federal programs are administered in a manner compatible with state government, local government, and private programs designed to protect farmland. The FPPA established the Farmland Protection Program (FPP).

The FPP is a voluntary program that provides funds to help purchase development rights to keep productive farmland in agricultural use. This program provides matching funds to state, local, and tribal government entities and nongovernmental organizations with existing farmland protection programs to purchase conservation easements. Participating landowners agree not to convert the land to nonagricultural land uses and retain all rights to the property for future agriculture production. A minimum 30-year term is required for conservation easements and priority is given to applications with perpetual easements. NRCS provides up to 50% of the fair market value of the easement.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Farmland Mapping and Monitoring Program

The California Department of Conservation, Division of Land Resource Protection, administers the Farmland Mapping and Monitoring Program (FMMP). Land is rated based on its soil characteristics and irrigation status. These ratings are then used to help prioritize farmland conservation efforts. The FMMP uses the term "Important Farmland" to describe parcels that meet certain criteria.

In Yuba County, three Important Farmland types have been identified: Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. According to the FMMP:

- **Prime Farmland** is "farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date."

- **Unique Farmland** is "farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date."

- **Farmland of Statewide Importance** is "farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date."

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, commonly known as the Williamson Act (California Government Code Section 51200 et seq.), enables local governments to enter into contracts with private landowners for the purpose of promoting the continued use of the relevant land in agricultural or related open space use. In return, landowners receive property tax assessments that are based on farming and open space uses instead of full market value. Local governments receive an annual subvention (subsidy) of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

The Williamson Act empowers local governments to establish "agricultural preserves" consisting of lands devoted to agricultural uses and other compatible uses. Upon establishment of such preserves, the locality may offer to agricultural landowners the opportunity to enter into annually renewable contracts that restrict the land to agricultural use for at least 10 years (i.e., the contract continues to run for 10 years following the first date upon which the contract is not renewed). In return, the landowner is guaranteed a relatively stable tax rate, based on the value of the land for agricultural/open space use only and unaffected by its development potential.

California Timberland Productivity Act of 1982

The California Timberland Productivity Act of 1982 (CTPA) describes the powers and duties of local government in protecting timberlands. The law is designed to maintain an optimum amount of timberland ensuring its current and continued availability by establishing Timberland Preserve Zones (TPZ) on all qualifying timberland, which restrict land use to growing and harvesting timber and other compatible uses. The act discourages premature or unnecessary conversion of timberland to urban or other uses and expansion of urban services into timberland, and encourages investment in timberlands based on reasonable expectation of harvest. The CTPA also provides that timber operations conducted in accordance with California forest practice rules (Z'Berg-Nejedly Forest Practices Act of 1973) shall not be or become restricted or prohibited due to land uses in or around the location of those timber operations.

Timberland Production Zones

Under the Z'berg-Warren-Keene-Collier Forest Taxation Reform Act of 1976 (California Government Code - Section 51110-51119.5: Article 2), counties must provide for the zoning of land used for growing and harvesting timber as TPZ. A TPZ is a 10-year restriction on the use of timberland and is similar to the Williamson Act for agricultural lands. Land use under a TPZ is restricted to growing and harvesting timber, and to compatible uses approved by the county (or city). In return, taxation of timberland under a TPZ will be based only on such restrictions in use.

The Z'berg-Nejedly Forest Practice Act of 1973

The FPA established a nine member Board of Forestry whose mandate is the control over forest practices and forest resources in California. The Board of Forestry is the policy arm of the enforcement branch of the California Department of Forestry and Fire Protection (CAL FIRE). CAL FIRE ensures that landowners abide by these laws when harvesting trees.

The FPA assures that productivity of timberlands is restored, enhanced, and maintained, and that the goal of maximum sustained production of high-quality timber products is achieved in consideration of values relating to watershed, fisheries and wildlife, range and forage, recreation and aesthetics, and employment and the regional economy. It requires that a Timber Harvest Plan (THP) be prepared by a Registered Professional Forester (RPF) for timber harvest on virtually all non-federal land. Article 7 of the Forest Practice Rules covers conversion of timberland to non-timberland uses.

The FPA is implemented by the Forest Practice Rules, consistent with other laws, including but not limited to the California Environmental Quality Act (CEQA) of 1970. The provisions of these rules are followed by RPFs in

preparing THPs. The THP process substitutes for the EIR process under CEQA because the timber harvesting regulatory program has been certified pursuant to Public Resources Code Section 21080.5. The THPs are required to adopt feasible mitigation measures or alternatives from the range of measures set out or provided for in FPA rules which would substantially lessen or avoid significant adverse impacts the activity may have on the environment.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Yuba County Consumer Disclosure Ordinance

In response to the need to protect agricultural land and operations, the Yuba County Board of Supervisors has adopted a consumer disclosure ordinance (Chapter 11.55 of the Yuba County Ordinance Code) that declares it to be in the public interest to preserve and protect agricultural land and operations for agricultural use. The ordinance finds that "residential development adjacent to such land and operations often leads to restrictions on such operations to the detriment of these uses and economic viability of the County's…agricultural industries as a whole." The ordinance's purposes are to promote the general health, safety, and welfare; protect those lands zoned, designated or used for agriculture; support and encourage agricultural operations; and previously notify prospective purchasers adjacent to or near agricultural operations of the inherent problems associated with such purchases, including sounds, dust, odor, fertilizers, pesticides, smoke, and vibrations. To accomplish its purposes, the ordinance requires that property sellers disclose to residential users of the land, at the point building permits are issued by the County, the potential inconveniences agricultural operations may present.

Yuba County Zoning Ordinance

The zoning ordinance includes two zoning district designations that specify agriculture as an ongoing allowable use, including Agriculture/Rural Residential Zone and Exclusive Agriculture Zone. The Exclusive Agricultural Zone covers much of the western portion of the County, while the Agriculture/Rural Residential Zone covers much of the eastern portion of the County. The County's zoning ordinance includes a TPZ, which is intended to accommodate planned timber harvest and provide tax benefits to property owners of timberland.

4.2.2 ENVIRONMENTAL SETTING

Agriculture is the most prevalent land use in Yuba County and the most significant single component of the County's economy. Cropland and pasture accounts for approximately 55% of the total County land area. Agriculture not only contributes to the local economy, but also helps define the County's visual and social character, maintains land in open space, supports wildlife habitats and migration corridors, separates urban land uses from surrounding developed areas, and provides access to a local food source.

Croplands are found in the areas of prime agricultural soil and soils with unique suitability to certain crops in the western Valley floor area of the county along the historic floodplain of the Yuba and Feather rivers due to the relatively flat topography, water supply and soil conditions. Grazing lands are found primarily in the central and eastern portions of the county, in the foothills of the Sierra Nevada Mountains, although grazing also occurs on uncultivated portions of the Valley floor. Livestock grazing also occurs in the Plumas and Tahoe National Forests.

In 2008, there were 226,588 acres of agricultural land in Yuba County, making up approximately 55% of the County's entire land area (Department of Conservation 2010). Prime Farmland accounted for approximately 41,369 acres or 10% of total county land, Farmland of Statewide Importance made up approximately 10,975 acres or 3% of total county land, and Unique Farmland made up approximately 32,605 acres or 8% of total county land. The bulk of these agricultural lands are located on the valley floor along historic floodplains. Grazing land occurred on 141,639 acres, or 34% of total county land. Most of the County's grazing lands are located in the foothills.

The FMMP of the California Department of Conservation monitors agricultural farmland loss. Table 4.2.1 below shows the change in acreage of farmland from 1992 to 2008. Overall, a total of 12,000 acres of agricultural land have been converted between 1992 and 2008. Approximately 4,104 acres of Prime Farmland have been lost during this time. During this same time, roughly 2,800 acres were added to the "urban and built-up land" category and 9,600 acres were added to the "other land" category. Other Land" includes low-density rural development, as well as vacant and non-agricultural land surrounded on all sides by urban development.

Table 4.2-1
Change in Farmland Acreage, 1992-2008[1]

Land Use Category[2]	1992	1994	1996	1998	2000	2002	2004 [2]	2006	2008	1992–2008 Net Acreage Changed
Prime Farmland	45,473	45,919	46,491	45,785	44,484	43,618	42,676	41,993	41,369	(4,104)
Farmland of Statewide Importance	10,918	10,973	11,011	11,032	10,991	11,293	11,094	11,020	10,975	57
Unique Farmland	37,271	37,527	37,845	36,928	34,698	34,267	33,109	32,371	32,605	(4,666)
Important Farmland Subtotal	**93,662**	**94,419**	**95,347**	**93,745**	**90,173**	**89,178**	**86,879**	**85,384**	**84,949**	**(8,713)**
Grazing Land	144,922	144,198	142,225	143,224	144,519	144,502	143,533	142,727	141,639	(3,283)
Agricultural Land Subtotal	**238,584**	**238,617**	**237,572**	**236,969**	**234,692**	**233,680**	**230,412**	**228,111**	**226,588**	**(11,996)**
Urban and Built-Up Land	10,833	10,952	11,110	11,180	11,544	11,837	12,082	13,083	13,669	2,836
Other Land	155,434	155,659	156,953	157,476	159,292	160,011	163,034	163,993	165,127	9,693

[1] Figures are generated from the most current version of the geographic information system data. Files dating from 1984 through 1992 were reprocessed with a standardized county line in the Albers equal-area projection, and other boundary improvements.

[2] Because of the incorporation of digital soil survey data (SSURGO) in 2002, acreages for farmland, grazing and other land categories may differ from those published in the 2000-2002 farmland conversion report.

[3] "Other Land" includes low-density rural development; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is also mapped as Other Land.

Source: California Department of Conservation 2010.

Overall, the total gross valuation for all agricultural commodities produced in Yuba County in 2009 was approximately $198 million, with fruit and nut crops making up about 46% of the total value of agricultural commodities. Total agricultural commodities increased in value by approximately 9% compared to 2008 values. Increases in the value of prunes, dried plums, peaches, and walnuts explain this increase (Yuba County 2010).

There are large forested areas of Yuba County that provide habitat, surface water supply, visual resources, and timber resources. Most forests are in the foothills and mountain areas of eastern and northeastern Yuba County, which include portions of Tahoe National Forest and Plumas National Forest. In 2005 there was a total of 95,000 acres of forested land in Yuba County; 55,000 acres were in private ownership and 40,000 acres was public owned (TSS Consultants 2010). Timber production and harvesting is a major component of the local economy, and the County has an interest in maintaining timber harvesting as a viable industry, along with the other open space co-benefits of the County's forest lands.

4.2.3 Environmental Impacts and Mitigation Measures

Methodology

The environmental analysis in this section is based, in part, on a review of FMMP Important Farmland maps. As part of the analysis, this EIR examines the Important Farmland classifications that are used by FMMP to determine the agricultural significance of the lands (i.e., Prime Farmland, Unique Farmland, and Farmland of Statewide Importance) in the unincorporated county.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on agricultural resources is considered significant if the proposed project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as determined by the FMMP Important Farmland criteria, to non-agricultural use; or
- conflict with existing zoning for agricultural use, or conflict with a Williamson Act contract; or
- conflict with existing zoning or cause rezoning of forest land or timberland; or
- result in the loss of forest land or conversion of forest land to non-forest use; or
- involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to a non-agricultural use or conversion of forest land to non-forest use.

Yuba County does not participate in the Williamson Act program, so there are no parcels within the County under Williamson Act contract. Thus implementation of the 2030 General Plan would not convert any land under Williamson Act contract to urban use, and this issue is not addressed further.

Impact Analysis

IMPACT 4.2-1 **Loss of Important Farmland and Conversion of Agricultural Land to Non-Agricultural Uses.** *Buildout of the 2030 General Plan could result in the conversion of as many as 5,682 acres of Important Farmland and 44,901 acres of grazing land to nonagricultural uses. This impact is considered* ***potentially significant****.*

In 2008, there were 84,949 acres of Important Farmland in Yuba County and 141,639 acres of grazing land, for a total of 226,588 acres of agricultural land. Under the 2030 General Plan, more than 50,000 acres of agricultural land could be converted to non-agricultural use, assuming maximum buildout of the General Plan. Of this acreage, roughly 3,900 acres is Prime Farmland, 170 acres is Farmland of Statewide Importance, 1,600 acres is Unique Farmland, and 45,000 acres is grazing land. Most of the grazing land that is potentially subject to development under the 2030 General Plan is in the foothills.

The 2030 General Plan includes policies and actions to balance the need for development with the need to protect the County's ongoing agricultural heritage and economic base. The 2030 General Plan Land Use Diagram calls for development to be focused within the Valley Growth Boundary, with limited development outside of the boundary. This Valley Growth Boundary effectively establishes long-term agricultural areas within valley portions of the unincorporated County to be conserved for ongoing agricultural activities (see Policy CD1.1, Policy CD1.2, and Policy CD1.3). The Land Use Diagram also maps Rural Community boundaries for the unincorporated communities, which are mostly located in the foothill and mountain portions of the County. The Rural Community boundaries will serve a similar function in directing any development to areas within Rural Community Boundary

Areas the boundary and preserving open space areas, including areas serving an agricultural purpose, in areas outside the boundaries.

The County describes its general intent for land use change in the Community Development Element. The County has also developed an Open Space Diagram (please refer to Exhibit Natural Resources-1) to illustrate the County's intent for important open spaces, including:

- Cropland,
- Forest,
- Grazing Land,
- Critical Habitat,
- Water and Groundwater Recharge Areas,
- Mineral Resources,
- Private Recreation, and
- Public Open Space.

The open space designations depicted on the Open Space Diagram is intended to accommodate multiple values (recreational, aesthetic, habitat, etc). The Open Space Diagram identifies large areas of the County for Cropland and Grazing lands. The Natural Resources Element provides the County's intent for land use in this area:

- **Cropland**. To provide for growing, processing, transporting, and selling cultivated crops, dairy operations, and other types of agricultural and agriculture-related uses. In these areas, the County's standards will be applied in a way that is protective of agricultural operations. Other beneficial uses provided on Croplands, such as habitat preservation, habitat mitigation, agricultural and ecological tourism, levees and other public facilities, recreation, and other public purposes are also consistent with the General Plan.

- **Grazing Lands**. To provide for grazing, viticulture, livestock management, and a variety of other agriculture-related uses. Other beneficial uses, such as habitat preservation, habitat mitigation, ecological tourism, recreation, public facilities, and other public purposes would also be consistent with the General Plan.

New development, particularly residential development, can make farming more difficult or costly due to conflicts between non-agricultural and agricultural activities. For example, residents may complain about noise, dust, odors and low-flying aircraft used to dust or spray crops. Increased restrictions on agriculture processes and other aspects of encroachment on agricultural areas can lower productivity, increase costs, and otherwise impair agricultural operations.

Non-agricultural development could create soil erosion, but this impact is reduced through application of General Plan policies and actions, as well as Regional Water Quality Board regulations to reduce erosion and runoff. Development in the Valley Growth Boundary and Rural Community Boundary Areas would add vehicular traffic in areas where agricultural equipment uses roads. This could make it somewhat more difficult to move agricultural equipment. Urban development could generate air pollution that could be harmful to crops, in certain instances. Urban activities can result in vandalism and the introduction of domestic animals that may disturb certain agricultural activities. Non-agricultural development can drive up the potential value of properties, creating pressure to convert agricultural land to urban use. One or a combination of these conflicts could limit agricultural activities or encourage farmers to take their land out of agricultural production, resulting in adverse impacts to agricultural resources in unincorporated parts of the County.

The 2030 General Plan includes policies that are intended to reduce conflicts between agricultural operations and adjacent uses, including policies requiring buffering of agricultural uses and supporting right-to-farm policies. In addition to geographic limitations on the location of new development provided by the Valley Growth Boundary and Rural Community boundaries, the General Plan includes policies intended to reduce indirect pressure on existing agricultural lands to prematurely convert to urban use. The General Plan also includes a policy supporting a Consumer Disclosure Ordinance, currently contained in Chapter 11.55 of the Yuba County Ordinance Code,

which requires that property sellers disclose to purchasers and residents of nearby agricultural operations and the potential inconveniences that those agricultural operations may present to residences. This protects the rights of agricultural property owners and farmers to continue agricultural operations on their land, even if it is adjacent to other land uses.

However, the 2030 General Plan would result in the outward expansion of non-agricultural development from the existing developed areas, which could potentially conflict with ongoing agricultural uses. This conflict could directly or indirectly cause or hasten conversion of these agricultural lands to a non-agricultural use.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan incorporates the following policies and implementation program aimed at protecting agricultural land, including Important Farmland, from premature conversion in Yuba County.

- **Policy NR1.15:** The County will support the establishment and expansion of ecological and agricultural tourism and recreation activities, consistent with the General Plan.
- **Policy NR3.1:** The County's zoning and development standards will be designed to support and avoid conflict with ongoing viable agricultural operations, as well as agriculture-related economic activities.
- **Policy NR3.2:** New developments adjacent to ongoing agricultural operations shall provide written notice to landowners and residents regarding potential noise, dust, odors, and other effects of adjacent agriculture.
- **Policy NR3.3:** The County will not consider agricultural operations to be a nuisance in cases where new development occurs in areas near ongoing agricultural operations.
- **Policy NR3.4:** New developments adjacent to ongoing agriculture shall incorporate design, construction, and maintenance techniques to minimize conflicts with adjacent agricultural uses, including, but not limited to the use of agricultural buffers.
- **Policy NR3.5:** Agricultural buffers are only required at the edges of Rural Community Boundary Areas and the Valley Growth Boundary where there are adjacent ongoing agricultural operations. Buffers are not required in areas adjacent to planned urban development shown on the General Plan Land Use Diagram.
- **Policy NR3.6:** Agricultural buffers are not required for portions of developments adjacent to existing rural residential development or other types of development on parcels of primarily 5 acres or less.
- **Policy NR3.7:** Agricultural buffers should be designed to accommodate drainage, trails, roads, other facilities or infrastructure, community gardens, native landscaping, and other uses that would be compatible with ongoing agricultural operations and provide valuable services or amenities.
- **Policy NR3.8:** The County will support small-scale farming on Valley Neighborhood properties, where such operations are compatible with surrounding uses.
- **Policy NR3.9:** The County will support agricultural tourism, small-scale agriculture and agricultural processing, such as olive oil production and wineries, in Rural Community Boundary Areas, where compatible with surrounding uses.
- **Policy NR3.10:** Cropland and grazing land may be used for habitat conservation and mitigation purposes, consistent with the Yuba-Sutter County Natural Community Conservation Plan/Habitat Conservation Plan, once adopted.

- **Policy NR3.11:** Residential dwellings developed in cropland areas shall be secondary to, and supportive of ongoing agricultural operations.

- **Policy NR3.12:** The County will support the incorporation of renewable energy generation and distribution projects into agricultural operations.

- **Policy NR3.13:** The County's Economic Development Strategy and Work Plan should include as a focus the expansion of existing agriculture and agriculture-related industries and development of new value-added activities, agricultural processing, distribution, marketing and sales, and other agriculture-related economic activities.

- **Policy NR3.14:** The County's entitlement process for agricultural operations and improvements will be designed and managed in a way that is efficient and predictable.

- **Policy NR3.15:** The County will support efforts to agree on a regional approach in the Yuba-Sutter area among counties and cities to protect local agricultural resources and the local agricultural economic base.

- **Action NR3.1:** Agricultural Zoning. As a part of the comprehensive Zoning Ordinance update that will follow adoption of the General Plan, the County will establish minimum parcel sizes on Cropland and Grazing Land designed to promote their long-term viability for agricultural use. In general, higher per-acre value agricultural operations could accommodate relatively smaller long-term viable parcel sizes, depending on the crop type. Lower per-acre value types of agricultural activity, such as grazing, would need larger parcel sizes in order to be viable on a long-term basis. Determining the minimum viable agricultural parcel size depends on several factors that are subject to change over time. A recent study by the UC Davis Department of Agricultural and Resource Economics does not establish minimum viable parcel size, but suggests that for walnuts in Yuba and Sutter counties, the minimum viable parcel size is more than 20 acres.[1] County staff will collaborate with local experts from UC Cooperative Extension, the Yuba-Sutter Farm Bureau, and other organizations, as well as local farmers for guidance on minimum parcel sizes required to support ongoing viable operations within the context of local crop types and grazing operations. The County's Zoning Ordinance will be revised to regulate land use and parcel size on Cropland and Grazing Lands outside the Valley Growth Boundary and Rural Communities, based on this guidance.

    - Related Goals: Goal NR3
    - Agency/Department: Community Development and Services Agency; Agricultural Commissioner
    - Funding Source: General Fund and/or permit fees
    - Time Frame: The County's zoning and development standards will be revised following the General Plan Update. The target date for approving a revised zoning code is 2013.

- **Action NR3.2:** Agricultural/Urban Interface. The County will develop and approve guidelines for the required location and design of agricultural buffers (Exhibit Natural Resources-4). Allowed land uses within buffer areas would include drainage swales, trails, roads, other facilities and infrastructure, community gardens, native landscaping, linear parkland, and other uses that are compatible with ongoing agricultural operations. Buffer guidelines will illustrate methods to avoid conflicts between ongoing agricultural uses and encroaching urban development. Buffers will be designed to avoid nuisance complaints related to dust, spraying, noise, and other relevant issues. The County's guidelines will provide guidance on the appropriate width of buffers. The width will depend on such factors as prevailing winds, crop types, agricultural practices,

[1] Karen Klonsky, Department of Agricultural and Resource Economics, UC Davis. Economically Viable Parcel Size. August 28, 2006.

and other relevant factors. The width of roads, trails, drainage ways, other rights-of-way, and easements may count as part of the buffer.

- Related Goals: Goal NR3, Goal HS1
- Agency/Department: Community Development and Services Agency and Agricultural Commissioner
- Funding Source: General Fund and/or fees
- Time Frame: The target date for approving guidelines for agricultural buffers is 2014.

Conclusion

As shown, the 2030 General Plan includes policies that are intended to conserve agricultural land by maintaining zoning appropriate for agriculture, continuing the disclosure of agricultural operations and potential inconveniences to nearby residences, directing growth away from important agricultural lands, and use of agricultural buffers, as appropriate.

These policies and actions for agricultural zoning and buffers, along with the County's approach to directing growth within the Valley Growth Boundary and Rural Community Boundary Areas, would reduce potential impacts to agricultural lands. In addition, policies and actions to reduce indirect impacts, such as disclosure and nuisance policies would reduce impacts related to the indirect conversion of agricultural land, including Important Farmland. However, the purpose of the 2030 General Plan is to develop a framework for future long-term development, and it is inevitable that some conversion of agricultural land to non-agricultural use would occur in accommodating long-term growth needs. The impact is considered **potentially significant**.

Mitigation Measure

The policies and actions in the 2030 General Plan would not prevent the conversion of Important Farmland or areas currently zoned for agricultural use. Because no new farmland would be made available, compensation for losses of farmland would not be achieved and a net loss of Important Farmland would occur. No additional feasible mitigation is available to reduce this impact to a less-than-significant level.

The 2030 General Plan includes policies that are intended to conserve agricultural land and reduce conflicts between agricultural operations and adjacent uses. However, the 2030 General Plan identifies areas for development that are currently used for agriculture and areas currently zoned for agricultural use. Implementation of the General Plan would result in the loss of agricultural land uses, including Important Farmland and lands zoned for agricultural use, to urban development. Any actions taken by the County, including policies contained within the proposed 2030 General Plan, would only extend the timeframe for conversion of Important Farmland associated with development, loss of Important Farmland would still occur. This impact would remain **significant and unavoidable**.

IMPACT 4.2-2 **Loss of Forest Land or Conversion of Forest Land to Non-Forest Use.** *Implementation of the 2030 General Plan would not result in large-scale conversion of forest lands to non-forest uses, but some timberland areas in Rural Community Boundary Areas could be affected by implementation of the 2030 General Plan. This impact is considered potentially significant.*

Large areas of the County have forests that provide habitat, watersheds, visual resources, and timber resources. Most forests in Yuba County are in the foothills and mountain areas of eastern and northeastern Yuba County, including portions of Tahoe National Forest and Plumas National Forest. Timber production and harvesting is a major sector of the County's agricultural economy, and the County has an interest in maintaining timber harvesting as a viable industry, in addition to other natural resources provided by the County's forest lands. The desire to preserve these important open spaces is reflected in 2030 General Plan policy.

The County describes its general intent for land use change in the Community Development Element. The County has also developed an Open Space Diagram (please refer to Exhibit Natural Resources-1 in the 2030 General Plan) to illustrate the County's intent for important open spaces that include forest land, including:

- Cropland,
- Forest,
- Grazing Land,
- Critical Habitat,
- Water and Groundwater Recharge Areas,
- Private Recreation, and
- Public Open Space.

The General Plan's intent for these open spaces is described in the Natural Resources Element and the County's intent for open space land related to forests is provided below:

- **Forest**. To provide for growing and harvesting of timber and forest products, recreation, water supply protection, carbon sequestration , and other forest-related uses. Other beneficial uses, such as habitat mitigation, ecological tourism, recreation, watershed management, fish and wildlife habitat management, exploration and extraction of mineral resources, public facilities, and other public purposes are also consistent with the General Plan.

- **Public Open Space**. To remain under public ownership and provide hazard protection, habitat, water supply protection, recreation, and other important public open space functions. Many of these areas were acquired to provide for habitat preservation. Other areas provide habitat value, but are owned and managed for other purposes, such as timber harvest, recreational opportunities, or other resource-oriented use. The County anticipates that Public Open Space areas would continue to provide habitat, aesthetic, recreational, resource extraction, and other values through buildout of this General Plan.

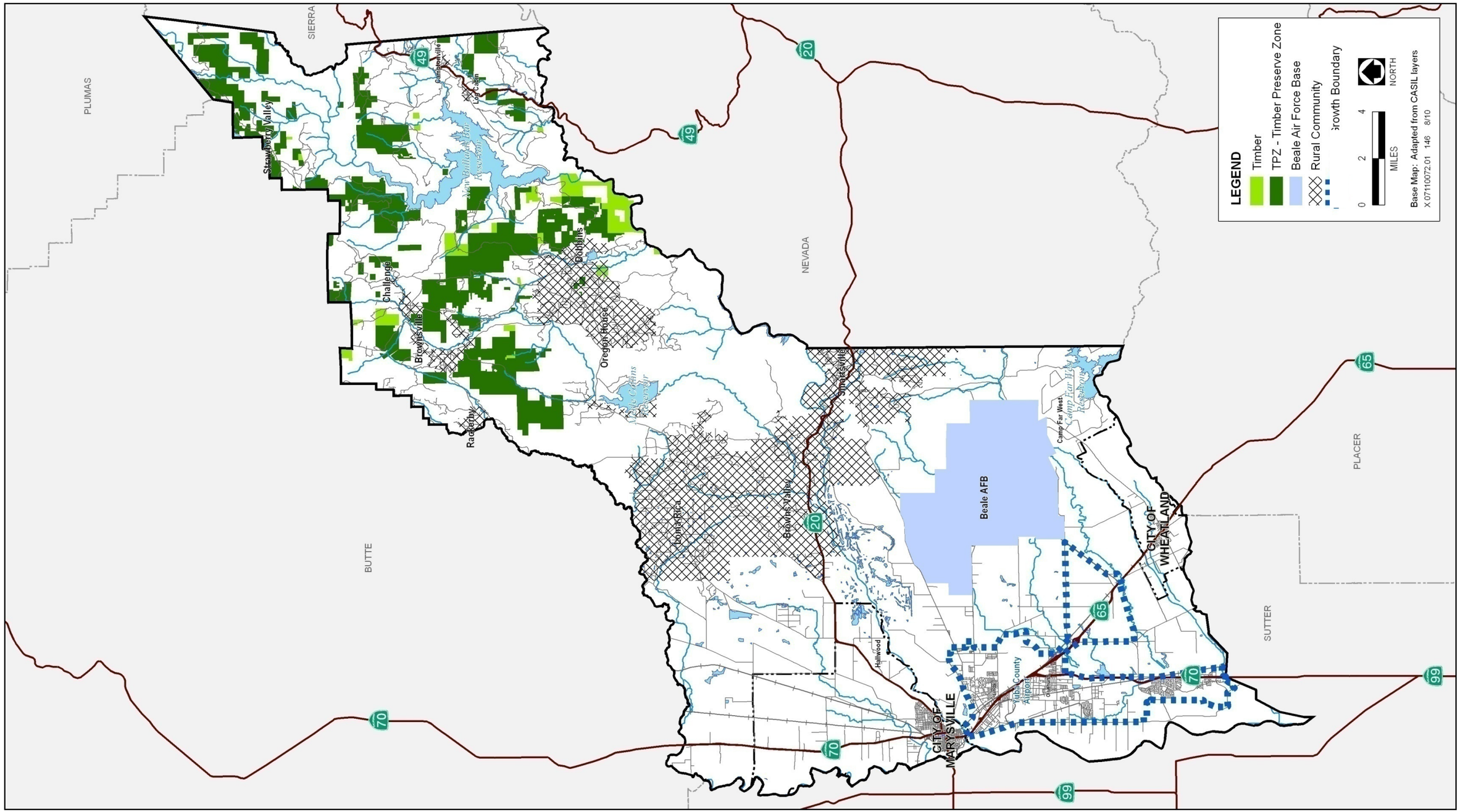
- **Water and Groundwater Recharge Areas**. To protect water quality and habitat associated with rivers, lakes, reservoirs, and streams. Recreational uses and public access are appropriate along the County's waterways, so long as the design and use does not substantially and adversely affect groundwater recharge, scenic views, cultural resources, or natural habitat.

The County's application of the Land Use and Open Space Diagrams would reduce the potential for land use change in forested areas of the County.

Most of the forest resources in Yuba County are located in mountainous areas of northeastern Yuba County near the rural communities of Oregon House, Dobbins, Brownsville, Challenge, Log Cabin, Camptonville, and Strawberry Valley.

The vast majority of the County's forest resources are located on protected federal lands outside of the Rural Community boundaries. Most of the growth anticipated under implementation of the 2030 General Plan would occur within the Valley Growth Boundary. Some development could occur in rural areas, as well. Similar to the approach in the valley, where development in the unincorporated County is directed to the Valley Growth Boundary, development within rural portions of the County would be directed to the Rural Community areas.

According to County Assessor classifications of existing land use, approximately 245 acres of land within Rural Community areas is characterized as either "timber" or "timber preserve zone" (see Exhibit 4.2-1). Although the General Plan does not require, and the County does not anticipate that Rural Community areas would be fully developed, the County has conservatively assumed for the purposes of this EIR that timberland within Rural Community areas could potentially be converted from forestry.



Source: Yuba County Assessor's Office 2007

Timber and Timber Preserve Zone within Rural Community Boundary Areas

Exhibit 4.2-1

New development, particularly residential development, could make timber harvest more difficult or costly due to complaints about noise or other components of forestry operations. However, the 2030 General Plan includes policies that are intended to reduce conflicts between forestry and adjacent uses.

Relevant Policies and Actions of the 2030 General Plan

The following policies from the 2030 General Plan are intended to protect Yuba County's forest resources from conversion to non-forest uses:

- **Policy NR4.1:** The County's zoning and development standards for Forest areas will be designed and implemented to support and avoid conflict with ongoing timber harvest operations and forestry-related economic activities.

- **Policy NR4.2:** Uses in Timberland Preserve Zones (TPZs) shall be compatible with ongoing forestry and timber harvest operations.

- **Policy NR4.3:** The County will generally defer to the State for timber harvest plan review, but will assist with efforts to address land use conflicts in the context of timber harvest plan review, where possible.

- **Policy NR4.4:** Any new residences constructed in or near timber harvest areas shall mitigate impacts on adjacent timber harvesting operations.

- **Policy NR4.5:** The County will discourage location of public improvements and utilities in Timberland Preserve Zones, where the public improvements or the land acquisition required for the improvements would have a substantial adverse affect on timber production.

- **Policy NR4.6:** The County will encourage conservation easement programs that combine sustainable forest management with timber production.

- **Policy NR4.7:** The County will support forest management and product certification, as well as new forestry related economic practices and product development, including renewable energy development and sawmills.

- **Policy NR4.8:** The County will support carbon offset programs within Yuba County's forests, according to established protocols, and will support local carbon sequestration programs as an important aspect of local and regional greenhouse gas reduction requirements.

- **Action NR4.1:** Carbon Sequestration Programs. The County will proactively coordinate with local and regional agencies to investigate the feasibility of setting up a carbon offset program. The County will coordinate with the U.S. Forest Service, Bureau of Land Management, Yuba County Water Agencies, and private timber companies and nonprofits to encourage local development of state-certified carbon sequestration projects. The County should encourage local application of regional greenhouse gas (GHG) offset fees, if feasible. If the County implements a GHG mitigation program tied to its GHG objectives, local GHG fees collected for projects that do not achieve GHG efficiency objectives on a per-capita, per-employee, or per-service population basis should be able to mitigate impacts using local, verified, GHG offset programs, if feasible.

    - Related Goals: Goal HS5, Goal NR4
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Mitigation fees, grant funding, other available funding sources
    - Time Frame: Implement program, if feasible, by 2020

Conclusion

Much of the County's forest lands are located on protected federal lands, which would preclude major development from affecting those lands. Most of the development anticipated under implementation of the 2030 General Plan would occur within the Valley Growth Boundary rather than in the foothills and mountains, where the County's forest resources are located. Policies and actions in the 2030 General Plan would reduce adverse impacts to forest lands. Rural development under the 2030 General Plan would be focused within a series of Rural Community areas, which include a minor amount of timberland. As noted, there is the potential for the conversion of approximately 245 acres of timberland. This is considered a **potentially significant** impact.

Mitigation Measure

Other than the policies and actions included in the General Plan, there is no additional feasible mitigation available to address this potentially significant impact.

Project objectives include planning proactively for long-term development and conservation within the County's rural communities, in order to make them more environmentally and economically sustainable places. Another objective of this project is to maintain the existing Rural Community areas, which are reflected in the existing (1996) General Plan. The forest land areas that could potentially be affected by implementation of the General Plan are within the existing (1996) Rural Community areas. This impact is **significant and unavoidable**.

4.3 AIR QUALITY

This section includes a summary of applicable regulations, a description of existing air quality conditions affecting Yuba County, and an analysis of potential air quality impacts of implementation of the 2030 General Plan.

4.3.1 REGULATORY SETTING

Air quality in Yuba County is regulated by the U.S. Environmental Protection Agency (EPA), California Air Resources Board (ARB), and the Feather River Air Quality Management District (FRAQMD). Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although EPA regulations may not be superseded, both state and local regulations may be more stringent.

Air quality regulations focus on the following air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM)[1], and lead. Because these are the most prevalent air pollutants known to be deleterious to human health, and extensive documents on health-effects criteria are available, these pollutants are commonly referred to as "criteria air pollutants."

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

At the federal level, EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments to the CAA were made by Congress in 1990.

The CAA required EPA to establish national ambient air quality standards (NAAQS). As shown in Table 4.3-2, EPA has established primary and secondary NAAQS for ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The primary standards protect the public health, while the secondary standards protect the public welfare.

The CAA also required each state to prepare an air quality control plan, referred to as a state implementation plan (SIP). The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and to determine whether implementing the SIPs will achieve air quality goals. If EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary sources of air pollution in the air basin.

Federal Programs for Hazardous Air Pollutants

Air quality regulations also focus on hazardous air pollutants (HAPs), or in state parlance, toxic air contaminants (TACs). For those HAPs/TACs that may cause cancer, there is no safe level of exposure. This contrasts with the criteria air pollutants, for which acceptable levels of exposure can be determined and for which the ambient standards have been established (Table 4.3-1). EPA and ARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology for toxics (MACT and BACT) to limit emissions. These statutes and regulations, in conjunction with additional rules set forth by the districts, establish the regulatory framework for TACs.

[1] Particulate matter with an aerodynamic diameter of 10 microns or less is referred to as PM_{10}. $PM_{2.5}$ includes a subgroup of finer particles that have an aerodynamic diameter of 2.5 microns or less.

EPA has programs for identifying and regulating HAPs. Title III of the CAAA directed EPA to promulgate national emissions standards for HAPs (NESHAP). The NESHAP may differ for major sources than for area sources of HAPs. Major sources are defined as stationary sources with potential to emit more than 10 tons per year (TPY) of any HAP or more than 25 TPY of any combination of HAPs; all other sources are considered area sources. The emissions standards are to be promulgated in two phases. In the first phase (1992–2000), EPA developed technology-based emission standards designed to produce the maximum emission reduction achievable. These standards are generally referred to as requiring MACT. For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), EPA is required to promulgate health risk–based emissions standards were deemed necessary to address risks remaining after implementation of the technology-based NESHAP standards.

The CAAA also required EPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions of, at a minimum, benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, CAAA Section 219 required the use of reformulated gasoline in selected areas with the most severe ozone nonattainment conditions to further reduce mobile-source emissions.

The U.S. Occupational Safety and Health Administration (OSHA) has worker safety regulations related to human exposure to asbestos in Title 29 of the California Federal Regulations, Section 1910 (29 CFR 1910) and 29 CFR 1926. The OSHA asbestos standards dictate asbestos sampling and analysis and mandated work practices.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

ARB is responsible for coordination and oversight of state and local air pollution control programs in California and for implementation of the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required ARB to establish California ambient air quality standards (CAAQS) (Table 4.3-1). ARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. In most cases, the CAAQS are more stringent than the NAAQS.

Differences in the standards are generally explained through interpretation of the health effects studies considered during the standard-setting process. In addition, the CAAQS incorporate a margin of safety to protect sensitive individuals.

The CCAA requires all local air districts in the state to craft air quality plans to achieve and maintain the CAAQS by the earliest practical date. The act specifies that local air districts shall focus particular attention on reducing the emissions from transportation and areawide emission sources, and provides districts with the authority to regulate indirect sources.

Among ARB's other responsibilities are:

- overseeing compliance by local air districts with California and federal laws;
- approving local air quality plans, submitting SIPs to EPA;
- monitoring air quality;
- determining and updating area designations and maps; and
- setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

Table 4.3-1
Ambient Air Quality Standards and Designations

Pollutant	Averaging Time	California		National Standards[a]		
		Standards[b, c]	Attainment Status[d]	Primary[c,e]	Secondary[c,f]	Attainment Status[g]
Ozone	1-hour	0.09 ppm (180 µg/m^3)	NT[j]	–[h]	Same as Primary Standard	–[h]
	8-hour	0.070 ppm (137 µg/m^3)	NT[j]	0.75 ppm (147 µg/m^3)		U/A
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	U	35 ppm (40 mg/m^3)	–	U/A
	8-hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (56 µg/m^3)	–	0.053 ppm (100 µg/m^3)	Same as Primary Standard	U/A
	1-hour	0.18 ppm (338 µg/m^3)	A	–		–
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	–	0.030 ppm (80 µg/m^3)	–	U/A
	24-hour	0.04 ppm (105 µg/m^3)	A	0.14 ppm (365 µg/m^3)	–	
	3-hour	–	–	–	0.5 ppm (1300 µg/m^3)	
	1-hour	0.25 ppm (655 µg/m^3)	A	–	–	–
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	N	–[h]	Same as Primary Standard	U
	24-hour	50 µg/m^3		150 µg/m^3		
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean[k]	12 µg/m^3	A	15 µg/m^3	Same as Primary Standard	N[k]
	24-hour	–	–	35 µg/m^3		
Lead[i]	30-day Average	1.5 µg/m^3	A	–	–	–
	Calendar Quarter	–	–	1.5 µg/m^3	Same as Primary Standard	–
Sulfates	24-hour	25 µg/m^3	A	**No National Standards**		
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m^3)	U			
Vinyl Chloride[i]	24-hour	0.01 ppm (26 µg/m^3)	–			

Table 4.3-1
Ambient Air Quality Standards and Designations

Pollutant	Averaging Time	California		National Standards[a]		
		Standards[b, c]	Attainment Status[d]	Primary[c,e]	Secondary[c,f]	Attainment Status[g]
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient of 0.23 per kilometer — visibility of 10 miles or more (0.07—30 miles or more for Lake Tahoe) because of particles when the relative humidity is less than 70%.	U	**No National Standards**		

Notes: $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million

a National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when 99% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. The $PM_{2.5}$ 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the U.S. Environmental Protection Agency for further clarification and current federal policies.

b California standards for ozone, CO (except Lake Tahoe), SO_2 (1- and 24-hour), NO_2, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

c Concentration expressed first in units in which it was promulgated (i.e., parts per million [ppm] or micrograms per cubic meter [$\mu g/m^3$]). Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d Unclassified (U): A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
Attainment (A): A pollutant is designated attainment if the state standard for that pollutant was not violated at any site in the area during a 3-year period.
Nonattainment (N): A pollutant is designated nonattainment if there was a least one violation of a state standard for that pollutant in the area.
Nonattainment/Transitional (NT): A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the standard for that pollutant.

e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

g Nonattainment (N): Any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.
Attainment (A): Any area that meets the national primary or secondary ambient air quality standard for the pollutant.
Unclassifiable (U): Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

h The 1-hour ozone national ambient air quality standard (NAAQS) was revoked in 2005, and the annual PM_{10} NAAQS was revoked in 2006.

i The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for this pollutant.

j. The District has been redesignated from Nonattainment to Nonattainment-Transitional for the State designation for ozone occurs by operation of law. The change was confirmed by the CARB Board of Directors on March 25, 2010. HSC Section 40925.5.

k. The District has been redesignated to attainment for the annual $PM_{2.5}$ State AAQS. The change was adopted on the March 25, 2010, by the CARB Board of Directors.

Sources: ARB 2009d

State and Local Programs for Toxic Air Contaminants

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807 [Chapter 1047, Statutes of 1983]) and the Air Toxics Hot Spots Information and Assessment Act (AB 2588 [Chapter 1252, Statutes of 1987]). AB 1807 sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the ARB list of TACs.

Once a TAC is identified, ARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The Air Toxics Hot Spots Information and Assessment Act requires existing facilities emitting toxic substances above a specified level to prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

ARB has adopted diesel-exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). In February 2005, ARB adopted new public-transit bus fleet rule and emissions standards for new urban buses. These rules and standards provide:

1. more stringent emission standards for some new urban bus engines beginning with 2002 model year engines,

2. zero-emission bus demonstration and purchase requirements applicable to transit agencies, and

3. reporting requirements under which transit agencies must demonstrate compliance with the public-transit bus fleet rule.

Milestones include the low-sulfur diesel fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide. Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially lower levels of TACs than current vehicles. Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) have been reduced significantly over the last decade, and they will be reduced further in California through a progression of regulatory measures (e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies.

In support of concerns raised about the possible health hazards that may occur during activities that disturb asbestos-containing rocks and soils, CGS issued Special Publication 124 Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California (CGS 2002). These guidelines provide a starting point for geologists involved in conducting or reviewing naturally occurring asbestos investigations.

ARB has regulations related to asbestos. In 2000, ARB updated its adopted asbestos Airborne Toxic Control Measure to reduce the threshold for asbestos content in ultramafic rock in surfacing materials to 0.25%, as determined by ARB Method 435 (ARB 2000). ARB thereby regulates human exposure to airborne asbestos.

Estimated Diesel PM Reductions

With implementation of ARB's risk reduction plan, it is expected that diesel PM concentrations will be reduced by 75% in 2010 and 85% in 2020 from the estimated year 2000 level. At the time of the writing of this document, the ARB had not verified whether the 2010 target had been met (Taricco 2010). Adopted regulations are also expected to continue to reduce formaldehyde emissions from cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

To help provide information on land use compatibility and TAC sources, ARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* in 2005 (ARB 2005). Although it is not a law or adopted policy, the handbook offers advisory recommendations for the siting of sensitive receptors near sources of TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way.

A number of comments on the handbook were provided to ARB by air districts, other agencies, real estate representatives, and others. The comments included concern about whether ARB was playing a role in local land use planning, questions regarding the validity of relying on static air quality conditions over the next several decades in light of technological improvements, and support for providing information that can be used in local decision making.

At the local level, air pollution control or air quality management districts (such as the FRAQMD) may adopt and enforce ARB control measures. Under FRAQMD Rule 4-1 ("Permit Requirements"), Rule 10-1 ("New Source Review"), and Rule 10-3 ("Federal Operating Permit"), all sources that possess the potential to emit TACs are required to obtain permits from the district. FRAQMD limits emissions and public exposure to TACs through a number of programs and prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

FRAQMD attains and maintains air quality conditions in Sutter and Yuba Counties through air quality planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues.

The clean-air strategy of FRAQMD involves the preparation of plans and programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. FRAQMD also inspects stationary sources, responds to citizen complaints; monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the CAA, CAAA, and CCAA.

Feather River Air Quality Management District

In 1998, FRAQMD published the *Indirect Source Review Guidelines, A Technical guide to assess the Air Quality Impact of Land Use Projects Under the California Environmental Quality Act* (FRAQMD 1998). In 2010, the FRAQMD updated the 1998 guidelines.

FRAQMD has provided the California Environmental Quality Act (CEQA) planning guidance online (FRAQMD 2010) to assist with identification of significant adverse air quality impacts and suggest measures that will reduce potential project emissions early in the planning process. Because stationary sources like industrial facilities are largely regulated, the guidelines focus on transportation and land use control measures to reduce emissions to achieve and maintain federal and state health-based air quality standards. Many projects, particularly those prosing new stationary sources, are subject to FRAQMD rules and regulations in effect at the time of construction.

Specific rules applicable to the construction and operation of projects developed under the 2030 General Plan may include the following:

- **Rule 3.0—Visible Emissions.** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour which is as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines.

- **Rule 3.2—Particulate Matter Concentration.** A person shall not discharge into the atmosphere from any source particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions.

- **Rule 3.15—Architectural Coatings.** No person shall: (i) manufacture, blend, or repackage for sale within the District [FRAQMD]; (ii) supply, sell, or offer for sale within FRAQMD; or (iii) solicit for application or apply within FRAQMD, any architectural coating with VOC [volatile organic compound] content in excess of the corresponding specified manufacturer's maximum recommendation.

- **Rule 3.16—Fugitive Dust Emissions.** A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line, from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation.

- **Rule 3.17—Wood Heating Devices.** All new and used wood heating devices used for the first time in existing buildings and those used in all new building projects must meet new EPA wood heating device standards.

- **Rule 4.1—Permit Requirements.** Any person operating an article, machine, equipment, or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, shall first obtain a written permit from the Air Pollution Control Officer (APCO). Stationary sources subject to the requirements of Rule 10.3, Federal Operating Permit Program, must also obtain a Title V permit pursuant to the requirements and procedures of that rule.

Air Quality Plans

FRAQMD, which comprises Yuba and Sutter counties, in coordination with the other Northern Sacramento Valley Air Basin (NSVAB) air quality management districts and air pollution control districts of Butte, Colusa, Glenn, Shasta, and Tehama counties, prepared and submitted the 2009 *Air Quality Attainment Plan* (AQAP) adopted in June, 2010. The AQAP was drafted in compliance with the requirements set forth in the CCAA and specifically addresses the nonattainment status for ozone and PM_{10}. The CCAA also requires a triennial assessment of the extent of air quality improvements and emissions reductions achieved through the use of control measures. As part of the assessment, the AQAP must be reviewed and, if necessary, revised to correct for deficiencies in progress and to incorporate new data or projections.

In July 1997, EPA promulgated a new 8-hour ozone standard. This change lowered the standard for ambient ozone from 0.12 ppm averaged over 1 hour to 0.08 ppm averaged over 8 hours. In general, the 8-hour standard is more protective of public health and more stringent than the 1-hour standard. The new standard prompted new designations and nonattainment classifications in June of 2004. On June 15, 2005 the 1 hour ozone standard was revoked for all areas except the 8-hour ozone nonattainment Early Action Compact Areas (EAC) areas (those do not yet have an effective date for their 8-hour designations) in accordance with 40 CFR 50.9(b).

Transportation Conformity

Projects developed under the 2030 General Plan could require federal approvals. Transportation conformity is the federal regulatory procedure for linking and coordinating the transportation and air quality planning processes. Conformity provisions require that federal funding and approvals be given only to those transportation plans and projects that are consistent with air quality goals specified in the SIP. The SIP applies to the Sacramento Federal Nonattainment Area (SFNA), which includes southern Sutter County, but not Yuba County. However, some vehicle trips from the Yuba County likely contribute emissions to the SFNA. Conformity with the SIP means that emissions from transportation activities are at or below the motor vehicle emission budgets established in the SIP.

The region's transportation plan must conform to the SIP and show that implementation will not harm the region's chances of attaining the ozone standard. The Sacramento Area Council of Governments (SACOG), of

which the County of Yuba County is a part, updated the Metropolitan Transportation Plan (MTP) in 2008, and a conformity determination was conducted by SACOG. The transportation air quality conformity determination performed for the 2008 MTP demonstrated that transportation projects planned for the region are consistent with the applicable SIP (SACOG 2008).

Odors

FRAQMD has identified types of facilities that have been known to produce odors that can be detected from one to five miles from the source. The actual distance from which odors would be detected would depend on the specific characteristics of the facility, the wind direction, and the sensitivity of the person detecting the odor. However, general guidelines for odor sources follow:

- wastewater treatment plants (up to 2 miles);
- pumping facilities (up to 1 mile);
- chemical manufacturing plants (up to 1 mile);
- asphalt batch plants (up to 2 miles);
- fiberglass manufacturing (up to 1 mile);
- painting/coating operations (up to 1 mile);
- feed lots/dairies (up to 1 mile);
- rendering plants (up to 5 miles);
- coffee roaster (up to 1 mile);
- food processing facility (up to 1 mile);
- metal smelting plants (up to 1 mile);
- landfills (up to 1 mile);
- composting facilities (up to 2 miles) and
- recycling facilities and solid waste transfer stations (up to 1 mile).

Offensive odors rarely cause any physical harm and no requirements for their control are included in federal or state air quality regulations. For this reason, FRAQMD has adopted a screening methodology for odors within the new indirect source review guidelines that assigns minimum distances for receptors from the odor sources identified above. Sources of odors are subject to the prohibited discharges regulations in the California Health & Safety Code (HSC) Section 41700. Since agriculture is prevalent in Yuba County, FRAQMD recommends taking possible agricultural odors sources into consideration when there is a possibility of siting receptors near agricultural operations. Two situations increase the potential for odor problems. The first occurs when a new odor source is located near existing sensitive receptors. The second occurs when new sensitive receptors are developed near existing sources of odor.

In the first situation, FRAQMD recommends operational changes, add-on controls, process changes, or buffer zones where feasible to address odor complaints. In the second situation, the potential conflict is considered significant if the project site is at least as close as any other site that has already experienced significant odor problems related to the odor source. For projects locating near a source of odors where there is no nearby development that may have filed complaints, and for odor sources locating near existing sensitive receptors, one approach to the determination of potential conflict is based on the distance and frequency at which odor complaints from the public have occurred in the vicinity of a similar facility.

4.3.2 ENVIRONMENTAL SETTING

Yuba County lies within the NSVAB, which also includes Butte, Colusa, Glenn, Shasta, Sutter, and Tehama counties. Different areas within the same Air Basin often share topographic characteristics, other physical characteristics, as well as sources of regional air pollutants. The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric

stability, and sunlight. Existing air quality conditions in Yuba County and the rest of the NSVAB are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources, as discussed below.

TOPOGRAPHY

The dimensions of the NSVAB are approximately 216 miles north to south and 95 miles east to west at the widest part. The NSVAB is bounded on the west and north by the Coast Range and on the east by the southern portion of the Cascade Range and the northern portion of the Sierra Nevada. The surrounding mountain ranges reach heights of 3,500 feet in the southwest, 8,500 feet in the northwest, 1,700 feet in the southeast, and 10,500 feet in the northeast. These mountain ranges provide a substantial physical barrier to locally created pollution as well as that transported northward on prevailing winds from the Sacramento metropolitan area.

METEOROLOGY AND CLIMATE

The annual temperature, humidity, precipitation, and wind patterns of the NSVAB reflect the regional topography and the strength and location of a semipermanent, subtropical high-pressure cell. Summer temperatures that exceed 100°F, coupled with clear sky conditions, are favorable for ozone formation.

Most precipitation in the valley occurs during winter storms. The coastal mountain ranges induce winter storms from the Pacific Ocean to release precipitation on the western slopes, producing a partial rain shadow over the valley. The winds and unstable atmospheric conditions associated with the passage of winter storms result in periods of low air pollution and excellent visibility. However, between winter storms, high pressure and light winds lead to the creation of low-level temperature inversions and stable atmospheric conditions that can result in high concentrations of CO and PM.

Summer conditions in the NSVAB are typically characterized by high temperatures and low humidity, with prevailing winds from the south. Summer temperatures average approximately 90°F during the day and 50°F at night (FRAQMD 2010). Winter conditions in the NSVAB are characterized by occasional rainstorms interspersed with stagnant and foggy weather. Winter temperatures average in the low 50s (°F), and nighttime temperatures average in the upper 30s. Rainfall occurs mainly from late October to early May, averaging 17.2 inches per year, but this varies significantly from year to year. During winter, north winds are frequent, but winds from the south predominate (FRAQMD 2010). The predominant wind direction and speed is from the south at 8.0 miles per hour (mph) (ARB 1994).

Atmospheric Stability and Inversions

"Stability" describes the resistance of the atmosphere to vertical motion. The stability of the atmosphere depends on the vertical distribution of temperature. When the temperature decreases vertically at 10°C (50°F per 1,000 meters, the atmosphere is considered "neutral." When the change in temperature is greater than 10°C per 1,000 meters, the atmosphere is considered "unstable." When the change is less than 10°C per 1,000 meters, the atmosphere is termed "stable."

NSVAB atmospheric stability categories range from extremely unstable conditions, which are present in spring and summer, through neutral to stable conditions, which are both present in fall and winter. Unstable conditions occur primarily during the daytime, when solar heating warms the lower atmospheric layers sufficiently. Under extremely unstable conditions, large fluctuations in horizontal wind direction are coupled with large mixing depths, which are the vertical depths available for diluting air pollution near the ground. As solar heating decreases, fluctuations in wind direction and the vertical mixing depth become less pronounced, resulting in neutral to stable conditions. Under the most stable conditions, which are present in the NSVAB in fall and winter, air pollution emitted into the atmosphere will travel downwind with poor dispersion. The dispersive power of the atmosphere decreases with progression through the categories from extremely unstable to stable.

The formation and dispersion of air pollutants is also affected by the presence or absence of significant temperature differences among atmospheric layers. For example, a layer of warmer air over a layer of cooler air is called an "inversion," which can influence the mixing depth of the atmosphere and significantly affect air quality conditions. The NSVAB experiences two types of inversions that affect air quality. The first type of inversion layer contributes to photochemical smog by confining pollution to a shallow layer of air near the ground. This type of inversion occurs during the summer, when sinking air near the ground forms a "lid" over the region. The second type of inversion occurs when the air near the ground cools while the air aloft remains warm. This type of inversion occurs during winter nights and can cause localized air pollution "hot spots" near emission sources because of poor dispersion. The shallow surface-based inversions are present in the morning, but are often broken by daytime heating of the air layers near the ground.

EXISTING AIR QUALITY—CRITERIA AIR POLLUTANTS

Concentrations of criteria air pollutant emissions are used as indicators of ambient air quality conditions. A brief description of each criteria air pollutant (source types, health effects, and future trends) is provided below, along with the most current attainment area designations and monitoring data for the Yuba County vicinity.

Ozone

Ozone is a photochemical oxidant, a substance whose oxygen combines chemically with another substance in the presence of sunlight, and the primary component of smog. Ozone is not emitted directly into the air, but is formed through complex chemical reactions between precursor emissions of ROG and NO_X in the presence of sunlight. ROG are volatile organic compounds that are photochemically reactive. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_X are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels.

Ozone located in the upper atmosphere (stratosphere) acts in a beneficial manner by shielding the earth from harmful ultraviolet radiation that is emitted by the sun. However, ozone located in the lower atmosphere (troposphere) is a major health and environmental concern. Meteorology and terrain play a major role in ozone formation. Generally, low wind speeds or stagnant air coupled with warm temperatures and clear skies provide the optimum conditions for formation. As a result, summer is generally the peak ozone season. Because of the reaction time involved, peak ozone concentrations often occur far downwind of the precursor emissions. Therefore, ozone is a regional pollutant that often affects large areas. In general, ozone concentrations over or near urban and rural areas reflect an interplay of emissions of ozone precursors, transport, meteorology, and atmospheric chemistry (Godish 2004).

Public Health of Effects of Ozone

The adverse health effects associated with exposure to ozone pertain primarily to the respiratory system. Scientific evidence indicates that ambient levels of ozone affect not only sensitive receptors, such as asthmatics and children, but healthy adults as well. Exposure to ambient levels of ozone ranging from 0.10 to 0.40 parts per million (ppm) for 1 or 2 hours has been found to significantly alter lung functions by increasing respiratory rates and pulmonary resistance, decreasing the volume of air in each normal breath (tidal volume), and impairing respiratory mechanics. Ambient levels of ozone above 0.12 ppm are linked to symptomatic responses that include throat dryness, chest tightness, headache, and nausea. In addition to the above adverse health effects, evidence also exists relating ozone exposure to an increase in the permeability of respiratory epithelia; such increased permeability leads to an increase in the respiratory system's responsiveness to challenges and the interference or inhibition of the immune system's ability to defend against infection (Godish 2004).

Trends in Ozone Concentrations

Emissions of ozone precursors ROG and NO_X have decreased over the past several years as a result of more stringent motor vehicle standards and cleaner burning fuels. Consequently, peak 1-hour and 8-hour ozone concentrations in the NSVAB have declined overall by about 14% and 26%, respectively, during the last 20 years. However, peak ozone values in the NSVAB have not declined as rapidly over the last several years as they have in other urban areas. This can be attributed to the influx of pollutants into the NSVAB from other urbanized areas, such as the Sacramento metropolitan area, making the region both a transport contributor and a receptor of pollutants (ARB 2009b). ROG emissions have been decreasing for the last 30 years due to more stringent motor vehicle standards and new rules for control of ROG from various industrial coating and solvent operations (ARB 2009b).

Particulate Matter

Respirable particulate matter with an aerodynamic diameter of 10 microns or less is referred to as PM_{10}. PM_{10} consists of particulate matter emitted directly into the air, such as fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires, and natural windblown dust; and particulate matter formed in the atmosphere by condensation and/or transformation of SO_2 and ROG (EPA 2009b). $PM_{2.5}$ includes a subgroup of finer particles that have an aerodynamic diameter of 2.5 microns or less (ARB 2009a).

The adverse health effects associated with PM_{10} depend on the specific composition of the particulate matter. For example, health effects may be associated with adsorption of metals, polycyclic aromatic hydrocarbons, and other toxic substances onto fine particulate matter (which is referred to as the "piggybacking effect"), or with fine dust particles of silica or asbestos. Generally, adverse health effects associated with PM_{10} may result from both short-term and long-term exposure to elevated concentrations and may include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, alterations to the immune system, carcinogenesis, and premature death (EPA 2009b).

Public Health of Effects of PM

$PM_{2.5}$ poses an increased health risk because the particles can deposit deep in the lungs and contain substances that are particularly harmful to human health. Based on reviews of the latest scientific literature, ARB has concluded that $PM_{2.5}$ is much more dangerous than previously estimated. New research suggests that even small increases in exposure increase the potential for earlier deaths. Every increase of 10 micrograms per cubic meter ($\mu g/m^3$) of $PM_{2.5}$ creates a 10% increase in risk of premature death to a person exposed. State ambient air quality standards are periodically reviewed to assess their adequacy in protecting public health, and this new information will be considered when the PM standards are next reviewed. Nonetheless, the new information indicates the need to continue to reduce exposure to $PM_{2.5}$ (ARB 2009a).

Trends in PM Emissions

Direct emissions of both PM_{10} and $PM_{2.5}$ increased slightly in the NSVAB between 1975 and 2005, and are projected to increase through 2020. These emissions are dominated by areawide sources and primarily attributable to urban development. Direct emissions of particulate matter from mobile and stationary sources have remained relatively steady (ARB 2009a).

Carbon Monoxide (CO)

CO is a colorless, odorless, and poisonous gas produced by incomplete combustion of fuels, primarily from mobile (transportation) sources. In fact, 63% of the CO emissions in Yuba County are from mobile sources. The remainder of CO emissions is from area and stationary sources, such as residential fuel combustion, wood-burning stoves, open burning, electric utilities, and industrial sources (ARB 2009b).

Public Health of Effects of CO

CO enters the bloodstream through the lungs by combining with hemoglobin, which normally supplies oxygen to the cells. However, CO combines with hemoglobin much more readily than oxygen does, resulting in a drastic reduction in the amount of oxygen available to the cells. Adverse health effects associated with exposure to CO concentrations include such symptoms as dizziness, headaches, and fatigue. CO exposure is especially harmful to individuals who suffer from cardiovascular and respiratory diseases (EPA 2009b).

The highest CO concentrations are generally associated with cold, stagnant weather conditions that occur during the winter. In contrast to ozone, which tends to be a regional pollutant, CO tends to cause localized problems.

Trends in CO Emissions

Emissions of CO declined in the Sacramento Valley Air Basin between 1975 and 2005 and are projected to decrease through 2020. Motor vehicles are the largest source of CO emissions. With the introduction of new automotive emission controls to meet more stringent emission standards, motor vehicle CO emissions have been declining since 1975, despite increases in vehicle miles travelled (VMT). Stationary and area-wide source CO emissions have remained relatively steady since 1990, with additional emission controls offsetting growth. (ARB 2009b)

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal-combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2 (EPA 2009b). The combined emissions of NO and NO_2 are referred to as nitrogen oxides (NO_X), which are reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with photochemical smog (ozone), the NO_2 concentration in a particular geographical area may not be representative of the local NO_X emission sources.

Public Health of Effects of NO_2

Inhalation is the most common route of exposure to NO_2. Because NO_2 has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of the adverse health effects depends primarily on the concentration inhaled rather than the duration of exposure. An individual may experience a variety of acute symptoms, including coughing, difficulty with breathing, vomiting, headache, and eye irritation, during or shortly after exposure. After a period of approximately 4–12 hours, an exposed individual may experience chemical pneumonitis or pulmonary edema with breathing abnormalities, cough, cyanosis, chest pain, and rapid heartbeat. Severe, symptomatic NO_2 intoxication after acute exposure has been linked on occasion with prolonged respiratory impairment, with such symptoms as chronic bronchitis and decreased lung functions.

Trends in NO_2 Emissions

Emissions of NO_X decreased from 1990 to 2005 and are projected to continue decreasing from 2005 to 2020. On-road motor vehicles and other mobile sources are by far the largest contributors to NO_X emissions. More stringent mobile source emission standards and cleaner burning fuels have largely contributed to the decline in NO_X emissions (ARB 2009b).

Sulfur Dioxide

SO_2 is produced by such stationary sources as coal and oil combustion, steel mills, refineries, and pulp and paper mills.

Public Health of Effects of SO_2

The major adverse health effects associated with SO_2 exposure pertain to the upper respiratory tract. SO_2 is a respiratory irritant with constriction of the bronchioles occurring with inhalation of SO_2 at 5 ppm or more. On contact with the moist mucous membranes, SO_2 produces sulfurous acid, which is a direct irritant. Concentration rather than duration of the exposure is an important determinant of respiratory effects. Exposure to high SO_2 concentrations may result in edema of the lungs or glottis and respiratory paralysis.

Trends in SO_2 Emissions

The emission levels for SO_2 have declined after 1990. Most of the reduction in SO_2 emissions is for on-road motor vehicles and other mobile sources (ARB 2009b).

Lead

Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, as discussed in detail below, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, EPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. EPA banned the use of leaded gasoline in highway vehicles in December 1995 (EPA 2009b).

Public Health of Effects of Lead

Once taken into the body, lead distributes throughout the body in the blood and is accumulated in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood. The lead effects most commonly encountered in current populations are neurological effects in children and cardiovascular effects (e.g., high blood pressure and heart disease) in adults. Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits and lowered IQ.

Lead is persistent in the environment and accumulates in soils and sediments through deposition from air sources, direct discharge of waste streams to water bodies, mining, and erosion. Ecosystems near point sources of lead demonstrate a wide range of adverse effects including losses in biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates (EPA 2009b).

Trends in Lead Emissions

As a result of EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector declined dramatically (95% between 1980 and 1999), and levels of lead in the air decreased by 94% between 1980 and 1999. Transportation sources, primarily airplanes, now contribute only 13% of lead emissions. A recent National Health and Nutrition Examination Survey reported a 78% decrease in the levels of lead in people's blood between 1976 and 1991. This dramatic decline can be attributed to the move from leaded to unleaded gasoline (EPA 2009b).

Lead emissions and ambient lead concentrations have decreased dramatically in California over the past 25 years. The rapid decrease in lead concentrations can be attributed primarily to phasing out the lead in gasoline. This

phase-out began during the 1970s, and subsequent ARB regulations have eliminated virtually all lead from gasoline now sold in California. All areas of the state are currently designated as attainment for the state lead standard (EPA does not designate areas for the national lead standard). Although the ambient lead standards are no longer violated, lead emissions from stationary sources still pose "hot spot" problems in some areas. As a result, ARB has identified lead as a TAC.

NATURALLY OCCURRING ASBESTOS

As noted in Section 4.6 of this EIR, Geology, Soils, Mineral Resources, and Paleontological Resources," asbestos is a naturally occurring mineral in California. Asbestos occurrences are most commonly associated with the mineral serpentinite and partially serpentinized ultramafic rocks (CGS 2007). Asbestos is a known carcinogen and inhalation of asbestos fibers may result in the development of lung cancer, mesothelioma, and gastrointestinal cancer (U.S. EPA 1993).

Yuba County is known to contain serpentine or ultramafic rock that is common to foothill areas of the region. According to the California Geologic Survey, naturally occurring asbestos (NOA) may be present in Yuba County (DOC 2000). The Department of Conservation produced a map entitled, "General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos." According to this generalized map, the areas most likely to contain naturally occurring asbestos are in northeastern Yuba County where the 2030 General Plan does not anticipate substantial new development activity. However, this map was prepared at a scale of 1:1,100,000 and is intended for use at that scale. This map is not appropriate for use at the project or parcel level and the map does not identify all areas of Yuba County where naturally occurring asbestos could be present.

MONITORING STATION DATA AND ATTAINMENT AREA DESIGNATIONS

Air pollutant concentrations are measured at several monitoring stations in the NSVAB. An air quality monitoring station on Almond Street in Yuba City is the closest monitoring station to Yuba County with sufficient data to meet EPA and ARB criteria for quality assurance. In general, the ambient air quality measurements from this monitoring station, although not recorded in Yuba County, are representative of the air quality in the General Plan area because of the close proximity of this monitoring station to the County line.

Table 4.3-2 summarizes the local air quality data from 2007 – 2009. Both ARB and EPA use this type of monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify those areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are "nonattainment," "attainment," and "unclassified." "Unclassified" is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of the nonattainment designation, called "nonattainment-transitional." The nonattainment-transitional designation is given to nonattainment areas that are progressing and nearing attainment.

Yuba County is classified as nonattainment for the $PM_{2.5}$ national standard and attainment or unclassified for all other national standards. Yuba County is classified as nonattainment transitional for the 1 hour and 8 hour state ozone standard, and nonattainment for the state PM_{10} standard, except as previously mentioned Yuba County is classified as attainment or unclassified for all remaining state standards.

Table 4.3-2 Summary of Annual Ambient Air Quality Data (2007–2009)[1]			
Ozone	2007	2008	2009
Maximum concentration (1-hr/8-hr avg, ppm)	0.095/0.081	0.092/0.080	0.089/0.076
Number of days State standard exceeded (1-hr)	1	0	0
Number of days national 1-hr/8-hr standard exceeded	0/3	0/1	0/1
Fine Particulate Matter ($PM_{2.5}$)	2007	2008	2009
Maximum concentration ($\mu g/m^3$)	45.0	127.2	41.8
Number of days national standard exceeded (measured[2])	6	9	2
Respirable Particulate Matter (PM_{10})	2007	2008	2009
Maximum concentration ($\mu g/m^3$)	51.0	66.9	50.7
Number of days state standard exceeded (measured[2])	1	4	0
Number of days national standard exceeded (measured[2])	0	0	0
Carbon Monoxide	2004	2005	2006
Maximum concentration (1-hr/8-hr avg, ppm)	5.80/2.54	4.40/3.39	3.10/2.29
Number of days state standard exceeded	0	0	0
Number of days national standard exceeded	0	0	0

Notes: $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million.

[1] Measurements from the Yuba City–Almond Street station.

[2] Measured days are those days that an actual measurement was greater than the level of the state daily standard or the national daily standard. Measurements are typically collected every 6 days. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

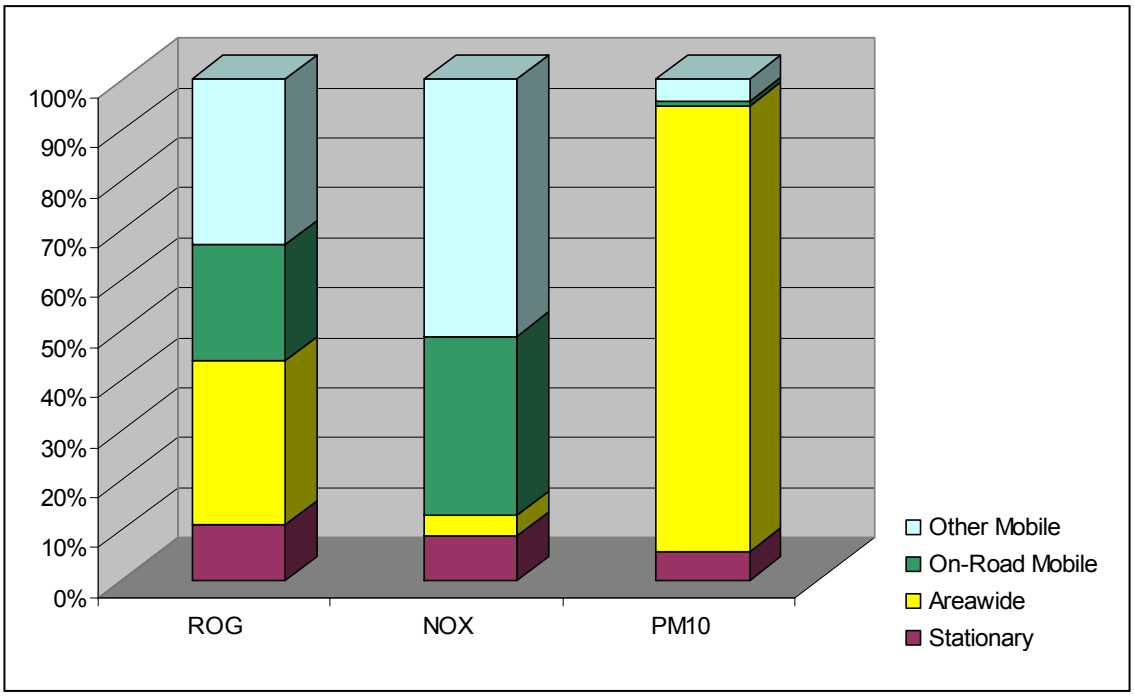
Source: ARB 2009d

4.3.3 EMISSION SOURCES

Approximately 60–70% of the air pollution in the FRAQMD area comes from mobile sources, which includes on-road and off-road motor vehicles (including cars, trucks, planes, trains, tractors, combines, buses, motorcycles, and boats) (see Exhibits 4.3-1 and 4.3-2).

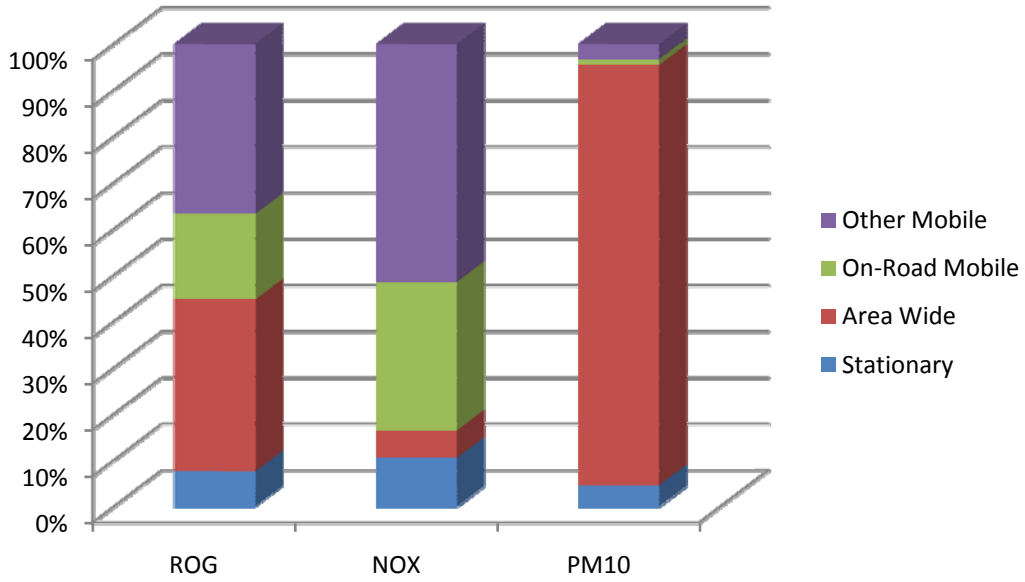
The remaining 30–40% of the air pollution in the FRAQMD area is a result of stationary sources that include agricultural operations, open burning of vegetative wastes, wood burning for residential heating, manufacturing industries, electric generation industries, diesel backup generators, retail gasoline and local bulk distribution facilities, auto body shops, dry cleaners, landfills, other human-made sources that emit air contaminants, and naturally occurring sources (including biological and geological sources, wildfires, and windblown dust) (FRAQMD 2010).

Criteria air pollutant emission sources in Yuba County include stationary, area, and mobile sources. According to the 2005 emissions inventory for the County, the majority of ROG and NO_X emissions are attributable to mobile sources, while areawide sources are the greatest contributor of PM emissions (ARB 2009b).



Source: ARB 2007

Yuba County 2005 Emissions Inventory—
Relative Contributions from Emission Sources[2] **Exhibit 4.3-1**



Source: ARB 2009b

Yuba County 2009 Emissions Inventory—
Relative Contributions from Emission Sources **Exhibit 4.3-2**

[2] On-road sources include automobiles, motorcycles, and trucks; other mobile sources (off-road mobile sources) include small off-road engines and equipment, off-road recreational vehicles, farm and construction equipment, forklifts, locomotives, commercial marine vessels, and marine pleasure craft. Stationary sources include nonmobile sources such as power plants, refineries, and manufacturing facilities. Areawide sources of pollution are those where the emissions are spread over a wide area, such as consumer products, fireplaces, road dust, and farming operations. Natural sources are emission sources that are not human made, which include biological and geological sources, wildfires, windblown dust, and biogenic emissions from plants and trees.

STATIONARY SOURCES

Major stationary sources of air pollutant emissions within the County include industrial processes, fuel combustion from electric utilities and other processes, waste disposal, surface coating and cleaning, petroleum production, and other sources. As discussed previously, the local districts issue permits to various types of stationary sources, which must demonstrate implementation of BACT.

AREAWIDE SOURCES

Areawide sources of emissions include consumer products, application of architectural coatings, residential fuel combustion, farming operations, construction and demolition, road dust, fugitive dust, landscaping, fires, and other miscellaneous sources. Unpaved road dust is the largest contributor to particulate matter emissions within the County.

MOBILE SOURCES

On-road and other mobile sources are the largest contributors of ozone precursor emissions within the County. On-road sources consist of passenger vehicles, trucks, buses, and motorcycles, while off-road vehicles and other mobile sources comprise heavy-duty equipment, boats, aircraft associated with Beale Air Force Base and other county airports, trains, recreational vehicles, and farm equipment. Major roadways in Yuba County include State Routes 65, 70, 20, and 49, as well as county rural, urban, or regional arterial roadways.

EXISTING AIR QUALITY—TOXIC AIR CONTAMINANTS

According to the 2009 California Almanac of Emissions and Air Quality (ARB 2009a) the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being PM from diesel-fueled engines (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances.

TAC Sources

Although diesel PM is emitted by diesel-fueled internal-combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, ARB has made preliminary concentration estimates based on a PM exposure method. This method uses ARB's PM_{10} database for emissions inventories, monitoring data for ambient PM_{10}, and the results from several studies on chemical speciation to estimate concentrations of diesel PM. Of the TACs for which data are available in California, diesel PM, benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene pose the greatest existing ambient risks. Diesel PM poses the greatest health risk among these 10 TACs mentioned (ARB 2009a).

Area sources of TAC emissions in Yuba County include Beale Air Force Base (associated with jet fuel and ordinance). The remaining permitted sources within Yuba County are wood production, agricultural or are associated with aggregate and/or asphalt production. In addition, please refer to the existing *Yuba County General Plan*'s land use diagram for areas currently designated as industrial (i.e., areas most likely to be stationary sources of emissions) (ARB 2009e).

TAC Exposure

TACs are considered in land use planning in association with sensitive land uses. Sensitive land uses or sensitive receptors are people or facilities that generally house people (e.g., schools, hospitals, residences, etc.) that may

experience adverse effects from unhealthful concentrations of air pollutants. There are numerous types of these receptors throughout Yuba County, particularly concentrated near populated areas.

EXISTING AIR QUALITY—ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

The ability to detect odors varies considerably among the population and is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast food restaurant) may be perfectly acceptable to another. Unfamiliar odors are more easily detected than familiar odors and are more likely to cause complaints. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition occurs only with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the intensity of the odor weakens and eventually becomes so low that detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Sources of Odor

Odor sources in the county include dairies and other livestock operations, industry, wastewater treatment facilities, and other sources. Existing odor sources within Yuba County are six wastewater treatment plants and 20 sewage lift stations, the Ostrom Landfill and two transfer processing facilities, as well as four permitted composting facilities with two more planned. Inactive landfills may cause odors as well as active and within Yuba County there is one "closed" landfill and seven "closed" solid waste disposal sites. Another potential source for odors is Beale Air Force Base, from the various fuels used and ordnance.

4.3.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

Regional and local emissions of criteria air pollutants and precursors, TACs, and odors throughout buildout of the 2030 General Plan were assessed in accordance with the methodologies described below.

Construction-related emissions of criteria air pollutants (e.g., PM_{10}) and ozone precursors (ROG and NO_X) were assessed in accordance with methodologies recommended by ARB and FRAQMD. Where quantification was required, emissions were modeled using the Urban Emissions (URBEMIS) 2007 Version 9.2.4 computer model. Model default parameters were assumed where project-specific data (e.g., construction equipment types and number requirements, and maximum daily acreage disturbed) were not available at the General Plan level.

Construction-related emissions were compared to applicable FRAQMD thresholds to determine significance.

Regional operational emissions of criteria air pollutants and precursors (e.g., mobile and area sources) were also quantified using the URBEMIS 2007 Version 9.2.4 computer model. Modeling was based on buildout

assumptions in the 2030 General Plan and information about vehicle trip generation from the traffic analysis prepared to support the General Plan and EIR (see Section 4.2, "Transportation and Circulation," in this DEIR).

Other air quality impacts (i.e., local emissions of CO, odors, and operation-related TACs) were assessed in accordance with methodologies recommended by ARB and FRAQMD.

THRESHOLDS OF SIGNIFICANCE

For the purpose of this analysis, the following thresholds of significance, as identified by the State CEQA Guidelines (Appendix G) and FRAQMD have been used to determine whether implementation of the 2030 General Plan would result in significant air quality impacts.

Based on Appendix G of the State CEQA Guidelines, an air quality impact is considered significant if the proposed project would:

- conflict with or obstruct implementation of the applicable air quality plan;
- 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 nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- expose sensitive receptors to substantial pollutant concentrations; or
- create objectionable odors affecting a substantial number of people.

As stated in Appendix G, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. Thus, according to FRAQMD, an air quality impact is considered significant if the proposed project would:

- Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations (25 pounds per day [lb/day] of ROG or NO_X, or 80 lb/day of PM_{10}).

IMPACT ANALYSIS

IMPACT 4.3-1 **Generation of Long-Term Operational, Regional Emissions of Criteria Air Pollutants and Precursors and Consistency with Air Quality Planning Efforts.** *Future development in Yuba County would generate emissions of criteria air pollutants (PM_{10} and $PM_{2.5}$) and ozone precursors, both of which affect regional air quality.* The 2030 General Plan would accommodate additional population and employment development, which would lead to *operational (mobile-source and area-source) emissions that are not accounted for in the current applicable air quality plan and would exceed FRAQMD thresholds. This impact is considered potentially significant.*

Air pollutant emissions associated with the 2030 General Plan were calculated based on assumptions regarding full development of General Plan land uses within the Valley Growth Boundary and Rural Communities. The analysis takes into account vehicle travel data provided in the traffic analysis prepared to support the 2030 General Plan and this EIR, and area-source emissions from proposed land uses.

ARB's motor vehicle emissions model (EMFAC 2007) factors, as contained in the URBEMIS 2007 (Version 9.2.4) computer model, were used along with travel demand impacts from the traffic analysis prepared for this

project (see Section 4.2, "Transportation and Circulation," of this DEIR). This transportation analysis was used to calculate emissions in units of lb/day for future (2030) conditions upon buildout of the 2030 General Plan relative to existing (on-the-ground) land uses (i.e., the baseline). The net change in daily air pollutant emissions is shown in Table 4.3-3.

Emissions of PM_{10} and ozone precursors (ROG and NO_X) associated with land use change under the 2030 General Plan are treated as new to the region. This is a conservative [worst-case] assumption because many "new vehicle trips" may actually be moved from one part of the region to another partly as a result of the 2030 General Plan.

Area- and Mobile-Source Emissions

Regional area- and mobile-source emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ were modeled using the URBEMIS 2007 Version 9.2.4 computer program, which is designed to estimate emissions for land use development projects. URBEMIS allows land use data entries that include project location specifics and trip generation rates. URBEMIS accounts for area-source emissions from the use of natural gas, wood stoves, fireplaces, landscape maintenance equipment, and consumer products; and mobile-source emissions associated with vehicle trip generation. Regional area- and mobile-source emissions were modeled based on proposed land use types and sizes (see Chapter 3.0, "Project Description"), the increase in trip generation from the traffic analysis prepared for this project (see Section 4.13, "Traffic and Transportation"), and default settings and parameters attributable to construction period and location.

Modeled operational emissions are summarized in Table 4.3-3 for 2030 buildout conditions. As shown in Table 4.3-3, operational activities associated with the 2030 General Plan could result in annual unmitigated emissions of up to 6,613 lb/day of ROG, 4,830 lb/day of NO_X, 15,253 lb/day of PM_{10}, and 2,879 lb/day of $PM_{2.5}$.

Table 4.3-3
Summary of Modeled Operational Emissions of Criteria Air Pollutants and Precursors—
New Development Accommodated under 2030 General Plan Full Buildout

Source	Emissions (lb/day)[1]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area Sources[2,4]	2,699	621	1.17	1.16
Mobile Sources[3]	3,914	4,210	15,252	2,878
Total GPU Daily Emissions	6,613	4,830	15,253	2,879
FRAQMD Significance Threshold	25 lb/day	25 lb/day	80 lb/day	-

Notes: FRAQMD = Feather River Air Quality Management District; GP = General Plan; GPU = General Plan Update; lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; ROG = reactive organic gases

[1] Emissions modeled using the URBEMIS 2007 (Version 9.2.4) computer model, for analysis year 2030 based on trip generation rates obtained from the analysis prepared for this project and proposed land uses identified in Chapter 3, "Project Description," and Section 4.13, "Transportation and Circulation," of this EIR.

[2] For this estimate, it was assumed that no wood-burning appliances would be installed.

[3] Trip generation rates were obtained from the traffic analysis for the respective land uses.

Refer to Appendix B for detailed assumptions and modeling output files.

Source: Data modeled by AECOM in 2010.

The data presented in Table 4.3-3 is based on winter estimations since winter calculations are typically higher than those estimated for summer. The main factor for higher winter emissions then summer is the increased use of heating devices, like furnaces, wood stoves and fireplaces. The data in Table 4.3-3 does not include the modeled emissions from woodstoves and fireplaces. Any newly installed wood burning device must meet the requirements of FRAQMD Rule 3-17. The emissions calculation for wood burning devices that meet the new criteria was calculated to be 450 lbs/day of ROGs, 147 lbs/day NO_X, 666 lbs/day PM_{10} and 641 lbs/day $PM_{2.5}$.

Based on the modeling conducted, operational activities would result in emissions of ROG, NO_X, and PM_{10} that exceed FRAQMD's applicable thresholds of 25, 25, and 80 lb/day, respectively. Thus, operational emissions of these ozone precursors and PM could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations.

Stationary-Source Emissions

The 2030 General Plan could accommodate stationary sources of pollutants that would be required to obtain permits to operate, in compliance with FRAQMD rules. These sources could include, but are not limited to, diesel-engine or gas turbine generators for emergency power generation; central-heating boilers for commercial, industrial, or large residential buildings; process equipment for light-industrial uses; kitchen equipment at restaurants and schools; service-station equipment; and dry-cleaning equipment. The permit process would assure that these sources would be equipped with the required emission controls, and that individually, these sources would not cause a significant environmental impact. There is no available methodology to reliably estimate these emissions at this time, since no such uses are specifically proposed under the 2030 General Plan. Nonetheless, the emissions from these sources would be additive to the estimated area-source and mobile-source emissions described above.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD1.1:** Urban and suburban development in the unincorporated County not related to agriculture, mining, or some natural or cultural resource-oriented purpose is prohibited in valley areas outside the Valley Growth Boundary.
- **Policy CD1.3:** Urban land use designation/s will not be assigned within the Planning Reserve area unless the County determines that these lands are needed to fulfill either the County's regional housing needs allocation or accommodate job-generating developments needed to achieve the County's jobs-housing goals.
- **Policy CD1.4:** New developments proposing urban land uses will not be approved within the Planning Reserve area until the County assigns the appropriate General Plan land use designation/s and approves zoning and development standards consistent with the Community Development Element.
- **Policy CD2.1:** The County will encourage infill development and redevelopment of vacant and underutilized properties within existing unincorporated communities.
- **Policy CD2.2:** The County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment.
- **Policy CD2.3:** The County will support reinvestment in Linda and Olivehurst that increases local shopping, job, and housing opportunities.
- **Policy CD2.4:** The County will maintain flexible development standards, infrastructure standards, and impact fees that promote infill development and promote lot consolidation for redevelopment, where necessary.
- **Policy CD2.5:** The County will prioritize public spending on infrastructure within infill areas in order to induce reinvestment, remove blight, and reduce poverty.

- **Policy CD2.6:** The County will support public/private partnerships that encourage infill development consistent with the General Plan.

- **Policy CD2.7:** The County will actively promote vacant industrial sites in the Linda and Olivehurst areas for employment development.

- **Policy CD3.1:** Commercial and industrial developments shall be located, buffered, or otherwise designed to avoid significant noise and air quality impacts.

- **Policy CD3.2:** New residential projects near railroads and highways should provide multi-use open space buffers designed to avoid adverse air quality, noise, vibration, light, and glare issues.

- **Policy CD3.3:** New residential development shall provide multi-use buffers and site plans designed to avoid pressure to convert long-term planned agriculture, mining, and forestry lands to urban development.

- **Policy CD3.4:** The County will use performance-based standards in mixed-use areas to ensure that important aspects of compatibility (air, noise, vibration, heavy truck traffic, light, glare) are addressed without impeding mixed-use development.

- **Policy CD3.5:** Prior to approval, new developments are required to demonstrate consistency with established standards for setbacks from landfills, airports, sewage treatment plants, and other similar uses, as applicable.

- **Action CD3.1: Compatibility Review and Conditioning of Projects and Plans.** The County will review projects against policies in this General Plan and analysis in the General Plan Environmental Impact Report (EIR) to reduce noise and air quality impacts. The County Zoning Ordinance and development standards should identify design and performance standards for noise, light, glare, air pollution, and other relevant issues. The County will use the General Plan to determine the adequacy of proposed buffering between residential land uses, highways, railroads, airports, industries, mining operations, agricultural operations, and other potentially incompatible uses. The County will condition projects, as appropriate, to provide consistency with this General Plan and the General Plan EIR. The County will balance its goals for infill and mixed-use development with policies and standards for noise, vibration, light and glare, and other issues of compatibility.

  - Related Goals: Goal CD3, Goal NR11, Goal HS5, Goal HS9, Goal HS10, Goal HS11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; applicant funding for project-specific work
  - Time Frame: Ongoing

- **Action CD3.2: Open Space Buffers along State Highways and Railroads**. The County will seek funding for design and implementation of air quality, noise, and visual buffers along regional transportation routes. The County will coordinate with regional transportation agencies and drainage providers to find opportunities to use these same buffer areas for natural drainage conveyance, multi-modal transportation routes, visual buffering, community gardens, and for other useful public purposes.

  - Related Goals : Goal CD2, Goal CD3, Goal CD 19, Goal NR11, Goal HS5, Goal HS10, Goal HS11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; federal and state funds; other funding, as appropriate.
  - Time Frame: Ongoing, as funding opportunities arise.

- **Policy CD4.1:** Employment and Commercial Centers shall be developed in coordination with local transit provider/s to ensure proper placement and design of transit stops and accommodate public transit for both employees and patrons.

- **Policy CD4.2:** Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.

- **Policy CD4.3:** In Commercial and Employment Centers, developments should place buildings close to the frontage street and emphasize the public realm by providing plazas, wide sidewalks, spaces for entertainment and other community events, outdoor seating and gathering areas, and other similar uses and activities.

- **Policy CD4.4:** Commercial projects of more than 20 acres in land area shall use public streets or small private streets to break up proposed development areas into blocks.

- **Policy CD4.5:** New commercial projects in Commercial Centers and other locations shall distribute proposed parking around the project site and not concentrate parking exclusively between the front building façade and the primary abutting street.

- **Policy CD4.6:** The County will encourage development of workforce housing around Employment Centers that is ancillary to, and supportive of employment-generating land uses.

- **Policy CD5.1:** Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks, and other civic uses.

- **Policy CD5.2:** Valley Neighborhoods should provide compact development patterns that conserve land and place homes in close proximity to destinations.

- **Policy CD5.3:** Valley residential development in existing and planned Valley Neighborhoods should provide for the full range of housing types and densities.

- **Policy CD5.4:** New developments within the Valley Growth Boundary shall provide a highly connected travel network that supports all local travel modes.

- **Policy CD5.5:** The County's development standards will allow narrow lots, narrow driveways, alleyway access, zero lot line housing, and other compact housing configurations in Valley Neighborhoods.

- **Action CD5.1: Update Zoning Ordinance**. Following the General Plan adoption, the County will review and revise the Zoning Ordinance, consistent with the updated General Plan. As a part of the revisions, the County will ensure the updated Zoning Ordinance accommodates compact growth patterns, consistent with the General Plan, while continuing to provide for the public health and safety. The County will consider provisions in the Zoning Ordinance that focus more on building form, function, and placement; lot design; and the relationship of buildings to the public realm (streets, plazas, public parks, etc.) and less emphasis on regulating specific land uses.

  To ensure land use compatibility while also encouraging a mix of land uses, the County will base performance standards in the Zoning Ordinance on General Plan policies for such topics as noise, vibration, light, glare, air pollution, and traffic. Such performance standards could be used to ensure compatibility in situations where nonresidential uses are located close to residential uses. The ordinance will also be revised to address nuisances, such as blight, stockpiling, and other similar issues.

  - Related Goals: Goal CD2, Goal CD3, Goal CD4, Goal CD6, Goal CD7, Goal CD8, Goal CD19, Goal HS5, Goal HS10, Goal HS11, Goal NR11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; federal and state funds, as available

- Time Frame: Update Zoning Ordinance by 2013

- **Policy CD6.1:** Valley Neighborhoods shall contain one or more Neighborhood Center, where medium- and higher-density residences, neighborhood commercial, and public services are focused.

- **Policy CD6.2:** Neighborhood Center activities, retail, and services should serve roughly 3,000 to 5,000 existing or planned residents in the surrounding neighborhood.

- **Policy CD6.3:** Neighborhood Centers should be developed on approximately 4 to 15 acres of land and sized according to the needs of the surrounding neighborhood.

- **Policy CD6.4:** Higher-density residential development and services in Neighborhood Centers should transition to less intense development at the edges of existing and planned Valley Neighborhoods.

- **Policy CD6.5:** Neighborhood Centers should provide for a pedestrian-friendly mix of uses and a range of housing types to meet the needs of the County's diverse households.

- **Policy CD6.6:** Neighborhood Centers shall be located and designed to provide convenient and safe bicycle, pedestrian, and transit access to and from surrounding neighborhoods.

- **Policy CD7.1:** The County will pursue funding for reinvestment along Olivehurst Avenue, McGowan Parkway, North Beale Road, Lindhurst Avenue, and other appropriate corridors.

- **Policy CD7.3:** The County will encourage – through entitlement, streamlining, flexibility in development standards, fee structures, and other incentives – infill development in vacant or underutilized sections of Mixed-Use Corridors.

- **Policy CD7.4:** Developments in Mixed-Use Corridors should have pedestrian-friendly property frontages with buildings built close to the street frontage.

- **Policy CD7.5:** Development in Mixed-Use Corridors should be designed so that building façades, street trees, and other landscaping are more visually prominent compared to surface parking lots and commercial signage.

- **Policy CD7.6:** The County will promote public plazas, outdoor dining, awnings, large windows, and other elements along property frontages that enhance pedestrian attractiveness and activity in Mixed-Use Corridors.

- **Policy CD7.7:** The County will seek funding to add drainage, bicycle, pedestrian, and transit facilities along Mixed-Use Corridors.

- **Policy CD7.8:** The County will seek funding to add street trees along Mixed-Use Corridors, particularly in areas that would shade sidewalks, parking areas, transit stops, and any public gathering places.

- **Action CD7.1: Corridor Planning.** The County will seek funding to support corridor planning efforts for McGowan Parkway, Olivehurst Avenue, Lindhurst Avenue, North Beale Road, the northern section of Feather River Boulevard, and surrounding areas. The County may also identify other Mixed-Use Corridors to address during buildout of the General Plan. Mixed-Use Corridor Plans would be designed to (Exhibit Community Development-10): Guide mixed-use, infill development consistent with the applicable land use designation/s and zoning district/s; Identify multimodal transportation improvements to support development; Describe public infrastructure and facilities needed to encourage private investment; and Identify incentives and streamlining that would induce private investment in these areas. The Plans would be structured to provide a mix and density of development with adequate transportation facilities such that walking, bicycling, or taking transit is viable for daily needs of the residents of surrounding neighborhoods. The County will pursue grant funding and regional partnerships to revitalize its Mixed-Use Corridors. The County will plan

and fund infrastructure designed to support increased density and intensity around future transit stops, near planned bicycle/pedestrian facilities, and in other targeted reinvestment areas.

- Related Goals: Goal CD4, Goal CD7, Goal CD8, Goal CD10, Goal CD11, Goal CD15, Goal CD19, Goal NR7, Goal HS5, Goal HS11
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; federal and state funds
- Time Frame: Ongoing, according to funding opportunities as they arise.

- **Policy CD8.1:** New developments should be designed to provide direct and convenient access to nearby parks, trails, commercial and public services, and transit stops.
- **Policy CD8.2:** Valley Neighborhood developments and residential portions of Employment Village areas shall provide relatively short block lengths and continuity of streets in order to facilitate convenient pedestrian, bicycle, and vehicle movement (Exhibit Community Development-11).
- **Policy CD8.3:** New cul-de-sacs are allowed within the Valley Neighborhoods and residential portions of Employment Village areas where they would not create a barrier for pedestrian and bicycle access or circulation between homes and destinations.
- **Policy CD8.4:** New buildings in Valley Neighborhoods and residential portions of Employment Village areas should, in general, be oriented toward, and placed close to frontage streets.
- **Policy CD8.5:** New developments shall be designed so that parking areas and garages are not the dominant visual element of site frontage.
- **Policy CD8.6:** County development standards will allow shallow residential front-yard setbacks to provide a human scale to development and allow for relatively larger, private back yards.
- **Policy CD8.7:** The County's development standards will allow alley-loaded garages.
- **Policy CD8.8:** New developments should use porches, stoops, windows, and other elements that provide "eyes on the street" onto yards, entrances, streets, and other public and semi-public places.
- **Policy CD8.9:** Fences and walls are discouraged along public travelways where they would present substantial barriers to casual surveillance or multi-modal travel.
- **Policy CD8.10:** New developments in the Valley Growth Boundary should provide streets lined with trees selected and located to provide a shade canopy at maturity.
- **Policy CD8.11:** Multi-family housing developments should be well connected to the surrounding neighborhood. Parking areas should be sized and broken up to avoid creating barriers to pedestrian and bicycle circulation.
- **Policy CD9.6:** The County will support planning for Rural Centers in foothill and mountain portions of the County that would provide a variety of activities and services needed or anticipated to be needed by the local population, including, but not limited to medical and educational services (Exhibit Community Development-12).

- **Policy CD9.9:** Rural Communities can provide clusters of housing constructed at the upper end of allowable density ranges in approved Rural Center plans, but in general should provide larger lots at the edges of the community that transition to the surrounding open space areas.

- **Policy CD9.11:** Rural Centers should be focused on County collector and arterial roads and highways, and particularly at "crossroads" locations central to the surrounding rural communities.

- **Policy CD10.1:** The County will encourage development that improves the balance between local jobs and housing, including new commercial, industrial, home-based businesses, business incubators, and other development that generates net revenues for the County and produces local jobs.

- **Policy CD10.3:** The County will phase growth with efficient infrastructure planning in order to keep fees as low as possible and coordinate with service providers to ensure the savings of this efficient infrastructure planning is passed on to occupants of employment-generating developments.

- **Policy CD10.5:** The County will support community and specific planning efforts following General Plan adoption that identify employment-generating uses and the housing and infrastructure that is needed to support the local workforce.

- **Policy CD10.6:** The County will encourage residential development that is priced, sized, and located to serve the needs of local employers and workers.

- **Policy CD10.7:** Large residential development projects should be phased or timed to occur concurrently with development projects that will provide employment in the County.

- **Action CD10.2: Land Use Monitoring**. The County will monitor progress toward the jobs-housing goal and, as necessary, amend the General Plan, Zoning Ordinance, Specific Plans, Community Plans, and other relevant plans and codes, as appropriate. Any amendments shall address imbalances between job and population growth, and may include revisions to allowable land uses or development standards, financial/regulatory incentives to accelerate the development of job-generating uses, and other actions.

    - Related Goals: Goal CD1, Goal CD4, Goal CD10
    - Agency/Department: Community Development and Services Agency and Economic Development Coordinator.
    - Funding Source: General Fund
    - Time Frame: Report on jobs-housing balance at least once per year to the Board of Supervisors.

- **Policy CD11.6:** The County will encourage rail spur development and increased use of local railroad routes for freight and passenger service, especially along the Highway 65 corridor and areas designated Employment Village.

- **Policy CD13.1:** Growth should be phased from developed areas and existing infrastructure outward in a logical, efficient manner, and in a way that avoids premature conversion of agricultural lands, changes in rural character, and unnecessary loss of other land-based natural resources.

- **Policy CD13.2:** The County will not induce growth by supporting the provision of services or infrastructure in areas that are not planned for development.

- **Policy CD13.3:** Unincorporated County development between present and 2030 will be focused within the Valley Growth Boundary and Rural Communities.

- **Policy CD13.4:** For areas designated Planning Reserve, allowable land use will be regulated according to the underlying land use designation unless the Board of Supervisors approves the following findings:

  - The subject project or plan proposed within the Planning Reserve Area promotes the goals and is consistent with the polices of the Community Development Element, Natural Resources Element, Housing Element, and Public Health & Safety Element of the General Plan; and

  - A Specific Plan or master plan meeting the County's requirements has been prepared; and

  - The subject project or plan is planned and designed to improve the match between local jobs and the local labor force, consistent with the goal of accommodating 0.8 total local jobs for every member of the labor force; and

  - The subject project or plan proposed within the Planning Reserve Area will directly provide substantial basic (exporting) employment development potential; or

  - The subject project or plan proposed within the Planning Reserve Area will construct water, wastewater, and drainage infrastructure that will serve future employment development, with the understanding that project applicants are repaid on a fair-share basis.

- **Policy CD14.6:** The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.

- **Policy CD14.7:** The County will support joint-use facilities, shared maintenance, and projects with other local service agencies and districts that are coordinated to provide enhanced public levels of service and/or long-term cost savings.

- **Policy CD14.8:** The County will support and encourage joint-use parks for school and community use, joint-use parks for recreational and drainage conveyance and detention, joint-use libraries for school and community use, and other appropriate joint-use facilities. The County will encourage the use of schools as community centers to provide a range of services.

- **Policy CD15.4:** The County's impact fees will be revised to consider cost efficiencies associated with compact, mixed-use, age- or income-restricted, and infill development.

- **Policy CD15.5:** New developments should incorporate water conservation techniques to reduce water demand, including the use of reclaimed water for landscaping and irrigation.

- **Policy CD15.9:** The County will require that new developments include safe and convenient access to nearby schools and work with the local school districts to ensure safe access.

- **Policy CD15.10:** The County will locate its own administrative facilities in downtown areas, along Mixed-Use corridors, or in Neighborhood Centers, whenever possible.

- **Action CD15.1: Revise Impact Fees**. The County will have prepared a Nexus Fee Study following the 2030 General Plan update to support revised development impact fees. One focus of this updated effort would be to ensure that compact development that makes efficient use of land has lower fees, where this approach to development is shown to have lower costs. The County will consider basing fees on an equivalent dwelling unit (EDU) basis, a per-capita basis, or per-acre basis, depending on the type of fee. The per-EDU, per-capita,

or per-acre approach would be considered rather than presenting fees on a flat-rate, per unit basis. Different types of dwelling units have different demands for services and different associated costs. The County will also consider reduced fees for infill development that has access to existing infrastructure with adequate capacity to serve that development.

- Related Goals: Goal CD1, Goal CD2, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD11, Goal CD12, Goal CD13, Goal CD14, Goal CD15, Goal CD16, Goal CD19, Goal NR12, Goal HS9
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund
- Time Frame: Nexus Fee Study and revised fees by 2014.

- **Policy CD16.1:** The County will maintain roadway levels of service that recognize differences between urban and rural environments and consideration of other community character, economic, and environmental policies of the County.

- **Policy CD16.5:** Where a new development would exceed the County's Level of Service policies, applicants shall first consider feasible revisions to the proposed development that would increase connectivity, enhance bicycle/pedestrian/transit access, provide additional travel demand management measures, and/or provide other revisions that would help to meet LOS standards by reducing vehicle miles traveled on roads exceeding the target LOS, prior to consideration of adding capacity to roadways and intersections.

- **Policy CD16.10:** The County will not use traffic level of service policies to analyze and mitigate CEQA impacts of new developments, but instead will use its level of service policies to assess fair-share funding of transportation facilities necessary to serve new projects.

- **Policy CD16.11:** The County will analyze and mitigate transportation impacts in CEQA documents according to their relative increase in vehicular travel demand.

- **Action CD16.2: Traffic Impact Fees**. Following adoption of the General Plan, the County will revise its Countywide Traffic Mitigation Fee Program based on a nexus study meeting state law requirements. The County will continue to require specific plans to identify funding for transportation facilities needed to serve development within each subject specific plan. The countywide program would focus on improvements needed to serve development within the unincorporated County not within a specific plan. The County's impact fee programs will be sensitive to elements of proposed projects that reduce their per-unit and per-employee trip generation rates. Centrally located projects, projects with high densities and employment intensities, located in areas with good transit service, located in mixed-use environments, for example, would be expected to have lower per-unit fees. Commercial traffic impact fees should take into account whether the commercial project is designed to attract drivers or oriented toward providing services to neighborhoods.

  - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD13, Goal HS5
  - Agency/Department: Public Works Department
  - Funding Source: Capital improvement funds
  - Time Frame: Update Countywide Traffic Mitigation Fee Program by 2014.

- **Policy CD17.1:** New developments shall be designed to facilitate safe and convenient travel by pedestrians, bicyclists, transit users, and drivers.

- **Policy CD17.2:** The County will coordinate approval of projects and plans with local transit providers to ensure that transit service is provided for work, shopping, school, and other types of trips within the Valley Growth Boundary.

- **Policy CD17.3:** The County will coordinate with Yuba College to provide housing and commercial services within walking and bicycling distance of the Linda campus and plan for convenient and safe pedestrian, bicycle, and transit options for students attending Yuba College.

- **Policy CD17.4:** The County will provide incentives to businesses that sponsor transit routes or create their own travel demand management programs, which may include, but are not limited, to streamlined permitting, and reduction of parking requirements.

- **Policy CD17.5:** The County will review and condition large employment generating projects, defined as new projects that could accommodate more than 50 full-time equivalent employees, according to the provisions of a County Travel Demand Management Ordinance.

- **Policy CD17.6:** New developments and specific plans shall analyze and mitigate impacts related to increased travel demand, as feasible and consistent with County General Plan policy.

- **Action CD17.1: Travel Demand Management Ordinance**. The County will develop a Travel Demand Management ordinance that provides options for large employers in mitigating the traffic related impacts of proposed projects. Reducing travel demand could be used in-lieu of providing traffic impact fees, where demonstrated to reduce trips, particularly during peak demand periods. Options for reducing travel demand in this ordinance could include, but are not limited to providing incentives for employees to commute via transit, bicycle, on foot, or by carpool, rather than the single-occupant vehicular commute. The County will periodically review the approaches provided under this ordinance to ensure their effectiveness and make revisions, as appropriate. The County may promote, as a part of this Ordinance, membership in the Yuba-Sutter Transportation Management Association.

    - Related Goals: Goal CD4, Goal HS5, Goal CD16, Goal CD17, Goal CD19
    - Agency/Department: Public Works
    - Funding Source: General Fund
    - Time Frame: Ongoing

- **Policy CD18.8:** The County will coordinate with Caltrans to implement context-sensitive improvements to State facilities that are keyed to local multi-modal transportation needs.

- **Policy CD19.1:** The County will promote mixed-use, infill development and redevelopment in order to reduce dependence on the private automobile.

- **Policy CD19.2:** New developments and specific plans with a buildout population greater than 2,000 dwelling units shall designate Neighborhood Centers, consistent with the policies of the General Plan.

- **Policy CD19.3:** New developments in the Valley Growth Boundary should provide focused nodes of population and employment density around transit stops, planned in coordination with Yuba-Sutter Transit, with a target of 9 units per acre of residential development, 20 employees per acre for nonresidential development, or 20 or more persons plus employees per acre for mixed-use development within ¼ mile of existing and planned transit stops.

- **Policy CD19.4:** The County will plan its investments and condition new developments to provide pedestrian, bicycle, and transit facilities designed to provide multi-modal connections within neighborhoods, within unincorporated communities, and between communities and cities in the County.

- **Policy CD19.5:** New developments shall include the construction or pro-rata funding of transportation infrastructure that may include a connected and integrated system of bicycle and pedestrian facilities, consistent with County standards.

- **Policy CD19.6:** New developments shall provide attractive streetscapes with street trees and sidewalks, planting strips, transit shelters, benches, and pedestrian-scale lighting, as required by County standards, as well as safe and frequent crosswalks along roadways, particularly in areas expected to have higher pedestrian traffic.

- **Policy CD19.7:** The County's improvement standards and street classification system will be designed to accommodate the full range of locally available travel modes. Intersection dimensions and turning radii should be minimized in areas where high pedestrian and bicycle activity is expected.

- **Policy CD19.8:** The County will seek funding for and, as feasible, install traffic-calming measures, such as planted medians, landscaped planter strips, landscaped traffic circles, and other designs in areas with excessive or high-speed traffic, as appropriate. The County will not support street closures, half closures, or other measures that limit connectivity as a way to calm traffic.

- **Policy CD19.9:** Secure bicycle parking shall be located at or near public buildings, business districts, parks, playgrounds, shopping centers, schools, transit terminals, bus stops, and other bicycle traffic generators.

- **Policy CD19.10:** The County will collaborate with Yuba-Sutter Transit, other regional transit providers, and local businesses to:

    - Ensure transit stops are accommodated in the context of new development and redevelopment.

    - Encourage local businesses to collaborate with transit providers to develop transit incentive programs for local employees.

    - Plan for and condition projects to provide for park-and-ride facilities; and

    - Support paratransit and other forms of transit service for those unable to use conventional transit service.

- **Policy CD19.11:** The County will support feasible opportunities to provide intra-county and inter-county passenger rail service for Yuba County residents and businesses, including support for expansion of AMTRAK passenger service and transit, bicycle, and pedestrian-friendly development around rail and transit stations.

- **Policy CD19.12:** The County will encourage programs that facilitate County employees' use of pedestrian, bicycle, and transit facilities to reach the workplace.

- **Action CD19.1: Pedestrian and Bikeway Master Planning.** The County will collaborate with other agencies during buildout of the General Plan to maintain pedestrian/bicycle master plans designed to meet growth needs. The master plan updates should be designed to improve bicycle and pedestrian connections between each city in the County, cities in adjacent counties, and each unincorporated community. Bicycle/pedestrian master planning efforts should be coordinated with local irrigation districts, special districts, and public agencies with easements and rights-of-way, the railroad, other property owners, and other agencies and interested parties to acquire and/or use existing easements and rights-of-way for development of off-street pedestrian and bicycle pathways. Master plans will focus on improving links between neighborhoods and important destinations, such as schools, shops, commercial services, public services, and recreational opportunities.

    - Related Goals: Goal CD15, Goal CD16, Goal CD17, Goal CD18, Goal CD19

- Agency/Department: Community Development and Services Agency
- Funding Source: Grant funding; regional funding
- Time Frame: Adopt Yuba-Sutter Bikeways Master Plan by 2013

- **Action CD19.2: Revise Development Code & Improvement Standards.** Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards, where necessary, to encourage a high level of pedestrian, bicycle, and transit-friendliness in new development. In general, the County will consider revisions to its codes and standards to reduce road widths, reduce the amount of paved areas of roadways and parking lots, reduce pedestrian crossing distances, and reduce curb radii at intersections, in consideration of pedestrian and bicycle comfort and safety, while also considering turning templates needed for service and emergency vehicles. The County will consider revisions to its codes and standards that require wider sidewalks in areas where higher pedestrian and bicycle activity would be anticipated.

  - Related Goals: Goal CD2, Goal CD8, Goal CD13, Goal CD15, Goal CD19, Goal CD 21, Goal HS3, Goal HS5, Goal HS8, Goal HS11, Goal NR7
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; grant funding
  - Time Frame: Revise zoning, development codes, and improvement standards by 2013

- **Action CD19.3: Transit Planning & Facilities Expansion.** During buildout of the General Plan, the County will proactively pursue funding for transit designed to meet the needs of Yuba County children, seniors, persons with disabilities, low-income, and all transit-dependent persons. The County will pursue air quality mitigation efforts that fund transit in coordination with Feather River Air Quality Management District and other interested agencies and nonprofits. The County will plan for, and implement expansion of transit service, as funding is available. Transit projects will be included in the County's capital improvements planning, as appropriate. The County will examine the need for intermodal transit transfer facilities as the transportation system expands. The County will proactively coordinate with Yuba-Sutter Transit on grant funding opportunities to fund transit expansion, consistent with the General Plan, with a focus on transit in areas with at least 20 persons plus employees per acre.

  - Related Goals: Goal CD13, Goal CD15, Goal CD16, Goal CD17, Goal CD18, Goal CD19, Goal HS5, Goal HS11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Grant funding
  - Time Frame: As funding is available

- **Policy CD20.1:** New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided, wherever feasible.

- **Policy CD20.2:** New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.

- **Policy CD20.3:** New developments shall connect with adjacent roadways and stubbed roads and shall provide frequent stubbed roadways in coordination with future planned development areas. Plans and projects shall connect to adjacent planned development areas and adjacent roadways at a minimum of 600-foot intervals. This minimum interval does not apply to development areas that are adjacent to existing or planned future limited-access highways, freeways, or expressways, or other areas where physical constraints would make this level of connectivity infeasible.

- **Policy CD20.4:** The County discourages the use of sound walls within neighborhoods. Traffic dispersal on a finely connected network of smaller roadways and other planning and site design solutions should be used instead of sound walls to address noise issues, to the greatest extent feasible.

- **Policy CD20.5:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.

- **Policy CD20.6:** The maximum allowable length of a cul-de-sac within the Valley Growth Boundary is 400 feet unless an exception is approved by the Community Development Director, in consultation with local emergency service providers. Where cul-de-sacs are allowed, they should incorporate bicycle/pedestrian through access, where feasible.

- **Policy CD20.7:** The County will seek frequent street and trail connections between new residential developments and established Valley Neighborhoods.

- **Policy CD20.8:** Speed bumps, which can inhibit connectivity and emergency access, are discouraged as a method of traffic calming.

- **Policy CD21.1:** New development projects should be designed to minimize the amount of on-site land required to meet parking, internal circulation, and delivery/loading needs.

- **Policy CD21.2:** New developments shall break up any proposed surface parking with landscaping and provide pedestrian routes from parking areas to building entrances.

- **Policy CD21.3:** Land uses with different parking needs that peak at different times of the day shall be encouraged to maximize opportunities to share parking.

- **Policy CD21.4:** In Rural Communities and the Valley Growth Boundary, parking areas for nonresidential uses should generally be focused to the side or rear of the facility being served.

- **Policy CD21.5:** New developments shall plant at least one tree for every four parking spaces or shall demonstrate adequate planting to provide at least 50 percent shading of parking areas at maturity.

- **Policy CD21.6:** The County's parking standards will be reduced or eliminated for infill and affordable housing projects in consideration of shared parking, on-street parking, and reduced travel demand attributable to these types of projects.

- **Policy CD21.7:** The County will consider adopting parking maximums in areas where high pedestrian and bicycle activity is expected and in areas around transit stops.

- **Action CD21.1: Revise Development Code & Improvement Standards**. Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards. The County will consider reduced surface parking in areas where pedestrians and bicyclists are concentrated and where transit service is planned. The County will consider strategies to optimize parking supply through shared parking;

use of on-street parking to meet demand of nearby properties; and other strategies. The County will consider establishing parking maximums, as well as minimums, as part of the development code and improvement standard revisions.

- Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD19, Goal CD21, Goal NR11, Goal HS3, Goal HS5
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; grant funding
- Time Frame: Revise zoning and development codes by 2013, revise improvement standards by 2014.

- **Policy NR1.5:** New developments shall provide for open space corridors consistent with the County's Parks Master Plan, and as needed to provide naturalized drainage and bike/pedestrian connections to nearby neighborhoods and destinations.
- **Policy NR1.8:** Local parks should be located central to the neighborhood they serve and designed to encourage pedestrian and bicycle access.
- **Policy NR1.12:** The County will incorporate trails along canals, transmission lines, and other easements and rights-of-way, where feasible, including trail development atop levees, so long as flood protection facilities are not adversely affected.
- **Policy NR1.13:** The County will communicate with neighboring counties and cities to explore connections with Yuba County's planned regional trail system.
- **Policy NR1.14:** Recreational facilities and open space should be designed to use recycled materials and green building techniques, minimize surface runoff, reduce water demand, provide habitat for native species, reduce the need for ongoing maintenance, and incorporate universal access principles to facilitate use by people of all ages and abilities. Active portions of parks that may generate light and noise should be located and designed to promote compatibility with the surrounding neighborhood.
- **Policy NR2.1:** The County will encourage urban greening projects that are designed to: improve air and water quality; protect natural resources; increase the attractiveness of affordable housing and existing developed areas; promote public health and the development of a healthy community; increase access to safe areas for physical activity; improve access to healthy, local food sources; improve and use existing infrastructure systems and other community resources; promote public health; reduce greenhouse gas emissions; and adapt to future climate conditions.
- **Policy NR2.2:** The County will encourage urban greening projects to be developed in underserved areas of Linda and Olivehurst, such as tree planting and maintenance, natural drainage systems improvements, ecological restoration, park development, renewable energy development and energy conservation projects, trail development, community gardens, and other appropriate project types.
- **Policy NR2.3:** Urban greening projects shall be designed to improve access to recreational spaces for existing residents and improve existing developed areas of the County.
- **Policy NR2.4:** Urban greening projects can also be designed to integrate open spaces in existing developed areas with open spaces designed to connect with planned development areas.

- **Policy NR2.5:** The County will coordinate with local and regional agencies on the identification of potential urban greening projects.

- **Policy NR2.6:** The County will invite local service agencies, residents, property owners, and other organizations and individuals to contribute ideas for local urban greening projects.

- **Action NR2.1: Urban Greening Projects**. During this General Plan time horizon, the County will identify and seek funding for urban greening projects that provide for a range of benefits, such as: reducing greenhouse gas emissions; decreasing air and water pollution; reducing the consumption of natural resources and energy; increasing the reliability of local water supplies, and/or Increasing adaptability to climate change. The County's urban greening projects will be designed to promote infill development and social equity, protect environmental resources, including agricultural lands, and encourage efficient development patterns. The County will coordinate with local school districts, local utility providers, cities, and other local and regional agencies, where appropriate, for Urban Greening Projects of mutual benefit. Urban greening projects will be identified that improve air and water quality, increase the attractiveness and availability of affordable housing, improve infrastructure systems or their function, and promote public health.

    - Related Goals: Goal NR1, Goal NR2, Goal CD8, Goal CD11, Goal CD12, Goal CD19
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Grant funding, as available
    - Time Frame: Throughout General Plan implementation, as funding is available.

- **Policy NR4.8:** The County will support carbon offset programs within Yuba County's forests, according to established protocols, and will support local carbon sequestration programs as an important aspect of local and regional greenhouse gas reduction requirements.

- **Action NR4.1: Carbon Sequestration Programs**. The County will proactively coordinate with local and regional agencies to investigate the feasibility of setting up a carbon offset program. The County will coordinate with the U.S. Forest Service, Bureau of Land Management, Yuba County Water Agency and water districts, and private timber companies and nonprofits to encourage local development of state-certified carbon sequestration projects. The County should encourage local application of regional greenhouse gas (GHG) offset fees, if feasible. If the County implements a GHG mitigation program tied to its GHG policies, local GHG fees collected for projects that do not achieve GHG efficiency policies on a per-capita, per-employee, or per-service population basis should be able to mitigate impacts using local, verified, GHG offset programs, if feasible.

    - Related Goals: Goal HS5, Goal NR4
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Mitigation fees, grant funding, other available funding sources
    - Time Frame: Implement program, if feasible, by 2020.

- **Policy NR7.1:** New developments shall address energy conservation in landscaping methods, materials, and design.

- **Policy NR7.2:** New buildings shall meet state standards for energy efficiency and should provide for renewable energy development and use, to the greatest extent feasible.

- **Policy NR7.3:** New developments should be designed to take advantage of passive or natural summer cooling and winter solar access.

- **Policy NR7.4:** New developments should provide street and lot orientation and lot dimensions that facilitate the use of solar energy.

- **Policy NR7.5:** New developments within the Valley Growth Boundary should orient the majority of buildings so that the longer axis of the building, also known as the ridge line, is oriented east-to-west, in order to maximize the potential for passive solar heating in the winter and to minimize heat gain from the afternoon summer sun.

- **Policy NR7.6:** New developments should consider energy conservation in building-site orientation and construction, with articulated windows, roof overhangs, appropriate insulation materials and techniques, and other architectural features that improve passive interior climate control.

- **Policy NR7.7:** Shade trees or other appropriate plantings should be used in new developments to protect buildings from unwanted solar gain in summer months. Using deciduous trees on the southern side of structures is encouraged to allow cooling in the summer and solar gain in winter. Short front setbacks are encouraged to allow shade trees planted in the public right-of-way to provide summertime shading.

- **Policy NR7.8:** New buildings should emphasize passive and natural lighting systems in architectural design to conserve electricity.

- **Policy NR7.9:** New developments proposing parking lots shall incorporate shade trees or shade structures to provide a minimum of 50 percent shading (at maturity, where trees are used).

- **Policy NR7.10:** The County will seek regional, state, and federal funding for making energy efficiency improvements to existing buildings on a voluntary basis with interested property owners and improvements the public realm.

- **Policy NR7.11:** The County and Yuba County Water Agency should explore opportunities related to future access to hydroelectric power, energy provision, strategic use of local energy resources for employment development, and other programs that have dual environmental-economic benefits.

- **Policy NR7.12:** The County will encourage financing programs designed to facilitate the installation of renewable energy systems.

- **Action NR7.13: Energy Efficiency Retrofits in Buildings and the Public Realm**. The County will proactively track and apply for regional, state, and federal funding to be used for energy efficiency improvements and renewable energy systems installation in existing buildings and the public realm (public rights-of-way, etc.). The County will seek regional, state, and federal funding for energy efficient systems, energy-efficient appliances, insulation, energy-efficient doors and windows, and other improvements. Any programs to assist property owners with making energy efficiency improvements to their buildings or other property shall be on a voluntary basis with interested property owners only. The County will update zoning and development standards, as well as permit processes to encourage the use of renewable energy systems that are sited and designed to ensure public safety and reduce aviation conflicts.

    - Related Goals: Goal NR2, Goal NR7, Goal CD15, Goal HS5
    - Agency/Department: Administrative Services
    - Funding Source: Grant funding, low-interest loans, impact fees, General Fund, and other appropriate funding sources
    - Time Frame: Ongoing, as funding is available

- **Policy NR12.4:** The County will encourage the use of recycled water and water from irrigation districts that is not treated to urban standards for outdoor irrigation, toilet flushing, fire hydrants; commercial and industrial

processes, carwashes, concrete batching, laundromats; dust control; parks, golf courses, and other landscaped areas, and other appropriate water-intensive uses.

- **Policy NR12.5:** New developments shall use climate appropriate landscaping in parks and open space, landscaping within new rights of way, yards, and other appropriate spaces, to the maximum extent feasible.

- **Policy NR12.6:** New developments shall include water conservation technologies such as low-flow toilets, efficient clothes washers, and efficient water-using industrial equipment, in accordance with state law.

- **Policy HS3.17:** New developments shall limit construction of new impervious surfaces, such as parking lots, travelways, vehicle waiting areas, and vehicle loading areas to the minimum amount needed to implement the subject project.

- **Policy HS5.1:** The County will guide land use change, direct investments, and apply its fees and programs to encourage more GHG-efficient development patterns, as feasible.

- **Policy HS5.2:** The County's regulations, investments, and fee programs should be structured to reduce net greenhouse gas emissions for new development in the unincorporated County consistent with the level of emissions needed per-capita or per service population to achieve the County's fair share of the state's emissions mandate.

- **Policy HS5.3:** Since transportation is the largest sector contributing to GHG emissions both locally and at the statewide level, the County will prioritize land use/transportation projects that manage travel demand by increasing housing/employment density, placing homes in closer proximity with destinations, increasing accessibility to transit, or otherwise decreasing vehicle miles traveled (per household, per capita, and/ or per employee).

- **Policy HS5.4:** The County will use an efficiency-based threshold (net emissions per-capita + employee) to evaluate proposed urban land uses, such as homes, retail, office, and other uses where the location, density, and mix of uses in the project area is important to the level of greenhouse gas generation.

- **Policy HS5.7:** The County will work collaboratively with state agencies and public/private utility providers charged with regulating building efficiency, mobile-source emissions controls, energy sources and uses, and other components of GHG emissions to create the opportunity for more GHG-efficient local development.

- **Policy HS5.8:** The County will actively pursue funding for GHG-efficient transportation systems and other needed infrastructure, building and public realm energy efficiency upgrades, renewable energy production, land use-transportation modeling, and other projects to reduce local greenhouse gas emissions.

- **Policy HS5.11:** Rural Community Plans should address strategies to diversify the local land use mix to meet more resident needs within each community, increase energy efficiency, shorten trips, and encourage non-vehicular travel, as feasible, to increase greenhouse gas efficiency.

- **Action HS5.1:** Greenhouse Gas Reduction Plan. The County will prepare and adopt a plan to reduce greenhouse gas (GHG) emissions. *[Please see the 2030 General Plan Public Health & Safety Element, under separate cover, for additional information on the County's Greenhouse Gas Reduction Plan.]*

    - Related Goals: Goal HS1, Goal HS2, Goal HS3, Goal HS5, Goal HS11, Goal CD2, Goal CD4, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD10, Goal CD15, Goal NR2, Goal NR7

    - Agency/Department: Community Development and Services Agency

- Funding Source: General fund, grant funding
- Time Frame: Adopt by 2013, monitoring reports and needed revisions in coordination with Housing Element updates and updates to the Regional Transportation Plan.

- **Action HS5.2: Assist Farmers to Reduce Greenhouse Gas Emissions.** The County will meet with local agricultural groups, such as the Yuba-Sutter Farm Bureau, UC Davis Extension representatives, local organic farming groups, and other public and private groups representing farmers to discuss the best available programs to reduce agricultural greenhouse gas (GHG) emissions. Methods to be explored may include, but are not limited to reduction strategies from changes in crop management, animal wastes, energy use, crop residue burning, livestock management, soil management, solid waste management, fertilizers, and off-road equipment. The County will seek funding, through carbon offsets or other sources, to provide incentives that encourage farmers to participate in consensus GHG reduction programs for agriculture.
  - Related Goals: Goal HS5, Goal NR3
  - Agency/Department: Community Development and Services Agency and Agricultural Commissioner, in collaboration with local farming groups.
  - Funding Source: General fund, grant funding, carbon offset fees
  - Time Frame: Ongoing, as funding is available.

Conclusion

Future development accommodated under the 2030 General Plan would generate emissions of ozone precursors, PM_{10}, and $PM_{2.5}$, primarily through the use of motor vehicles. The 2030 General Plan contains numerous goals, policies, and actions intended to reduce VMT and resulting air pollution, as well as air pollution from other sources. The County includes a wide range of policies designed to provide compact, mixed-use development and infill development. These types of development patterns place homes closer to destinations, reducing vehicle miles traveled and accommodating non-auto trips. The General Plan also aligns public infrastructure and facilities planning and fee structures with the County's approach for future development patterns. The County's policies also are designed to improve energy and water conservation and therefore reduce emissions associated with energy generation and water delivery. Policies and actions in the General Plan designed to address greenhouse gas emissions would also have the benefit of reducing criteria air pollutant emissions, in many cases. In summary, the General Plan addresses air quality in a comprehensive manner, with relevant policies and actions in each element. However, even with implementation of these goals, policies, and actions, operational emissions could exceed applicable emissions thresholds. Therefore, this impact would be **significant**.

Mitigation Measures

Implementation of the various 2030 General Plan goals, policies, and actions outlined above would reduce air pollutant emissions that affect both Yuba County and the region. However, the 2030 General Plan would still result in operational emissions in excess of threshold assumptions used by FRAQMD for relevant clean air plans.

Buildout of the 2030 General Plan would continue to conflict with current air quality planning efforts. Each significant source of air pollution from General Plan buildout was considered in drafting General Plan policies and actions. There are no additional policies, actions, or mitigation measures that are available to reduce long-term impacts associated with operational air pollutants within unincorporated Yuba County. This impact is considered **significant and unavoidable**.

IMPACT 4.3-2 **Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors.** *Emissions of Criteria Air Pollutants and precursors resulting from construction activities accommodated under the 2030 General Plan would exceed FRAQMD's significance thresholds of 25 lb/day for ROG and NO_X and 80 lb/day for PM_{10}. Policies in the 2030 General Plan would support compliance with FRAQMD-recommended standard construction mitigation practices. This would appreciably reduce construction-generated air pollutant emissions from buildout of the 2030 General Plan. However, due to the large amount of total development proposed over the buildout period, construction-generated emissions of criteria air pollutants and precursors is considered substantial, and could violate an ambient air quality standard, contribute substantially to an existing or predicted air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. As a result, this impact is considered* ***potentially significant****.*

Construction-related emissions are described as short-term or temporary in duration. Despite the finite period of construction related emissions for any particular project, these emissions have the potential to represent a significant air quality impact. General Plan buildout is dependent on economic, demographic, and other factors, many of which are not knowable at this time. However, individual projects brought forward under the 2030 General Plan would be reviewed by the County to ensure that development occurs in a logical manner consistent with policies in the General Plan, and that additional environmental review is conducted under CEQA, as needed.

Construction-related activities would result in emissions of criteria air pollutants (e.g., PM_{10}) and precursors (e.g., ROG and NO_X) from site preparation (e.g., excavation, grading, and clearing); exhaust from off-road equipment, material delivery vehicles, and worker commute vehicles; vehicle travel on paved and unpaved roads; and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings, and trenching for utility installation).

Emissions of ozone precursors are associated primarily with exhaust from off-road construction equipment. Worker commute trips and other construction-related activities also contribute to short-term increases in ozone precursors. Emissions of fugitive PM dust (e.g., PM_{10} and $PM_{2.5}$) are primarily associated with ground disturbing activities during site preparation (e.g., grading and excavation) and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and VMT on- and off-site.

Exhaust emissions from diesel equipment and worker commute trips also contribute to short-term increases in PM_{10} emissions, but to a much lesser extent (see Table 4.3-4). Construction-related activities would result primarily in project-generated emissions of fugitive PM_{10} dust from site preparation (e.g., excavation, grading, and clearing).

Construction-related emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ were modeled using the URBEMIS 2007 Version 9.2.4 computer program. URBEMIS is designed to model construction emissions for development projects and allows for the input of project-specific information. Detailed phasing and construction information (e.g., construction equipment type and number requirements, maximum daily acreage disturbed, number of workers, hours of operation) is not possible to determine at the General Plan level.

Modeling was performed assuming a 20-year planning horizon (2011 through the General Plan time horizon of 2030). It is assumed that 1/20 or roughly 5% of the proposed uses would be constructed during any given year over the 20-year time frame covered by the 2030 General Plan. This would represent approximately 3,500 acres of development per year over 20 years. Modeling was conducted for the year 2011 to represent worst-case conditions. If construction would not occur until future years, emission factors associated with off-road construction equipment would be lower due to the regulatory trend of more stringent emissions standards for engines. As older models of equipment are replaced by newer models with cleaner engines, fleetwide emission factors would decline.

Table 4.3-4
Summary of Modeled Construction-Related Emissions of Criteria Air Pollutants and Precursors—Buildout of the 2030 General Plan in the Worst-Case Year (2011)

	Emissions (lb/day)			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Construction Activities Associated with 2030 General Plan[1, 2]				
Grading	5	41	380	82
Building Construction	32	125	8	6
Asphalt Paving	28	78	4	4
Architectural Coatings	2,110	2	0.02	0.10
Trenching	4	33	2	2
Total Unmitigated Worst-case Daily Emissions (GPU)	**2,178**	**279**	**394**	**92**
FRAQMD Significance Threshold	25	25	80	-
Total Mitigated Daily Emissions (GPU)[3]	**1,634**	**210**	**79**	**n/a**

Notes: lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter ROG = reactive organic gases; FRAQMD = Feather River Air Quality Management District

Emissions totals may not sum exactly due to rounding.

[1] No emissions were modeled for demolition activities. Existing land uses to be demolished are unknown at this time.

[2] It was assumed that, on average, 3,495.95 acres would be developed annually and a maximum of 19 acres/day would be actively disturbed associated with construction of the 2030 General Plan.

[4] Implementation of FRAQMD-recommended construction mitigation measures was assumed to result in a 5%, 20% and 75% reduction in ROG, NO_X, and PM_{10}, respectively.

Refer to Appendix B for detailed input parameters and modeling results.

Source: Modeling performed by AECOM in 2010

Table 4.3-4 summarizes the estimated construction-related emissions of criteria air pollutants and ozone precursors from site preparation (e.g., grading) and building construction activities that could be accommodated under buildout of the 2030 General Plan. Construction-related air quality impacts were determined by comparing these modeling results with applicable FRAQMD significance thresholds. Refer to Appendix B for detailed modeling input parameters and results.

As summarized in Table 4.3-4, construction-related activities associated with the buildout of the reasonable worst-case year (2011) would result in annual unmitigated emissions of approximately 2,178 lbs/day of ROG, 279 lbs/day of NO_X, 394 lbs/day of PM_{10}, and 92 lbs/day of $PM_{2.5}$. FRAQMD does not have a threshold for emissions of $PM_{2.5}$, which are listed for informational purposes only, and are a subset of PM_{10}.

Based on the modeling conducted, construction-related activities associated with buildout of the 2030 General Plan would result in emissions of ROG, NO_X, and PM_{10} that exceed FRAQMD's significance thresholds. Taken together, or individually, buildout of land uses designated under the proposed 2030 General Plan could result in construction-related emissions of criteria air pollutants and precursors that could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. The 2030 General Plan includes policies designed to reduce construction-related impacts, as summarized below.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD5.5:** The County's development standards will allow narrow lots, narrow driveways, alleyway access, zero lot line housing, and other compact housing configurations in Valley Neighborhoods.

- **Policy CD14.7:** The County will support joint-use facilities, shared maintenance, and projects with other local service agencies and districts that are coordinated to provide enhanced public levels of service and/or long-term cost savings.

- **Policy CD14.8:** The County will support and encourage joint-use parks for school and community use, joint-use parks for recreational and drainage conveyance and detention, joint-use libraries for school and community use, and other appropriate joint-use facilities. The County will encourage the use of schools as community centers to provide a range of services.

- **Policy CD21.3:** Land uses with different parking needs that peak at different times of the day should maximize opportunities to share parking, where feasible.

- **Policy CD21.3:** Land uses with different parking needs that peak at different times of the day shall be encouraged to maximize opportunities to share parking.

- **Policy CD21.6:** The County's parking standards will be reduced or eliminated for infill and affordable housing projects in consideration of shared parking, on-street parking, and reduced travel demand attributable to these types of projects.

- **Policy CD21.7:** The County will consider adopting parking maximums in areas where high pedestrian and bicycle activity is expected and in areas around transit stops.

- **Action CD21.1: Revise Development Code & Improvement Standards**. Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards. The County will consider reduced surface parking in areas where pedestrians and bicyclists are concentrated and where transit service is planned. The County will consider strategies to optimize parking supply through shared parking; use of on-street parking to meet demand of nearby properties; and other strategies. The County will consider establishing parking maximums, as well as minimums, as part of the development code and improvement standard revisions.

    - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD19, Goal CD21, Goal NR11, Goal HS3, Goal HS5
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund; grant funding
    - Time Frame: Revise zoning and development codes by 2013, revise improvement standards by 2014

- **Policy NR1.14:** Recreational facilities and open space should be designed to use recycled materials and green building techniques, minimize surface runoff, reduce water demand, provide habitat for native species, reduce the need for ongoing maintenance, and incorporate universal access principles to facilitate use by people of all ages and abilities. Active portions of parks that may generate light and noise should be located and designed to promote compatibility with the surrounding neighborhood.

- **Policy NR7.1:** New developments shall address energy conservation in landscaping methods, materials, and design.

- **Policy NR7.2:** New buildings shall meet state standards for energy efficiency and should provide for renewable energy development and use, to the greatest extent feasible.

- **Policy HS3.17:** New developments shall limit construction of new impervious surfaces, such as parking lots, travelways, vehicle waiting areas, and vehicle loading areas to the minimum amount needed to implement the subject project.

- **Policy HS6.1:** New developments shall implement emission control measures recommended by the Feather River Air Quality Management District for construction, grading, excavation, and demolition, to the maximum extent feasible.

Conclusion

The General Plan provides policies intended to reduce construction related emissions. The General Plan includes policies that encourage joint-use of facilities, thereby reducing the amount of construction and land disturbance that would be required compared to a situation where each public facility was separately constructed. The General Plan also includes policies designed to reduce the amount of parking, vehicle access, and roadway construction, which would reduce both construction and operational emissions compared to the continued application of 1996 General Plan policies, which does not include this policy approach.

However, the incorporation of FRAQMD-recommended control measures cannot be analyzed in detail for the large and diverse set of projects that could be accommodated under the General Plan. It is possible that emission control measures would be applied for certain larger projects, but emissions would still exceed relevant significance thresholds. As a result, construction-related emissions of fugitive dust could violate an air quality standard, contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations.

Because of the large amount of development and potential for simultaneous construction of multiple sites, the nonattainment status, and modeled emissions that exceed applicable thresholds (Table 4.3-4), implementation of the 2030 General Plan could have **significant** construction-related impacts.

Mitigation Measures

FRAQMD standard mitigation typically would include fugitive dust reduction measures. Open burning of vegetative waste (natural plant growth wastes) or other burn materials (trash, demolition debris) would normally be prohibited. FRAMQMD would not normally regulate construction equipment exhaust emissions, fuels, and idling time. Instead of fuel-powered equipment, existing power sources (e.g., power poles) or clean fuel generators would be used wherever feasible. Implementation of FRAQMD recommended mitigation measures would reduce short-term, construction-related emissions.

However, the County cannot demonstrate at this time that these measures would reduce impacts to a less-than-significant level. It is possible that construction-related emissions of criteria air pollutants and precursors could still exceed significance thresholds. Such emissions could violate or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations. The County's policies require compliance with standard mitigation measures recommended by the local air quality management district. Beyond this and other County policies and actions, there are no additional feasible mitigation measures available to address this significant impact. This impact is considered **significant and unavoidable**.

IMPACT 4.3-3 Generation of Long-Term, Operational, Local Mobile-Source Emissions of CO. *Local mobile-source emissions of CO would not be expected to substantially contribute to emissions concentrations that would exceed the 1-hour ambient air quality standard of 20 ppm or the 8-hour standard of 9 ppm. As a result, this impact would be less than significant.*

The concentration of CO is a direct function of motor vehicle activity, particularly during periods of peak travel demand, and of meteorological conditions. Under specific meteorological conditions, CO concentrations may reach unhealthy levels with respect to local sensitive land uses (e.g., residential areas, schools, and hospitals). The California Department of Transportation (Caltrans) has established preliminary screening criteria for long-term, local mobile-source emissions of CO. If these criteria are not violated with implementation of the 2030 General Plan, it is unlikely that such CO emissions would result in, or substantially contribute to emissions concentrations exceeding the 1-hour ambient air quality standard of 20 ppm or the 8-hour standard of 9 ppm. Caltrans' preliminary screening criteria for significance are as follows (Garza et al 1997):

- A traffic study for the project indicates that the peak-hour Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to an unacceptable LOS (typically LOS E or F, with A being best and F being worst); or,

- A traffic study indicates that the project will substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where delay would increase by 10 seconds or more when project-generated traffic is included.

According to the traffic analysis prepared for the 2030 General Plan (see Section 4.13, "Traffic and Transportation"), signalized roadway intersections could be reduced to LOS E or LOS F from LOS A–D under buildout (2030) conditions for both a.m. and p.m. peak hours.

Worst-Case Effects at a Roadway Intersection

The intersection of North Beale Road and Lindhurst Avenue is expected to be the most impacted of the intersections analyzed therefore it was chosen to be modeled. The intersection of Erle Road and Lindhurst Avenue would deteriorate from LOS D under existing conditions to LOS E during the P.M. peak hour under the 2030 General Plan scenario. In addition the intersection of North Beale Road and Lindhurst Avenue would deteriorate to LOS E during the P.M. peak hour under the 2030 General Plan scenario.

CO Modeling

Because local mobile-source CO impacts did not meet the screening-level criteria identified by Caltrans, CO concentrations were modeled using the California Line Source Dispersion Model with emission factors from the EMFAC 2007 computer model. Modeling was conducted in accordance with the University of California, Davis Transportation Project-Level Carbon Monoxide Protocol (Garza, et al. 1997). Background (ambient) CO concentrations were obtained from the ARB, and were identified as the highest concentrations recorded during the last three years at the monitoring station nearest the project site. However, it is expected that background CO concentrations in the year 2030 would be lower than those recorded during 2006, due to continuous improvement in CO emissions control technology over time, making this analysis conservative. According to the data summarized in Table 4.3-1, the 1- and 8-hour background CO concentrations for the year 2030 were estimated to be 3.1 ppm and 2.3 ppm, respectively.

The maximum project-generated 1- hour CO concentration from p.m. peak hour daily trips at the modeled intersection was calculated to be 2.2 ppm, and the 8-hour concentration was estimated at 1.5 ppm. Total 1-hour and 8-hour estimated CO concentrations associated with 2030 General Plan buildout conditions would be approximately 5.3 and 4.1 ppm, respectively.

North Beale Road and Lindhurst Avenue would be among the busiest intersections in the Yuba County. Other delayed intersections would be expected to have similar or lower CO concentrations at buildout of the 2030 General Plan. The proposed project would not be anticipated to result in or contribute to local CO concentrations that exceed the California 1-hour or 8-hour ambient air quality standards of 20 ppm or 9 ppm, respectively. As a result, the impact of long-term operational emissions of local CO associated with the 2030 General Plan is considered **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.3-4 **Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants.** *Implementation of the 2030 General Plan would reduce the potential for exposure of sensitive land uses to substantial concentrations of TACs. This impact is considered* ***potentially significant.***

Emissions of TACs during project construction consistent with the 2030 General Plan (e.g., emissions from on-site heavy-duty diesel equipment) and from project operation under the 2030 General Plan (e.g., emissions from both on-site and off-site area, stationary, and mobile sources) are discussed and their resulting levels of TAC exposure of sensitive receptors are analyzed separately below.

Construction-Related Emissions

Construction-related activities would result in short-term emissions of diesel PM from the exhaust of off-road heavy-duty diesel equipment for site preparation (e.g., excavation, grading, and clearing); paving; application of architectural coatings; and other miscellaneous activities. Diesel PM was identified as a TAC by ARB in 1998. The potential cancer risk from the inhalation of diesel PM, as discussed below, outweighs the potential for all other health impacts (ARB 2003).

Emissions from construction equipment would be reduced over the period of buildout of the 2030 General Plan. This is important, in part, because existing regulations would have beneficial impacts related to TAC exposure over time. In January 2001, EPA promulgated a final rule to reduce emissions standards for heavy-duty diesel engines in 2007 and subsequent model years. These emissions standards represent a 90% reduction in NO_X emissions, 72% reduction of nonmethane hydrocarbon emissions, and 90% reduction of PM emissions in comparison to the emissions standards for the 2004 model year. In December 2004, ARB adopted a fourth phase of emission standards (Tier 4) in the Clean Air Non-road Diesel Rule that are nearly identical to those finalized by EPA on May 11, 2004. As such, engine manufacturers are now required to meet after-treatment-based exhaust standards for NO_X and PM starting in 2011 that are more than 90% lower than current levels, putting emissions from off-road engines virtually on par with those from on-road heavy-duty diesel engines.

TAC Exposure to Construction-Related Emissions

The dose to which receptors are exposed to TAC emission levels that exceed applicable standards is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time.

According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period (Salinas, pers. comm., 2004). A long exposure period is used for health risk assessments due to the exposure periods associated with health risk. Because the use of off-road heavy-duty diesel equipment would be temporary and intermittent, and because of the highly dispersive properties of diesel PM (Zhu et al. 2002), construction-related TAC emissions are not anticipated to expose sensitive receptors to substantial concentrations of TACs.

Operational Emissions

Stationary Sources

The 2030 General Plan anticipates construction of a variety of industrial, commercial, and other land uses that could represent new stationary sources. Under general plans, it is not possible to list out each type of new stationary sources to describe TAC exposure for any given project or location within the unincorporated area without substantial speculation.

However, it is possible that projects developed under the 2030 General Plan would include stationary sources of TACs, such as dry-cleaning establishments, gasoline-dispensing facilities, and diesel-fueled backup generators. These types of stationary sources, in addition to any other stationary sources that may emit TACs, would be subject to FRAQMD rules and regulations.

Thus, as discussed above, FRAQMD would analyze such sources, using health risk assessments, where necessary, based on the source's potential to emit TACs. If it is determined that the sources would emit TACs in excess of FRAQMD's applicable significance threshold, MACT or BACT would be implemented to reduce emissions. If the implementation of MACT or BACT would not reduce the risk below the applicable threshold, FRAQMD would deny the required permit. As a result, given required compliance with applicable rules and regulations, operation of stationary sources would not result in the exposure of sensitive receptors to TACs at levels exceeding FRAQMD significance thresholds.

According to ARB, there are 19 major existing stationary sources of TACs in Yuba County (ARB 2010e). These stationary sources are permitted and regulated to prevent new land use compatibility conflicts. Therefore, the County does not anticipate compatibility related TAC impacts of existing or proposed land uses with major existing sources of TAC emissions.

Mobile Sources

Mobile sources of TACs would be associated primarily with the operation of on-road heavy-duty diesel trucks used for any on-site commercial/industrial activities (e.g., unloading/loading). According to the ARB guidance document *Air Quality and Land Use Handbook: A Community Health Perspective*, ARB recommends avoiding the siting of new commercial trucking facilities that accommodate more than 100 trucks per day, or 40 trucks equipped with transportation refrigeration units (TRUs), within 1,000 feet of sensitive receptors (e.g., residences) (ARB 2005). But, the ARB guidance document is advisory, not regulatory. See below for rail traffic discussion. Aircraft operations would also contribute TACs and this issue is addressed by 2030 General Plan policies and actions (see below).

Operational activities that require the use of diesel-fueled vehicles for extended periods, such as commercial trucking facilities or delivery/distribution areas, may generate diesel PM emissions that could expose sensitive receptors to diesel PM emissions. Although commercial and industrial uses that would be developed under the 2030 General Plan have not been specifically identified, it is likely that commercial uses developed under the General Plan would have tenants that would require large delivery and shipping trucks that use diesel fuel. The diesel exhaust PM emissions generated by these uses would be produced primarily at single locations on a regular basis (e.g., loading dock areas). Idling trucks, including TRUs, increase diesel PM levels at these locations. Occupants of nearby existing and proposed residences could be exposed to diesel exhaust PM emissions on a reoccurring basis.

ARB has adopted an idling restriction ATCM for large commercial diesel-powered vehicles, which became effective February 1, 2005. In accordance with this measure, affected vehicles are required to limit idling to no longer than 5 minutes, under most circumstances. ARB is currently evaluating additional ATCMs intended to further reduce TACs associated with commercial operations, including a similar requirement to limit idling of smaller diesel-powered commercial vehicles. In addition, the 2030 General Plan contains goals, policies, and

actions (see below) designed to minimize exposure of sensitive receptors to concentrations of TACs from mobile sources.

The 2030 General Plan includes a mix of land uses, including commercial, industrial, and residential uses. The ARB guidance document *Air Quality and Land Use Handbook: A Community Health Perspective* recommends avoiding the placement of new sensitive land uses (e.g., residences and schools) within 500 feet of major freeways or high traffic roads (those freeways or urban roads with 100,000+ vehicles per day or rural roads with 50,000+ vehicles per day). There are six road segments can be considered high traffic freeways or urban roads and 10 segments that can be considered major rural roads under the full buildout scenario. For this discussion, the use of major freeway, urban road and rural road is solely dependent on daily traffic volumes as trying to predict future populations around the various roadway segments would be beyond the scope of this analysis. It is possible that sensitive receptors locating adjacent to roadways that, under buildout conditions, could have high traffic volumes would be exposed to substantial pollutant concentrations.The 2030 General Plan includes policies designed to reduce this impact.

Rail Traffic Sources

There are two railroad lines that operate in Yuba County carrying both freight and Amtrak trains. Union Pacific Railroad (UPRR) operates both, the Valley Line and the UPRR/Burlington Northern Santa Fe (BNSF) line.

The Valley Line, located in western Yuba County, extends from where SR 70 crosses the Bear River to the north and crosses the Feather River into Sutter County and the UPRR/BNSF line extends from Wheatland adjacent to SR 65 north into Butte County. Today, the Valley Line operates approximately 19 daily train trips through Yuba County, which pass near Linda, and Olivehurst, and the Plumas Lake area. The UPRR/BNSF rail line operates approximately 48 daily train trips through Yuba County, which pass near Wheatland, Linda, and Olivehurst (Lund, pers. comm., 2007). Since diesel engines are used along the railroad corridors, there is the potential to expose sensitive receptors to substantial pollutant concentrations if new sensitive receptors locate in areas adjacent to railroad lines with substantial traffic and railroad traffic increases in the future.

For TAC emissions, this analysis evaluates the impact of operations along existing railroad lines relative to proposed sensitive receptors. While the California Air Resources Land Use Handbook provides guidance for exposure of sensitive receptors to large-volume roadways, the same quantitative guidance is not available for railroads as of the writing of this document. Therefore, this section describes impacts related to exposure of sensitive receptors to TACs by using conservative assumptions and methods to translate the guidance on high-volume roadways to railroad lines.

The number of daily freight and passenger trains passing through the County was determined using information from Amtrak and noise monitoring data. Freight trains are assumed to be a mix of Union Pacific Railroad and Burlington Northern Santa Fe Railroad. The average horsepower for a large line haul locomotive for UP engines is 4,000 and for BNSF engines is 4,256 (Sangkapichai 2008). The average horse power for Amtrak locomotives is assumed to be 3,000.

Heavy-duty trucks were used as a proxy emission source to represent railroad TAC emissions. Emissions from rail traffic were converted to heavy-duty truck volumes, which were then converted to typical roadway traffic for comparison with air district screening thresholds for high-volume roadways. The EPA Office of Transportation and Air Quality released “Emission Factors for Locomotives” in April of 2009 (EPA 2009a). The EPA locomotive emissions factors were developed in a manner that captures the national fleet percentages of the different tier engines. Future emissions factors are lower than current since, with existing regulations, a greater percentage of the fleet will be higher tier (cleaner) engines in the future. Based on the EPA locomotive emissions factors, line haul locomotives in 2011 produce 4.4 grams gallon of fuel consumed (g/gal) of PM_{10} and commuter locomotives for 2011 produce 4.5 g/gal of PM_{10} (EPA 2009a).

Emissions factors for trucks were calculated using the EMFAC 2007 computer model in units of grams of PM_{10} per truck category. Truck categories used in this analysis were Light Heavy Duty Trucks (T4) (LLHDT), Light Heavy Duty Trucks (T5) (LHDT), Medium Heavy Duty Trucks (MHDT), and Heavy Heavy Duty Trucks (HHDT) The percent representation of each truck type was calculated for the total vehicle fleet and for the truck-only fleet.

The emissions estimate for railroad traffic was then used to determine the number of trucks that would be required to produce the same emissions as the railroad traffic in the County. It would take approximately 2,383 daily heavy duty truck (HDT) trips to produce approximately the same amount of emissions as the railroad traffic within the County. This method determined that the rail line activity in the County would be equivalent to a road with approximately 56,393 vehicle trips per day.

Because of the absence of a quantified screening threshold for rail lines, the proposed rail activity was converted to heavy-duty truck trips as a surrogate emissions source. The ARB Land Use Handbook discusses land use recommendations for roadways with 100,000 vehicles per day.

With the calculations described above and in the "Methodology" section of this section used to convert rail traffic to the equivalent high-volume roadway traffic volumes, exposure to potential TAC emissions along the railroad is considered **less than significant** since it is below levels identified by ARB for land use and roadway compatibility.

In October 2004, ARB released a study that provided a health risk characterization and assessment of the diesel PM from locomotives at the J. R. Davis Rail Yard in Roseville, California (ARB 2004). The study indicated that locomotive-related activities at the rail yard would result in the exposure of sensitive receptors near the yard to a cancer risk level in excess of the applicable threshold. However, the rail lines in Yuba County are used specifically for passenger and freight service and experience extremely light daily rail traffic relative to the traffic occurring at the rail yard in Roseville. In addition, unlike the locomotives in Yuba County, the locomotives at the Roseville rail yard undergo engine testing, and they idle for extended periods of time, so emissions are higher and persist in one localized area for greater amounts of time. The rail yard study describes conditions that are unlike those associated with the rail line through Yuba County, which would not expose sensitive receptors to diesel PM concentrations that would result in a health risk in excess of the threshold.

Should additional railroad lines or spurs become developed in Yuba County, it is anticipated that these would be freight rail lines with similar characteristics of existing railroad lines. Although the General Plan allows a broad range of land uses, the County does not currently anticipate development of any railyards under the 2030 General Plan.

Naturally Occurring Asbestos

Asbestos is a naturally occurring mineral in California that is a known carcinogen (U.S. EPA 1993). Yuba County is known to contain serpentine or ultramafic rock that is common to foothill areas of the region. According to the California Geologic Survey, naturally occurring asbestos may be present in Yuba County (DOC 2000). It is possible that construction of projects accommodated under the 2030 General Plan could expose humans to naturally occurring asbestos.

However, construction within Yuba County must identify if it is operating in serpentine, or ultramafic rock and must comply with requirements outlined in the ARB Asbestos Air Toxic Control Measures for Construction, Grading, Quarrying, and Surface Mining Operations or for Surfacing Applications. This measure is designed to reduce potential exposure to naturally occurring asbestos. This Air Toxic Control Measure is incorporated in its entirety into the Rules and Regulations of the Feather River Air Quality Management District (Rule 11.1).

Requirements of this Air Toxic Control Measure include: 1) an asbestos dust mitigation plan which must be approved by the local air district before construction begins, and must be implemented at the beginning and

maintained throughout the duration of construction and grading activities, and 2) an asbestos health and safety program (if required under CCR, Title 8, Section 1529(4) Asbestos). Asbestos mitigation plans, per the California Code of Regulations, Title 17, Section 93105(e)(2, 4), shall specify dust mitigation practices that are sufficient to ensure that no equipment or operation emits dust that is visible crossing property lines, and shall include track-out prevention and control measures, control measures for disturbed surface area and storage piles that would remain inactive for more than seven days, post-construction stabilization, and asbestos monitoring, if required. Examples of these may include, but shall not be limited to surface wetting, surface covering, surface crusting, application of chemical dust suppressants or stabilizers, installation of wind barriers, construction area speed limits, truck spillage controls, and establishment of vegetative covers. In addition, the asbestos dust mitigation plan must include record-keeping and reporting requirements that document the results of any air monitoring, geologic evaluation, and asbestos bulk sampling. The asbestos health and safety program must be implemented if permissible exposure limits for airborne asbestos are found to be exceeded within a project site. Implementation is required to include applicable construction employee protection measures as defined under the California Code of Regulations, Title 8, Section 1529(g).

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes policies and actions designed to reduce exposure of sensitive receptors to concentrations of TACs and help reduce future land use incompatibilities of sources that could potentially emit TACs and exposure of sensitive uses to harmful air pollutants:

- **Policy HS7.4:** New residential developments proposed in areas adjacent to ongoing agriculture shall provide buffers or other design features adequate to protect residents from harmful effects of agricultural chemical use.
- **Policy HS7.5:** The County will support compliance with state law regarding the location of school sites and sources of hazardous air emissions to ensure against endangerment of public health.
- **Policy CD3.1:** Commercial and industrial developments shall be located, buffered, or otherwise designed to avoid significant noise and air quality impacts.
- **Policy CD3.2:** New residential projects near railroads and highways should provide multi-use open space buffers designed to avoid adverse air quality, noise, vibration, light, and glare issues.
- **Policy CD3.3:** New residential development shall provide multi-use buffers and site plans designed to avoid pressure to convert long-term planned agriculture, mining, and forestry lands to urban development.
- **Policy CD3.4:** The County will use performance-based standards in mixed-use areas to ensure that important aspects of compatibility (air, noise, vibration, heavy truck traffic, light, glare) are addressed without impeding mixed-use development.
- **Policy CD3.5:** Prior to approval, new developments are required to demonstrate consistency with established standards for setbacks from landfills, airports, sewage treatment plants, and other similar uses, as applicable.
- **Action CD3.1: Compatibility Review and Conditioning of Projects and Plans.** The County will review projects against policies in this General Plan and analysis in the General Plan Environmental Impact Report (EIR) to reduce noise and air quality impacts. The County Zoning Ordinance and development standards should identify design and performance standards for noise, light, glare, air pollution, and other relevant issues. The County will use the General Plan to determine the adequacy of proposed buffering between residential land uses, highways, railroads, airports, industries, mining operations, agricultural operations, and other potentially incompatible uses. The County will condition projects, as appropriate, to provide consistency with this General Plan and the General Plan EIR. The County will balance its goals for infill and mixed-use

development with policies and standards for noise, vibration, light and glare, and other issues of compatibility.

- Related Goals: Goal CD3, Goal NR11, Goal HS5, Goal HS10, Goal HS11
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; applicant funding for project-specific work
- Time Frame: Ongoing

- **Action CD3.2: Open Space Buffers along State Highways and Railroads.** The County will seek funding for design and implementation of air quality, noise, and visual buffers along regional transportation routes. The County will coordinate with regional transportation agencies and drainage providers to find opportunities to use these same buffer areas for natural drainage conveyance, multi-modal transportation routes, visual buffering, community gardens, and for other useful public purposes.

  - Related Goals: Goal CD2, Goal CD3, Goal CD 19, Goal NR11, Goal HS5, Goal HS10, Goal HS11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; federal and state funds; other funding, as appropriate.
  - Time Frame: Ongoing, as funding opportunities arise.

- **Policy HS6.1:** New developments shall implement emission control measures recommended by the Feather River Air Quality Management District for construction, grading, excavation, and demolition, to the maximum extent feasible.

Conclusion

With respect to potential exposure to asbestos, projects that have the potential to create exposure to asbestos are required through existing regulations to develop and implement an asbestos dust mitigation plan sufficient to ensure that no equipment or operation emits dust that is visible crossing property. Construction employee protection measures are also required. Compliance with existing regulations would ensure a less-than-significant impact.

The General Plan includes policies that would require buffers between sensitive land uses and sources of TACs. The General Plan anticipates that the review and conditioning of projects, including buffering and other measures to promote compatibility of adjacent land uses, would be formalized through updates to County Codes. Despite the implementation of 2030 General Plan policies and actions, existing regulations, it is possible that sensitive land uses may be exposed to substantial TAC concentrations. Therefore, the impact is considered **significant**.

Mitigation Measures

There are no feasible mitigation measures available to address this impact beyond existing regulations and General Plan policies and programs. Therefore, the impact is considered **significant and unavoidable**.

IMPACT 4.3-5 Exposure of Sensitive Receptors to Emissions of Odors. *Implementation of the 2030 General Plan could result in the exposure of sensitive receptors to emissions of objectionable odors. As a result, this impact is considered potentially significant.*

The human response to odors is subjective, and sensitivity to odors varies greatly among the public. Minor sources of odors, such as exhaust from mobile sources, garbage collection areas, and charbroilers associated with commercial uses, are not typically associated with numerous odor complaints, but are known to have some temporary, less concentrated odorous emissions. Major and minor sources of odors are discussed separately below.

Major Sources of Odors

The following land use types are widely considered major sources of odors: wastewater treatment and pumping facilities, chemical manufacturing facilities, sanitary landfills, fiberglass manufacturing facilities, transfer stations, painting/coating operations (e.g., auto body shops), composting facilities, food processing facilities, confined animal facilities, asphalt batch plants, rendering plants, metal smelting plants, and coffee roasters. This list is meant not to be entirely inclusive, but to act as general guidance. Odor sources in Yuba County would be expected to include cooking and food processing facilities, agricultural uses, other industrial sources, wastewater treatment plants, and other sources. The County has anticipated the possibility that sensitive receptors may be exposed to sources of odor during implementation of the General Plan.

Relevant Policies and Actions of the 2030 General Plan

Though odor impacts are subjective, it is possible that land use conflicts between major odor sources and future sensitive receptors could occur. However, the 2030 General Plan includes policies designed to minimize land use incompatibilities, including those that may arise related to odors.

- **Policy HS7.4:** New residential developments proposed in areas adjacent to ongoing agriculture shall provide buffers or other design features adequate to protect residents from harmful effects of agricultural chemical use.
- **Policy CD3.1:** Commercial and industrial developments shall be located, buffered, or otherwise designed to avoid significant noise and air quality impacts.
- **Policy CD3.3:** New residential development shall provide multi-use buffers and site plans designed to avoid pressure to convert long-term planned agriculture, mining, and forestry lands to urban development.
- **Policy CD3.4:** The County will use performance-based standards in mixed-use areas to ensure that important aspects of compatibility (air, noise, vibration, heavy truck traffic, light, glare) are addressed without impeding mixed-use development.
- **Policy CD3.5:** Prior to approval, new developments are required to demonstrate consistency with established standards for setbacks from landfills, airports, sewage treatment plants, and other similar uses, as applicable.
- **Policy CD3.10:** Odor controls should be installed on new and existing sources, as feasible, to reduce exposure for existing and future residents. This policy does not apply to existing agricultural or agricultural-related operations.
- **Policy CD3.11:** The deeds to all properties of proposed residential uses located near major odor sources, as defined by Feather River Air Quality Management District, shall include a disclosure clause advising buyers and tenants of the potential adverse odor impacts.
- **Action CD3.1: Compatibility Review and Conditioning of Projects and Plans**. The County will review projects against policies in this General Plan and analysis in the General Plan Environmental Impact Report (EIR) to reduce noise and air quality impacts. The County Zoning Ordinance and development standards should identify design and performance standards for noise, light, glare, air pollution, and other relevant issues. The County will use the General Plan to determine the adequacy of proposed buffering between residential land uses, highways, railroads, airports, industries, mining operations, agricultural operations, and other potentially incompatible uses. The County will condition projects, as appropriate, to provide consistency with this General Plan and the General Plan EIR. The County will balance its goals for infill and mixed-use development with policies and standards for noise, vibration, light and glare, and other issues of compatibility.

- Related Goals: Goal CD3, Goal NR11, Goal HS5, Goal HS10, Goal HS11
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; applicant funding for project-specific work
- Time Frame: Ongoing

Minor Sources of Odors

Minor sources of odors associated with the 2030 General Plan would be associated with the construction of the proposed land uses. The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines, as well as emissions associated with asphalt paving and the application of architectural coatings may be considered offensive to some individuals. Similarly, diesel-fueled locomotives traveling along railroad lines, and diesel-fueled trucks traveling on local roadways would produce associated diesel exhaust fumes.

However, because odors associated with diesel fumes would be temporary and would disperse rapidly with distance from the source, construction-generated and mobile-source odors would not result in the frequent exposure of on-site receptors to objectionable odor emissions.

Relevant Policies and Actions of the 2030 General Plan

Though odor impacts are subjective, it is possible that land use conflicts between minor odor sources and future sensitive receptors could occur. However, the 2030 General Plan includes a policy and action designed to minimize land use incompatibilities, including those that may arise related to minor odors:

- **Policy CD3.2:** New residential projects near railroads and highways should provide multi-use open space buffers designed to avoid adverse air quality, noise, vibration, light, and glare issues.

- **Policy CD3.10:** Odor controls should be installed on new and existing sources, as feasible, to reduce exposure for existing and future residents. This policy does not apply to existing agricultural or agricultural-related operations.

- **Policy CD3.11:** The deeds to all properties of proposed residential uses located near major odor sources, as defined by Feather River Air Quality Management District, shall include a disclosure clause advising buyers and tenants of the potential adverse odor impacts.

- **Action CD3.2: Open Space Buffers along State Highways and Railroads.** The County will seek funding for design and implementation of air quality, noise, and visual buffers along regional transportation routes. The County will coordinate with regional transportation agencies and drainage providers to find opportunities to use these same buffer areas for natural drainage conveyance, multi-modal transportation routes, visual buffering, community gardens, and for other useful public purposes.

    - Related Goals: Goal CD2, Goal CD3, Goal CD 19, Goal NR11, Goal HS5, Goal HS10, Goal HS11
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund; federal and state funds; other funding, as appropriate.
    - Time Frame: Ongoing, as funding opportunities arise.

Conclusion

Minor sources of odors (e.g., construction equipment, highways, railroads) would not result in exposure of sensitive receptors (on- or off-site) to excessive project-generated odor sources, with implementation of the 2030 General Plan.

As noted elsewhere, the County will require agricultural buffers in new development to reduce adverse impacts and complaints associated with encroaching urban development. It is possible that agricultural processing facilities, dairies, feedlots, or other agriculture related uses that produce major odors would occur adjacent to the areas with existing or future sensitive uses. Exposure to wastewater treatment facilities could increase in the future. Future sensitive receptors could be exposed to excessive odors from existing or future land uses on a recurring basis. This impact is **significant**.

Mitigation Measures

Implementation of the above policies and action above would reduce the exposure of sensitive receptors to odorous emissions. But the County cannot guarantee that odor sources can be effectively reduced such that complaints will not occur occasionally in the future. Due to the subjective nature of odor, it is possible that future impacts related to major and minor sources could be considered significant. The County has included all available feasible mitigation as General Plan policy. This impact is considered **significant and unavoidable**.

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4.4 BIOLOGICAL RESOURCES

This section provides information on biological resources located in Yuba County. Impacts on biological resources from implementation of the 2030 General Plan are discussed in conjunction with policies and actions that would avoid, reduce, or compensate for significant impacts.

4.4.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over projects that may result in take of a species listed as threatened or endangered under the federal Endangered Species Act (ESA). Under the ESA (16 U.S. Code [USC] 153 et seq.), the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant habitat modification that could result in take. If implementation of a project is likely to result in take of a federally listed species, then the project applicant must either obtain an incidental-take permit under ESA Section 10(a) or complete a federal interagency consultation process under ESA Section 7 before the take occurs. An incidental-take permit typically requires various types of mitigation to compensate for or minimize the take.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703–711) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the U.S. Secretary of the Interior. Most native bird species fall under the jurisdiction of this act.

Clean Water Act

Section 404 of the Clean Water Act (CWA) (33 USC 1252–1376) requires a project applicant to obtain a permit before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

Under Section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) regulates and issues permits for activities that involve the discharge of dredged or fill materials into waters of the United States. Fills of less than one-half acre of non-tidal waters of the United States for residential, commercial, or institutional development projects can generally be authorized under USACE's nationwide permit (NWP) program, provided that the project satisfies the terms and conditions of the particular NWP. Fills that do not qualify for a NWP require a letter of permission or an individual permit.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

General Plan Requirements

California's *General Plan Guidelines* (2003), prepared by the Governor's Office of Planning and Research, contain the state's requirements for general plan content and compliance with state laws relating to general plan elements. General plan law requires that the Open Space and Conservation Elements address the future conservation, development, and utilization of the county's natural resources and the preservation of "open space

land." The General Plan Land Use Element also affects natural habitat and biological resources by determining where development, agricultural, and other non-habitat land uses are directed.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Section 2050 et seq.) establishes state policy to conserve, protect, restore, and enhance endangered or threatened species and their habitats. CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of endangered or threatened species if reasonable and prudent alternatives are available that would avoid jeopardy of a state listed species. Definitions of endangered and threatened species in the CESA parallel those defined under ESA.

Native Plant Protection Act

California's Native Plant Protection Act (Fish and Game Code Sections 1900–1913) requires all state agencies to establish criteria for determining whether a species, subspecies, or variety of native plant is endangered or rare. Provisions of this act prohibit the taking of listed plants from the wild and require that the Department of Fish and Game (DFG) be notified at least 10 days in advance about any change in land use that would adversely affect listed plants. This requirement allows DFG to salvage listed plant species that would otherwise be destroyed.

Oak Woodland Conservation

The incremental loss of oak woodland through habitat conversion to agricultural, commercial, and residential uses, combined with other concerns such as the lack of natural regeneration, has led to an increased concern about the future of oak woodlands and its associated wildlife throughout California. In 2001, the California Oak Woodland Conservation Act was passed by the California Legislature, establishing a fund through the Wildlife Conservation Board (WCB) (DFG's acquisition branch) to financially support counties' oak woodland conservation efforts. The act authorizes the WCB to purchase oak woodland conservation easements and provide grants for land improvements and restoration efforts. Grants resulting in the purchase of oak woodland conservation easements are given priority; however, funds may also be used for grants designed to provide technical assistance and to develop and implement oak conservation elements in local general plans. The WCB also funds the development of outreach efforts and education related to preservation of oak woodlands.

In 2005, Senate Bill (SB) 1334 was passed by the California Legislature, mandating that counties require feasible and proportional habitat mitigation for impacts on oak woodlands as part of the CEQA process. Under Public Resources Code (PRC) Section 21083.4, a county is required to determine whether projects "may result in a conversion of oak woodlands that will have a significant effect on the environment." The law applies to all oak woodlands except those dominated by black oak. When it is determined that a project may have a significant effect on oak woodlands, mitigation is required. PRC Section 21083.4 institutes a cap on planting oaks for habitat mitigation (it cannot fulfill more than 50% of the required mitigation) and prescribes four mitigation options:

- conserving oak woodland through the use of conservation easements;
- contributing funds to the Oak Woodlands Conservation Fund to purchase oak woodlands conservation easements;
- replanting trees; or
- implementing other mitigation actions, as outlined or developed by the county.

In 2005, the County Board of Supervisors approved the Yuba County Voluntary Individual Oak and Oak Woodland Management Plan and Landowner Guidelines (Voluntary Plan). The Voluntary Plan was developed to

meet the resource concerns of Yuba County landowners, while promoting the general health and economic value of individual oaks and oak woodlands found on their land.

The Voluntary Plan promotes habitat integration with development plans within oak woodland zones, fire safety, and the economic viability of farming and ranching operations, while enhancing the biological integrity and diversity of oak woodlands. In addition to providing practical management tools for landowners to voluntarily preserve their private oak stands, the adoption of this plan by the County Board of Supervisors is the precursor to receiving financial support from the WCB to further develop and promote voluntary oak management education, regeneration, and landowner assistance programs.

Porter-Cologne Water Quality Act

Under the Porter-Cologne Water Quality Control Act, waters of the state fall under jurisdiction of the applicable regional water quality control board (RWQCB)—in this case, the Central Valley RWQCB. Under the act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification under Section 401 of the CWA.

California Fish and Game Code

Fully Protected Species

The California Fish and Game Code strictly prohibits the incidental or deliberate take of fully protected species. DFG cannot issue a take permit for fully protected species, except under narrow conditions for scientific research or the protection of livestock; therefore, avoidance measures may be required to avoid take.

Lake and Streambed Alteration

DFG, through provisions included in Sections 1600–1603 of the California Fish and Game Code, is empowered to issue streambed alteration agreements for projects that would "divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" (Fish and Game Code Section 1602[a]). Streams and rivers are defined by the presence of a channel bed and banks, and intermittent flow. The limits of DFG jurisdiction are also based on riparian habitat and may include wetland areas that do not meet USACE criteria for soils and/or hydrology (e.g., where riparian woodland canopy extends beyond the banks of a stream away from frequently saturated soils).

Protection of Bird Nests and Raptors

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., hawks, owls, eagles, and falcons), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Yuba-Sutter Natural Community Conservation Plan / Habitat Conservation Plan

Yuba and Sutter Counties (including the cities of Live Oak, Wheatland, and Yuba City) are currently in the process of developing a combined Natural Community Conservation Plan (NCCP) / Habitat Conservation Plan (HCP). The Yuba-Sutter NCCP/HCP is a cooperative planning effort initiated by the counties in connection with improvements to State Highway Routes (SRs) 99 and 70 and future development in the area surrounding those highways.

HCPs are tools for providing certainty to landowners who wish to develop properties in areas populated by rare, threatened, or endangered wildlife by: 1) identifying areas containing habitat necessary for the survival of that wildlife, and 2) creating a mechanism to protect that habitat. HCPs are legal agreements whereby landowners who take certain actions to protect wildlife species and habitats receive governmental assures that no new regulations will be imposed on them in the future.

HCPs are authorized by Congress under Section 10(a) of the ESA, which allows issuance of incidental take permits upon approval of a conservation plan developed by the permit applicants. Early HCPs addressed one or two listed species in small areas, often in response to individual development projects. Recent efforts have shifted toward large-scale, multispecies HCPs, often covering hundreds of thousands of acres and involving multiple jurisdictions or planning partners.

In 1991, the State of California passed the Natural Community Conservation Planning Act, which established the Natural Community Conservation Planning program. NCCPs are carried out under California state law and can be even broader than HCPs. This landscape-level approach is typically a more effective means to protect substantial areas, which in turn have a higher likelihood of conserving special-status species over the long term. The benefits of large-scale conservation planning for various stakeholders include acceleration and integration of the permitting process, reduction of applicants' permitting costs, while improving regulatory certainty, and facilitation of needed public infrastructure projects. The program provides economic incentives for willing private landowners to conserve and act as stewards of valuable resources, and enables local governments to play a leadership role in natural resource conservation and permitting within a framework established in partnership with regulatory agencies.

The Yuba-Sutter NCCP/HCP is a cooperative planning effort that is meant to:

- continue economic growth and community development;
- retain the economic vitality of the local agricultural community;
- maintain recreation, hunting, fishing, and other public uses of the local open space;
- simplify and expedite land use and conservation planning in the plan area;
- protect threatened and endangered species; and
- preserve plant and wildlife communities.

In 2005, the Yuba County and Sutter County Boards of Supervisors approved the formation of an Advisory Committee (AC) for the NCCP/HCP, with members representing landowners, businesses, agricultural interests, environmental groups, and other stakeholders. The AC has begun the process of:

- identifying and evaluating biological resources within the planning area;
- analyzing land use policies and plans for the planning area;
- seeking the advice of independent scientists on conservation strategies and related issues;
- proposing a preliminary list of natural communities, species, and activities to be covered by the plan; and
- identifying preliminary conservation goals and objectives for the plan.

The Yuba-Sutter Regional NCCP/HCP will provide a way to accommodate economic and community development; retain the economic vitality of the local agricultural community; maintain recreation, hunting, fishing, and other public uses of the local open space; simplify and expedite land use and conservation planning in the plan area; protect threatened and endangered species; and preserve plant and wildlife communities. The Yuba-Sutter Regional NCCP/HCP will likely provide an opportunity to mitigate potential impacts to biological resources that may occur through implementation of the General Plan. The NCCP/HCP is still in draft form as of the writing of this document.

4.4.2 ENVIRONMENTAL SETTING

VEGETATION AND WILDLIFE

Overview

The following descriptions of major habitat types are summaries of detailed accounts presented in A Guide to Wildlife Habitats in California (Mayer and Laudenslayer 1988). Exhibit 4.4-1 shows the extent and location of major habitat types in Yuba County, as mapped for the California Fire and Resource Assessment Program (FRAP) in the eastern portion of the county, and for the Yuba-Sutter Regional NCCP/HCP in the western portion of the county.

The value of an area to wildlife depends on physical and biological factors:

- the location relative to other land uses;
- the quality of habitat within and adjacent to the area; and,
- the uniqueness of the habitat within a regional context.

Yuba County supports habitat ranging from very disturbed areas to high-quality native plant communities. However, much of the habitat's value is decreased because of adjacent urban development and agricultural uses.

Table 4.4-1 shows the acreage of all habitat types occurring in Yuba County. The major habitats in the county have been grouped into five categories:

- coniferous forest habitats,
- woodland habitats,
- shrub-dominated habitats,
- herbaceous-dominated habitats, and
- other habitats.

Coniferous Forest Habitats

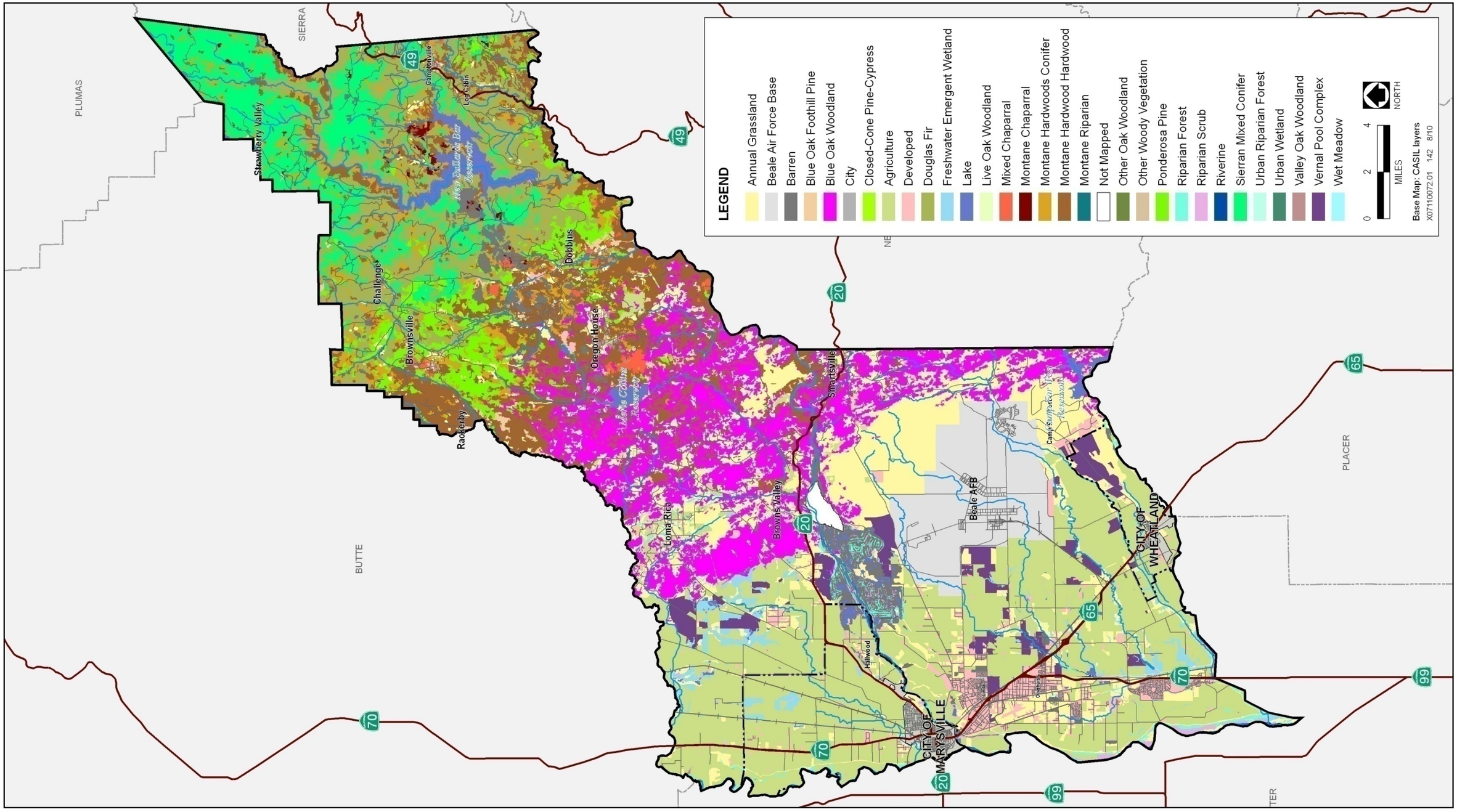
Coniferous forest habitats are the dominant vegetation type in Yuba County above 2,500 feet in elevation. Coniferous forest habitats cover approximately 74,824 acres, or about one-fifth of the total acreage in the county. The three major coniferous forest habitats in Yuba County are Sierran mixed conifer forest, ponderosa pine forest, and Douglas-fir forest. Each of these habitats is described in more detail below along with other coniferous forest habitats present in the county.

Table 4.4-1
Major Habitat Types in Yuba County

Category	Habitat Type	Total Acres
Coniferous Forest Habitats	Sierran Mixed Conifer	28,411
	Douglas-Fir	33,105
	Ponderosa Pine	13,234
	Closed-Cone Pine-Cypress	74
Woodland Habitats	Montane Hardwood-Conifer	14,528
	Montane Hardwood	40,006
	Blue Oak Woodland	46,117
	Blue Oak–Foothill Pine Woodland	3,464
	Other Oak Woodland	41
	Valley Oak Woodland*	1,150
	Valley Foothill Riparian*	5,835
Shrub-Dominated Habitats	Montane Chaparral	701
	Mixed Chaparral	1,773
	Montane Riparian Scrub*	195
Herbaceous-Dominated Habitats	Annual Grassland	53,513
	Freshwater Emergent Wetland*	5,871
	Vernal Pool Complex*	8,719
	Wet Meadow*	7
Other Habitats	Urban, Barren, Agriculture, Open Water	126,035
Not Yet Mapped		1,210
Total		**383,989**

Notes;
Sensitive habitats are marked with * and are described in more detail below under "Sensitive Biological Resources."
Sources: Jones and Stokes 2005, CDF 2005, data compiled by AECOM in 2010

Sierran mixed conifer forest covers approximately 28,411 acres in Yuba County. Generally occurring at elevations between 2,500–6,000 feet, this habitat comprises both hardwood and conifer species. Trees commonly occurring in Sierran mixed conifer include Douglas-fir (*Pseudotsuga menziesii*), ponderosa pine (*Pinus ponderosa*), sugar pine (*Pinus lambertiana*), incense cedar (*Calocedrus decurrens*), white fir (*Abies concolor*), and black oak (*Quercus kelloggii*). Historically, burning and logging have caused wide variability in stand structure, resulting in both even-aged and uneven-aged stands. Forested stands form closed, multi-layered canopies with nearly 100% overlapping cover. Virgin old-growth stands where fire has been excluded are often two-storied, with the overstory composed of mixed conifer and the understory white fir and incense cedar. Shrubs are common below openings in the canopy. Common shrub species are deer brush (*Ceanothus integerimmus*), manzanita (*Arctostaphylos manzanita*), bush chinquapin (*Chrysolepis sempervirens*), squawcarpet (*Ceanothus prostratus*), mountain whitethorn (*Ceanothus cordulatus*), gooseberry (*Ribes* spp.), and mountain misery (*Chamaebatia foliolosa*).



Source: Jones and Stokes 2005; CDF 2005; data compiled by AECOM in 2010

Land Cover **Exhibit 4.4-1**

Douglas-fir forest covers approximately 33,105 acres and is found primarily at middle and higher elevations where it frequently replaces ponderosa pine on north-facing slopes. Plant diversity and density in the shrub and herbaceous understory of Douglas-fir forest vary considerably depending upon topographic and environmental factors such as elevation, aspect, and age of the stand.

Ponderosa pine forest covers approximately 13,234 acres and usually occurs above montane hardwood-conifer (discussed under "Woodland Habitats" below) and below Sierran mixed conifer forest at elevations of 4,000–7,000 feet. This habitat ranges in composition from open to dense forest, and may exist in pure stands or be associated with other species such as white fir, Douglas-fir, or sugar pine.

Closed-cone pine-cypress forest covers approximately 74 acres in the county and is dominated by a single species of one of the closed-cone pines (pine species whose cones require fire to open and release seed) or species of cypress. The height and canopy closure of these forests are variable and depend upon site characteristics, soil type, the age of the stand, and the floristic composition. In Yuba County, most of these stands are dominated by knobcone pine (*Pinus attenuata*). This pine grows in small dense patches with chamise (*Adenostoma fasciculatum*), ceanothus (*Ceanothus* spp.), leather oak (*Quercus durata*), and manzanita occurring between patches or in openings in the tree canopy.

Woodland Habitats

Woodland habitats are located primarily at middle and lower elevations in the central portion of Yuba County. The four major woodland habitats are montane hardwood-conifer, montane hardwood, blue oak–foothill pine, and blue oak woodland. Woodland habitats range in structure from open savanna to dense forest. Sensitive woodland habitats in the county consist of valley-foothill riparian and oak woodlands. These habitats are discussed under "Sensitive Biological Resources" below.

Montane hardwood-conifer woodland includes vegetation associated with both coniferous and hardwood habitats and is a transitional habitat between the montane hardwood, mixed chaparral, and woodlands of low elevations and the coniferous forests of high elevations. Habitat composition is generally a minimum of one-third coniferous trees and one-third broad-leaved trees. Conifers typically dominate the upper canopy, ranging up to 200 feet in height, and broad-leaved trees form a subcanopy at 30–75 feet. Common tree species associated within this habitat type include ponderosa pine, Douglas-fir, white fir, back oak, and incense cedar. In Yuba County, montane hardwood-conifer is generally found at elevations between 1,000–4,000 feet.

Montane hardwood woodland habitat usually occurs at lower elevations than montane hardwood-conifer and is often associated with major river canyons. Montane hardwood is composed of a mixture of trees that occur on rocky, poorly developed and well-drained soils. The structure ranges from dense to open tree cover with a poorly developed shrub understory. At low elevations, common species include canyon live oak (*Quercus chyrsolepis*), foothill pine (*Pinus sabiniana*), madrone (*Arbutus menziesii*), and California bay (*Umbellularia californica*). Black oak and Douglas-fir may occur at higher elevations. Common shrubs in montane hardwood habitat include wood rose (*Rosa gymnocarpa*), snowberry (*Symphoricarpos* sp.), manzanita, and poison-oak (*Toxicodendron diversilobum*).

Shrub-Dominated Habitats

Shrub-dominated habitats exist at scattered locations throughout the foothills, but primarily between 1,500 and 3,500 feet. These habitats are described in the county vegetation data as mixed chaparral occurring at the lower elevations and montane chaparral occurring at the higher elevations. Montane riparian scrub is a shrub-dominated sensitive habitat type that is described under "Sensitive Biological Resources" below.

Mixed chaparral is located throughout the foothill elevations of the county on xeric (dry), south-facing slopes with fine-textured soils. This habitat can be dominated by one or more species of shrubs including chamise, toyon (*Heteromeles arbutifolia*), poison-oak, ceanothus, or manzanita. Vegetation typically consists of a nearly

impenetrable mass of shrubs, vines, and herbs. Fire plays an important role in the composition and makeup of mixed chaparral, and the vegetation is naturally prone to wildfire. After fire removes the mature woody vegetation, a greater abundance and diversity of herbaceous plant species emerge.

Montane chaparral occurs at higher elevations in the county, intergrading with coniferous forest habitats. Montane chaparral is characterized by scattered shrubs in forests or in dense thickets where forests have been disturbed by landslide or avalanche, fire, or logging activities. Common plants found within this habitat include mountain whitethorn, greenleaf Manzanita (*Arctostaphylos patula*), huckleberry oak (*Quercus vacciniifolia*), and deerbrush.

Herbaceous-Dominated Habitats

Annual grassland is the primary herbaceous-dominated habitat in Yuba County. Annual grassland is common at low elevations (i.e., below 2,500 feet) in the western region of the county. This habitat is dominated by nonnative annual grasses, primarily of Mediterranean origin; however, it also typically includes a variety of native herbaceous species and the abundance and composition of native species varies greatly depending on environmental conditions in the particular annual grassland stand. Nonnative grasslands have replaced most native perennial grasslands in Yuba County and throughout most of California. Sensitive herbaceous-dominated habitats in Yuba County are freshwater emergent wetlands, vernal pool complex, and wet meadow. These habitats are described under "Sensitive Biological Resources" below.

Open Water

Open water covers approximately 6,844 acres in Yuba County, including lakes, ponds, rivers, and streams. Open water exists throughout the county. The major open water habitat areas are the Feather River, Yuba River, Bear River, North Yuba River, Englebright Lake, New Bullards Bar Reservoir, Camp Far West Reservoir, and Collins Reservoir.

WILDLIFE AND FISHERIES

Wildlife

The complex array of habitats in Yuba County supports abundant and diverse fauna because large tracts of land are covered by habitats known to have outstanding value for wildlife, such as mixed coniferous forests and oak woodlands. Sierran mixed conifer habitat supports 355 species of animals (Verner and Boss 1980), while oak woodlands provide habitat for more than 100 species of birds, 60 species of mammals, 80 species of amphibians and reptiles, and 5,000 species of insects (Verner and Boss 1980, Pavlik et al. 1991).

The floodplains and riparian forests of western Yuba County are essential for aquatic communities and many species of terrestrial plants and wildlife. Although the riparian forests of the Feather, Yuba, and Bear Rivers have been adversely affected by past and current human activities, they continue to support areas of high biological value.

Wildlife diversity is generally high in the lower montane coniferous forest types that occupy the eastern portion of the county. Amphibians and reptiles found in lower montane forest and woodlands include Pacific treefrog (*Hyla regilla*) and rubber boa (*Charina bottae*). Common resident birds in these forests include Stellar's jay (*Cyanocitta stelleri*) and hairy woodpecker (*Picoides villosus*). Migratory species that use these forests for breeding during summer months include western tanager (*Piranga ludoviciana*), Nashville warbler (*Vermivora ruficapilla*), and black-headed grosbeak (*Pheucticus melanocephalus*). Common mammals in lower montane coniferous forests include Douglas' squirrel (*Tamiasciurus douglasii*), mule deer (*Odocoileus hemionus*), and black bear (*Ursus americanus*).

Oak and other hardwood habitats at middle elevations are important for a large percentage of the wildlife species found in Yuba County. Reptiles and amphibians found in oak woodlands include California slender salamander

(*Batrachoseps attenuatus*), western fence lizard (*Sceloporus occidentalis*), and common kingsnake (*Lampropeltis getula*). Common birds in oak woodland include acorn woodpecker (*Melanerpes formicivorus*), western scrub-jay (*Aphelocoma californica*), and oak titmouse (*Baeolophus inornatus*). Mammals that characterize oak woodland habitat include mule deer, western gray squirrel, gray fox (*Urocyon cinereoargenteus*), and bobcat (*Lynx rufus*).

Chaparral generally has lower wildlife diversity than most forest and woodland habitats. However, chaparral does provide habitat for many wildlife species, including some that are considered rare elsewhere. Reptiles found in chaparral include western rattlesnake (*Crotalus viridis*), western fence lizard, and western whiptail (*Aspidoscelis tigris*). Common birds in chaparral at low elevations include wrentit (*Chamaea fasciata*), Bewick's wren (*Thryomanes bewickii*), California towhee (*Pipilo crissalis*), and California quail (*Callipepla californica*). At higher elevations, chaparral can provide habitat for mountain quail (*Oreortyx pictus*), fox sparrow (*Passerella iliaca*), and green-tailed towhee (*Pipilo chlorurus*). Mammals such as coyote, gray fox, bobcat, mule deer, and mountain lion use this habitat through established wildlife trails and areas disturbed by fire and brush removal.

Annual grasslands generally support lower wildlife diversity than woodland and shrub-dominated habitats but are invaluable to the grassland-dependent species found in the county. A great diversity and abundance of insects rely on grasslands. Reptiles found in annual grasslands include western fence lizard and gopher snake (*Pituophis catenifer*). Birds that are common in this habitat include western meadowlark (*Sturnella neglecta*), Say's phoebe (*Sayornis saya*), and savanna sparrow (*Passerculus sandwichensis*). Mammals known to use this habitat include California ground squirrel (*Spermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), pocket gopher (*Thomomys mazama*), and coyote (*Canis latrans*).

Agricultural land and lands dominated by urban development support many wildlife species, most of which are highly adapted to these disturbed environments. Agricultural land is not generally considered important wildlife habitat, but is used by many species, particularly as foraging habitat. Wildlife found in agricultural areas varies by crop type and time of year. Common wildlife expected in most agricultural regions of Yuba County include Brewer's blackbird (*Euphagus cyanocephalus*), American crow (*Corvus brachyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), house finch (*Carpodacus mexicanus*), raccoon (*Procyon lotor*), striped skunk (Mephitis mephitis), and opossum (*Didelphis virginiana*).

An example of an agricultural land use that is recognized as important wildlife habitat is rice fields. Rice fields support large wintering populations of waterfowl and shorebirds, forage for Swainson's hawk, and provide habitat for giant garter snakes, a federally protected species (discussed in more detail below). However, the approach to management of these areas has a large influence on wildlife use and mortality.

Rice fields in western Yuba County are also considered important wildlife habitat because of their position in the Pacific Flyway, the westernmost of North America's four flyways, or migration routes. These flyways are defined as geographic regions with breeding grounds in the north, wintering grounds in the south, and a system of migration routes in between. The Central Valley lies at the southerly end of the Pacific Flyway migratory route. Historically, the Central Valley contained approximately 4 million acres of wetlands, including permanent marshes and seasonal wetlands created by winter rains and spring snow melt from the Sierra Nevada. Today, approximately 300,000 acres remain, providing wintering habitat for 60 percent of the Pacific Flyway's current waterfowl population and migration habitat for an additional 20 percent of the population. Altogether, approximately 10 to 12 million ducks and geese, along with millions of other water birds, winter in or pass through the Central Valley each year (City of Sacramento et al. 2003). USFWS ranks Central Valley wetland habitat as one of the top five habitats in the U.S. for migrating waterfowl. Although most marshes and seasonal wetlands in western Yuba County have been converted to agricultural and urban uses, flooded rice fields continue to attract and support migrant waterfowl. Some species also utilize pasture, harvested rice, and other croplands for foraging (City of Sacramento et al. 2003).

Wildlife found in urban areas is often dependent upon surrounding land uses and the presence or absence of nearby natural vegetation. In the more urbanized areas, a large percentage of the wildlife can be made up of exotic

species such as rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), house mouse (*Mus musculus*), and brown rat (*Rattus norvegicus*). Urban areas provide habitat for species also found in agricultural areas, such as mourning dove, American robin (*Turdus migratorius*), and western gray squirrel.

FISHERIES RESOURCES

Primary aquatic habitats in Yuba County include the Feather River, Yuba River, Bear River, North Yuba River, Englebright Lake, New Bullards Bar Reservoir, Camp Far West Reservoir, and Collins Reservoir. These waterways provide vital fish spawning, rearing, and/or migration habitat for a diverse assemblage of native and nonnative fish species.

Native fishes include anadromous (i.e., species that spawn in fresh water after migrating as adults from marine habitat) and resident species. Native anadromous species that occur or have the potential to occur in Yuba County rivers and streams include four runs of chinook salmon (*Oncorhynchus tshawytscha*), steelhead trout (*O. mykiss*), green and white sturgeon (*Acipenser medirostris* and *A. transmontanus*), and Pacific lamprey (*Lampetra tridentata*). Nonnative anadromous species include American shad (*Alossa sapidissima*) and striped bass (Morone *saxatilis*). Native resident species include Sacramento pikeminnow (*Ptychocheilus grandis*), Sacramento splittail (*Pogonichthys macrolepidotus*), Sacramento sucker (*Catostomus occidentalis*), hardhead (*Mylopharodon conocephalus*), Sacramento roach (*Lavinia symmetricus* sp. *symmetricus*), and rainbow trout (*O. mykiss*). Nonnative resident species include largemouth bass (*Micropterus salmoides*), smallmouth bass (*M. dolomieu*), redeye bass (*M. coosae*), white and black crappie (*Pomoxis annularis* and *P. nigromaculatus*), channel catfish (*Ictalurus punctatus*), white catfish (*Ameiurus catus*), brown bullhead (*Ictalurus nebulosus*), bluegill (*Lepomis macrochirus*), green sunfish (*L. cyanellus*), golden shiner (*Notemigonus crysaleucas*), brown trout (*Salmo trutta*), kokanee salmon (*Oncorhynchus nerka*), and brook trout (*Salvelinus fontinalis*).

In Yuba County and throughout the Central Valley, the use of different portions of aquatic resources by various fish species is influenced by variations in environmental conditions, and by the habitat requirements, life history, and daily and seasonal movements and behavior of each species. The distribution of common native fishes in Yuba County streams reflects the historical distribution of common native fishes in the larger Central Valley drainage. Central Valley streams have headwaters in mountain areas and flow through steep canyons and deep pools in the foothills before flowing into slow-moving rivers or lakes on the valley floor.

The habitats found in mountains, foothills, and the valley floor contain distinct assemblages of fish that have wide or narrow zones of overlap, depending on the gradient of the stream and other environmental conditions. The overlap among regions with distinct assemblages (often called zones) is fairly broad. Four assemblages can usually be recognized in Central Valley streams: the rainbow trout assemblage, the pikeminnow-hardhead-sucker assemblage, the California roach assemblage, and the deep-bodied fishes assemblage (Moyle 2002). Streams in Yuba County are occupied primarily by the pikeminnow-hardhead and California roach assemblages.

As discussed above, anadromous fishes, including steelhead, fall-/late fall–run chinook salmon, and Pacific lamprey are also present, but have been reduced in their range since the construction of dams on the main rivers (Moyle et al. 1998). Furthermore, fish assemblages historically found in Yuba County have been altered with the introductions of nonnative species including striped bass, largemouth bass, sunfishes, and brown trout.

Pikeminnow-Hardhead-Sucker Assemblage

The foothill areas of the Central Valley support the pikeminnow-hardhead-sucker assemblage, which occur at elevations between approximately 250 and 1,800 feet (Moyle 2002). The pikeminnow-hardhead-sucker fish assemblage zone is characterized by streams that have average summer flows greater than 10 cubic feet per second (cfs); deep, rocky pools; and wide, shallow riffles. Water quality is usually very good (high clarity, low conductivity, high dissolved oxygen, summer temperatures between 19° and 22°C [66.2 and 71.6°F]), with

complex habitat created by stream meanders and riparian vegetation. However, some streams may become intermittent in the summer, or have such reduced flows that fish are confined to pools. Summer water temperatures in such streams may exceed 25°C (77°F) and may track air temperatures closely.

Sacramento pikeminnow and Sacramento sucker are usually the most abundant native fishes of this assemblage. Other fishes that are part of this assemblage include hardhead, speckled dace, California roach, riffle sculpin, and rainbow trout. Anadromous fishes (mainly chinook salmon, steelhead rainbow trout, and Pacific lamprey) have spawning grounds in the same zone in stream reaches downstream of impediments to migration (Moyle 2002).

California Roach Assemblage

The California roach assemblage occurs in small, warm tributaries, to larger streams that flowed through open foothill woodlands of oak and foothill pine (Moyle 2002). Streams that support the California roach assemblage are located in the foothills in much of the same region that contain the pikeminnow-hardhead-sucker assemblage. During summer the streams are usually intermittent, so fish are often confined to stagnant pools that may exceed 30°C (86°F) during the day. The streams are swift and subject to flooding during the winter and spring. The primary permanent resident in this zone is the California roach. Because of its small size and tolerance of low oxygen levels and high temperatures, roach survives where most other fish cannot. During winter and spring, Sacramento sucker, pikeminnow, and other native minnows use the streams for spawning and juveniles for rearing (Moyle 2002).

SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources are those identified as such by DFG, the California Native Plant Society (CNPS), and USFWS and those given recognition in local or regional plans, policies, and regulations. Information about sensitive biological resources previously reported in Yuba County was collected from a variety of sources, including electronic databases and published reports.

The California Natural Diversity Database (CNDDB) (2007) was used as the primary source to identify previously reported occurrences of special-status species and sensitive habitats in Yuba County. The CNDDB is a statewide inventory, managed by DFG, that is continually updated with the locations and condition of the state's rare and declining species and habitats. Although the CNDDB is the most current and reliable tool for tracking occurrences of special-status species, it contains only those records that have been submitted to DFG, and is not always completely up-to-date. Additional special-status species are likely to be present in Yuba County that have not been discovered or reported, and additional occurrences that have already been reported may have not yet been entered into the database.

Additional sources of information used to identify potentially occurring special-status species in Yuba County include the CNPS Electronic Inventory of Rare and Endangered Plants of California (CNPS 2007) and the USFWS Sacramento Field Office database of federally listed species (USFWS 2007). The CNPS inventory contains records for 12 additional species in Yuba County that are not included in the CNDDB.

Special-Status Species

Special-status species include plants and animals in the following categories:

- species listed or proposed for listing as threatened or endangered under the ESA or CESA,
- species considered as candidates for listing as threatened or endangered under the ESA or CESA,
- wildlife species identified by DFG as species of special concern,
- plants listed as endangered or rare under the California Native Plant Protection Act,
- animals fully protected under the California Fish and Game Code, and

- plants on CNPS List 1B (plants rare, threatened, or endangered in California and elsewhere) or List 2 (plants rare, threatened, or endangered in California but more common elsewhere). The CNPS lists are used by both DFG and USFWS in their consideration of formal species protection under the ESA or CESA.

Special-Status Plants

There are 25 special-status plant species documented in Yuba County and two additional species are included for coverage under the Yuba Sutter NCCP/HCP. A list of these species along with their listing status, habitats, and blooming periods is provided in Table 4.4-2. Of these, three are federally and/or state listed as endangered, threatened, or rare: Bogg's Lake hedge-hyssop (*Gratiola heterosepala*), Hartweg's golden sunburst (*Pseudobahia bahiifolia*) and Layne's ragwort (*Senecio layneae*). Bogg's Lake hedge hyssop is addressed in this EIR because it is proposed for coverage under the Yuba Sutter NCCP/HCP, but it is not known to occur in Yuba or Sutter Counties, though it has been documented nearby in Placer County. The remaining 24 special-status plant species are tracked in CNPS's Electronic Inventory of Rare and Endangered Plants. The CNPS inventory includes five lists for categorizing plant species of concern, which are summarized below. The plants listed on CNPS lists 1A, 1B, and 2 meet the definitions of Section 1901, Chapter 10 of the Native Plant Protection Act, or Sections 2062 and 2067 (CESA) of the California Department of Fish and Game Code and may qualify for state listing. Therefore, they are considered rare plants pursuant to Section 15380 of CEQA. DFG recommends that they be fully considered during preparation of environmental documents pursuant to CEQA.

Some of the plants constituting CNPS Lists 3 and 4 meet the definitions of Section 1901, Chapter 10, or Sections 2062 and 2067 of the DFG Code and are eligible for state listing. DFG recommends, and some local governments require, that CNPS List 3 and List 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

The CNPS lists are categorized as follows:

- List 1A: Plants presumed extinct in California
- List 1B: Plants rare, threatened, or endangered in California and elsewhere
- List 2: Plants rare, threatened, or endangered in California but more common elsewhere
- List 3: Plants about which we need more information—a review list
- List 4: Plants of limited distribution—a watch list

Nine of the CNPS listed species are on lists 1B or 2 while the remaining 15, not counting the state and federally listed species, are on lists 3 or 4. Seven of the plant species in Table 4.4-2 -- dwarf downingia (*Downingia pusilla*), Bogg's Lake hedge-hyssop, Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*), legenere (*Legenere limosa*), Ferris's milkvetch (*Astragalus tener* var. *ferrisiae*), veiny monardella (*Monardella douglasii* ssp. *venosa*), and Hartweg's golden sunburst -- are proposed for coverage by the Yuba-Sutter NCCP/HCP. One additional species, aquatic felt lichen (*Peltigera hydrothyria*), is documented in the CNDDB. This is a Forest Service sensitive species documented on the Plumas National Forest within the County. Locations of CNDDB-documented special-status plant occurrences in the county are shown in Exhibit 4.4-2. Additional information about the state and federally listed species in Yuba County is provided below.

Hartweg's Golden Sunburst. Hartweg's golden sunburst is an annual herb in the sunflower family (Asteraceae) and flowers from March through April. It is federally and state listed as endangered. This species is found (in annual grasslands and also at the edge of open woodlands in the grassland- woodland transition zone (or ecotone). Within these communities, this species typically occurs on shallow, well-drained, medium- textured soils exhibiting mima mound topography (62 FR 5542). Hartweg's golden sunburst is most often found near the tops of mima mounds on north or east aspects and is strongly correlated with the Amador and Rocklin soil series (62 FR 5542). Although the first documented collection of Hartweg's golden sunburst was made in 1847 from the floodplain of the lower Feather River near the junction of the Yuba and Feather Rivers, this type locality has been

eliminated and no subsequent occurrences of Hartweg's golden sunburst have been documented in Yuba County. There are 15 remaining populations identified in the CNDDB located in Madera, Fresno, and Stanislaus Counties.

Table 4.4-2
Special-Status Plant Species Known to Occur or Potentially Occurring in Yuba County

Species[1]	Status[2]			Habitat
	USFWS	DFG	CNPS	
Sanborn's onion *Allium sanbornii* var. *Sanbornii*	–	–	4	Found in chaparral, cismontane woodland and on serpentinite, gravelly lower montane coniferous forest at elevations of 850–5,000 feet.
True's manzanita *Arctostaphylos mewukka* ssp. *Truei*	–	–	4	Found in chaparral and lower montane coniferous forest at elevations of 1,400–4,300 feet.
Depauperate milk-vetch *Astragalus pauperculus*	–	–	4	Found in chaparral, cismontane woodland, and vernally mesic, volcanic valley and foothill grasslands at elevations of 200–3,700 feet.
Ferris's milkvetch *Astragalus tener* var. *ferrisae*	–	–	1B	Alkaline flats and floodlands, usually on adobe soils of valley and foothill grassland, below 200 feet.
Brandegee's clarkia *Clarkia biloba* ssp. *Brandegeeae*	–	–	1B	Found in chaparral and cismontane woodland at elevations of 240–3,100 feet.
Golden-anthered clarkia *Clarkia mildrediae* ssp. *Lutescens*	–	–	4	Found in cismontane woodland and in openings of lower montane coniferous forest at elevations of 900–5,800 feet.
California lady's-slipper *Cypripedium californicum*	–	–	4	Found in bogs and fens and in seeps and streambanks of serpentinite lower montane coniferous forest at elevations of 100–9,100 feet.
Clustered lady's-slipper *Cypripedium fasciculatum*	–	–	4	Found in lower montane coniferous forest and serpentinite seeps and streambanks of North Coast coniferous forest at elevations of 330–8,100 feet.
California pitcherplant *Darlingtonia californica*	–	–	4	Found in bogs and fens and mesic, generally serpentinite meadows and seeps at elevations of 0–8,600 feet.
Dwarf downingia* *Downingia pusilla*	–	–	2	Found in mesic valley and foothill grasslands and vernal pools at elevations of 3–1,500 feet.
Northern Sierra daisy *Erigeron petrophilus* var. *sierrensis*	–	–	4	Found in cismontane woodland, and in lower and upper montane coniferous forest at elevations of 900–6,900 feet.
Stinkbells *Fritillaria agrestis*	–	–	4	Found in chaparral, cismontane woodland, pinyon and juniper woodland, and clay valley and foothill grassland at elevations of 30–5,200 feet.
Butte County fritillary *Fritillaria eastwoodiae*	–	–	3	Found in chaparral, cismontane woodland, and in openings of lower montane coniferous forest at elevations of 160–5,000 feet.
Bogg's Lake hedge-hyssop* *Gratiola heterosepala*	–	E	1B	Vernal pools and shallow lake margins, < 4,000 feet elevation.
Ahart's dwarf rush* *Juncus leiospermus* var. *ahartii*	–	–	1B	Found in mesic valley and foothill grasslands at elevations of 100–350 feet.
Legenere* *Legenere limosa*	–	–	1B	Found in vernal pools at elevations of 3–3,000 feet.

Table 4.4-2
Special-Status Plant Species Known to Occur or Potentially Occurring in Yuba County

Species[1]	Status[2]			Habitat
	USFWS	DFG	CNPS	
Humbolt lily *Lilium humboldtii* ssp. *Humboldtii*	–	–	4	Found in chaparral, cismontane woodland, and openings of lower montane coniferous forest at elevations of 290–4,000 feet.
Quincy lupine *Lupinus dalesiae*	–	–	4	Found in chaparral, cismontane woodland, and in lower and upper montane coniferous forests at elevations of 2,800–8,250 feet.
Veiny monardella *Monardella douglasii* ssp. *Venosa*	–	–	1B	Found in cismontane woodland and heavy clay valley and foothill grasslands at elevations of 198–1,400 feet elevation.
Tehama navarretia *Navarretia heterandra*	–	–	4	Found in mesic valley and foothill grasslands and vernal pools at elevations of 100–3,400 feet.
Layne's ragwort *Packera layneae*	T	R	1B	Found in chaparral and cismontane woodland at elevations of 660–3,300 feet.
Bacigalupi's yampah *Perideridia bacigalupii*	–	–	4	Found in chaparral and serpentinite lower montane coniferous forest at elevations of 1,480–3,300 feet.
Michael's rein orchid *Piperia michaelii*	–	–	4	Found in coastal bluff scrub, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest at elevations of 10–3,100 feet.
Hartweg's golden sunburst* *Pseudobahia bahiifolia*	E	E	1B	Found in shallow, well-drained, medium- textured soils in valley and foothill grasslands and cismontane woodland at elevations of 50–500 feet. Typically on mima mounds.
Sticky pyrrocoma *Pyrrocoma lucida*	–	–	1B	Found in lower montane coniferous forest and meadows and seeps at elevations of 2,300–6,200 feet.
Brownish beaked-rush *Rhynchospora capitellata*	_	_	2	Mesic sites in lower and upper montane coniferous forests, meadows and seeps, and marshes and swamps at elevations of 1,500–6,500 feet.
Siskiyou Mountains huckleberry *Vaccinium coccineum*	_	_	3	Found in lower and upper montane coniferous forests, often in serpentinite soils, at elevations of 3,500–7,000 feet.

Notes:

[1] Species proposed for coverage under the Yuba-Sutter Habitat Conservation Plan/Natural Community Conservation Plan are indicated by an asterisk (*)

[2] Legal Status Definitions

Federal Listing Categories (USFWS)

E Endangered

T Threatened

State Listing Categories (DFG)

E Endangered

T Threatened

R Rare

CNPS Categories

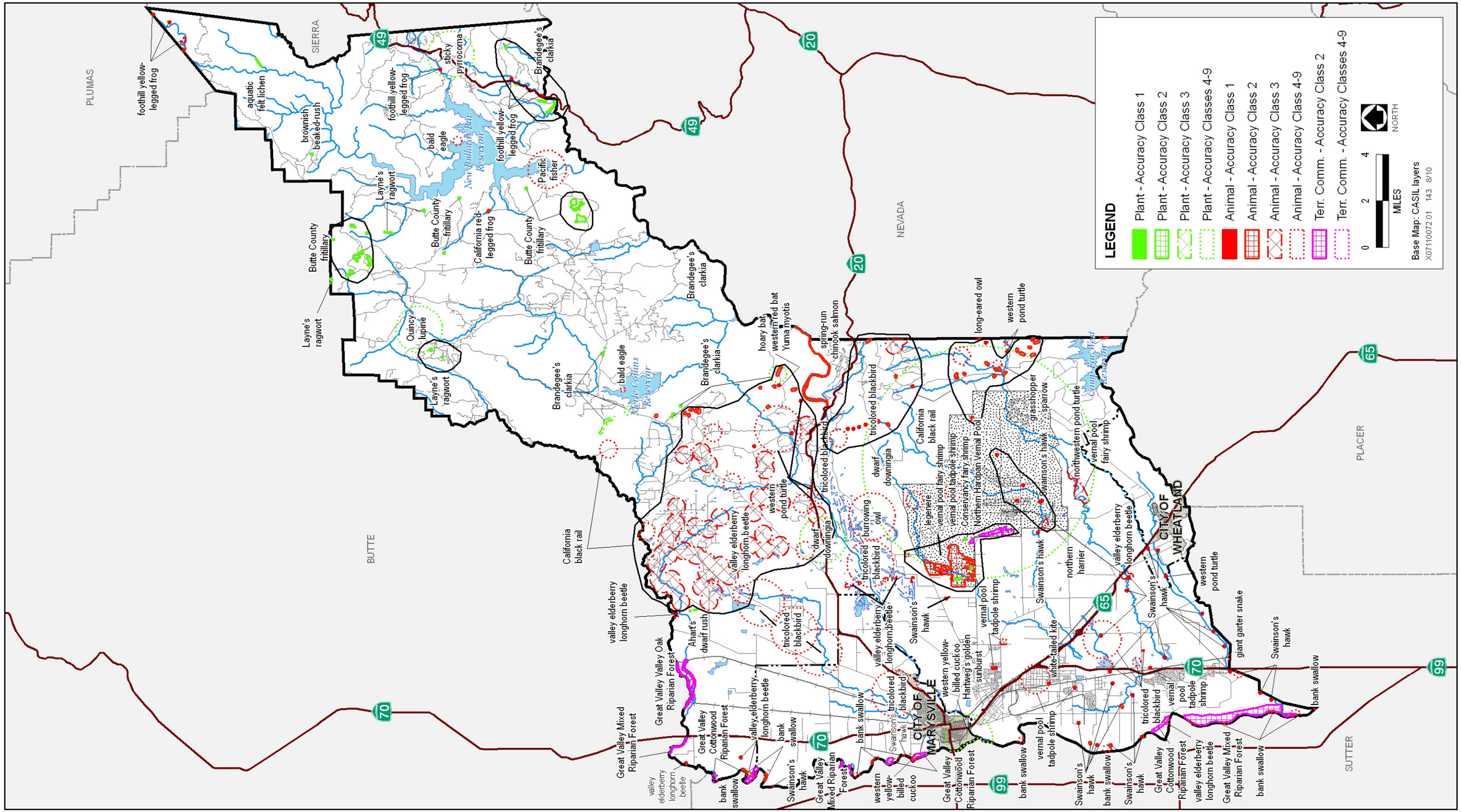
1A Plant species presumed extinct in California.

1B Plant species considered rare or endangered in California and elsewhere (but not legally protected under the federal Endangered Species Act or California Endangered Species Act)

2 Plant species considered rare or endangered in California but more common elsewhere (but not legally protected under the federal Endangered Species Act or California Endangered Species Act)

3 Need more information about this plant (review list)

4 Limited distribution (watch list)



Source: CNDDB 2010

Special-Status Species Occurrences Recorded in CNDDB **Exhibit 4.4-2**

Layne's Ragwort. Layne's ragwort is federally listed as threatened and state listed as rare. It is a perennial herb in the sunflower family (Asteraceae) found in open pine and oak woodland on serpentine soils. It flowers from April to July. There are 43 records of Layne's ragwort identified in the CNDDB located in El Dorado, Tuolumne, and Yuba Counties. Four of these are thought to have been extirpated. Thirty-four of the remaining populations occur in El Dorado County and are threatened by urbanization.

There are three documented occurrences of Layne's ragwort in Yuba County. One particularly dense population is found in Yuba County just north of the Brownsville Aero Pines airport on public park property that was previously a landfill.

Bogg's Lake Hedge-Hyssop. Bogg's Lake hedge-hyssop is a semi-aquatic annual in the snapdragon family (Scrophulariaceae). It is state listed as endangered. Mature plants are typically less than 4 inches tall and bloom between April and August. It grows at elevations of 30–7,800 feet in marshes, vernal pools, and margins of lakes in clay soils. Bogg's Lake hedge-hyssop seeds germinate when pools become inundated, and growth begins underwater. The plants complete a rapid life cycle during the period when vernal pools have begun to dry but still contain shallow water (Corbin 2004 and Kaye et al. 1990 cited in USFWS 2005). The geographic range of Bogg's Lake hedge-hyssop includes portions of the Inner North Coast Ranges, central Sierra Nevada Foothills, Sacramento Valley, and Modoc Plateau. Within this range, it is known from 87 CNDDB occurrences and 85 of these occurrences are presumed to be extant (CNDDB 2010). Bogg's Lake hedge-hyssop has not been documented as occurring in Yuba County, but potentially suitable habitat is present and it is proposed for coverage under the Yuba Sutter NCCP/HCP.

Special-Status Wildlife

Twenty-eight special-status wildlife species are known to occur in Yuba County (Table 4.4-3, below). Of these, 12 are federally listed as threatened or endangered and three are candidates for federal listing. Four species are listed as threatened or endangered by the State of California only, but several of the federally listed species are also listed under CESA. The remaining 12 species are considered California species of special concern or fully protected species by DFG. Locations of documented occurrences of special-status wildlife species in Yuba County are shown on Exhibit 4.4-2. The California tiger salamander and the greater sandhill crane, which are not shown on the exhibit, are included in the table because they have the potential to occur in Yuba County, but their presence has not been verified.

Exhibit 4.4-3 shows the extent of critical habitat designated by USFWS in the County for selected species. The 18 fish and wildlife species presently proposed for coverage by the Yuba-Sutter NCCP/HCP are indicated in the table by an asterisk (*). Additional status and habitat requirements for each of the terrestrial wildlife species proposed for coverage under the NCCP/HCP is provided below. Special-status fish species are discussed under a separate heading.

Vernal Pool Tadpole Shrimp

The vernal pool tadpole shrimp (*Lepidurus packardi*) is federally listed as endangered. This species is found in suitable habitats in the Central Valley from Shasta County to Merced County. The vernal pool tadpole shrimp typically occurs in vernal pool complexes. The species has also been observed in stock ponds and other seasonal wetlands. The life history of the vernal pool tadpole shrimp is linked to the periodic filling and drying of its vernal pool habitat. When pools are dry, the eggs lie dormant in the dry pool sediments. After rainwater fills the pools during winter, populations of the species are reestablished as the dormant eggs hatch. Unlike the eggs of many fairy shrimp species, the eggs of the vernal pool tadpole shrimp do not require a freezing or drying period to hatch (Ahl 1991). Adult shrimp are often present and reproductive in vernal pools until the pools dry up in spring (Ahl 1991; 59 Federal Register [FR] 48136–48153, September 16, 1994).

In Yuba County, vernal pool tadpole shrimp are known to occur in suitable vernal pool habitats, including populations near Beale Air Force Base (AFB), Olivehurst and other locations in the foothills and valley portion of the County (CNDDB 2010).

Table 4.4-3
Special-Status Wildlife Species Known to Occur or Potentially Occurring in Yuba County

Species[1]	Status[2]		Habitat
	USFWS/NMFS	DFG	
Invertebrates			
Conservancy fairy shrimp *Branchinecta conservatio*	E		Inhabit large, cool-water vernal pools with moderately turbid water.
Vernal pool fairy shrimp* *Branchinecta lynchi*	T		Inhabits pools with clear to tea-colored water, most commonly in grass or mud-bottomed swales, or basalt flow depression pools in unplowed grasslands, but sometimes in sandstone rock outcrops and alkaline vernal pools. Critical habitat is designated for this species in the county.
Valley elderberry longhorn beetle* *Desmocerus californicus dimorphus*	T		Closely associated with blue elderberry (*Sambucus Mexicana* or *S. velutina*), which is an obligate host for beetle larvae. Adult valley elderberry longhorn beetles are usually found upon flying between elderberry plants.
Vernal pool tadpole shrimp* *Lepidurus packardi*	E		Inhabits seasonal wetlands, vernal pools or swales that contain clear to highly turbid water and retain water for a few months at a time. Critical habitat is designated for this species in the county.
Fish			
Green sturgeon, southern DPS *Acipenser medirostris*	T		Inhabit a range or environments throughout their life cycle, including freshwater streams, rivers, estuarine habitat, and marine waters. Spawning is thought to occur in deep pools in areas of large cobbles, but has also been observed in areas of clean sand or bedrock in turbulent river mainstreams. Critical habitat has not been designated.
Hardhead *Mylopharodon conocephalus*		CSC	Inhabits clear, deep pools and runs with sand-gravel-boulder substrates and slow water velocities. Most of the streams in which it occurs have summer temperatures in excess of 60°F. Hardhead are likely present in Yuba County rivers, including the Feather and Yuba Rivers.
Central Valley steelhead DPS* *Oncorhynchus mykiss*	T		Inhabits riparian, emergent, palustrine habitat. Spawning and rearing habitat is usually characterized by perennial streams with clear, cool to cold, fast-flowing water with a high dissolved oxygen content and abundant gravels and riffles. Critical habitat designated to include Yuba County includes the Feather, Yuba, and Bear Rivers below the dams.
Chinook salmon, Central Valley fall/late fall-run ESU *Oncorhynchus tshawytscha*	C	T	Inhabits riparian, emergent, palustrine habitat. Spawning and rearing habitat is usually characterized by perennial streams with clear, cool to cold, fast-flowing water with a high dissolved oxygen content and abundant gravels and riffles. Essential fish habitat is established for the fall-run ESU in the lower Feather, Yuba, and Bear Rivers below the dams.
Chinook salmon, Central Valley spring-run ESU *Oncorhynchus tshawytscha*	T	T	Inhabits riparian, emergent, palustrine habitat. Spawning and rearing habitat is usually characterized by perennial streams with clear, cool to cold, fast-flowing water with a high dissolved oxygen content and abundant gravels and riffles. Critical habitat is designated in Yuba County includes the Feather, Yuba, and Bear Rivers below the dams.

Table 4.4-3
Special-Status Wildlife Species Known to Occur or Potentially Occurring in Yuba County

Species[1]	Status[2]		Habitat
	USFWS/NMFS	DFG	
Chinook salmon, Sacramento River winter-run ESU* *Oncorhynchus tshawytscha*	E	E	Inhabits riparian, emergent, palustrine habitat. Spawning and rearing habitat is usually characterized by perennial streams with clear, cool to cold, fast-flowing water with a high dissolved oxygen content and abundant gravels and riffles. Critical habitat is designated for this species but does not include any waterways in Yuba County.
Sacramento splittail *Pogonichthys macrolepidotus*		CSC	Inhabits brackish areas of the Sacramento–San Joaquin Delta, including the lower Sacramento River and Suisun Bay. Adults migrate upstream from brackish areas to spawn in freshwater. Requires flooded vegetation for spawning and rearing and therefore utilizes floodplain habitat when available.
Amphibians			
California tiger salamander* *Ambystoma californiense*	T	CSC	Vernal pools and permanent waters in grasslands; needs underground refuges, especially ground-squirrel burrows for breeding.
California red-legged frog* *Rana aurora draytonii*	T	CSC	Found in a variety of aquatic, riparian, and upland habitats, including ephemeral ponds, intermittent streams, seasonal wetlands, springs, seeps, permanent ponds, perennial creeks, human-made aquatic features, marshes, dune ponds, lagoons, riparian corridors, blackberry thickets, nonnative annual grasslands, and oak savannas. Critical habitat is designated for this species in the county.
Foothill yellow-legged frog* *Rana boylii*		CSC	Found in middle to low elevations in perennial creeks and streams, usually with cobble bottoms.
Reptiles			
Northwestern pond turtle* *Emys marmorata marmorata*		CSC	Uses permanent or nearly permanent water bodies in a variety of habitat types. Can be found in ponds, marshes, rivers, streams, and irrigation ditches within grasslands, woodlands, and open forests.
Giant garter snake* *Thamnophis gigas*	T	T	Found in aquatic, riparian, and upland habitats, including marshes, sloughs, small lakes, low-gradient streams, ponds, agricultural wetlands (irrigation and drainage canals, rice fields), and adjacent uplands.
Birds			
Tricolored blackbird* *Agelaius tricolor*		CSC	Nests in dense cattails and tules, riparian scrub, and other low dense vegetation; forages in grasslands and agricultural fields.
Grasshopper sparrow *Ammodramus savannarum*		CSC	Nests in grassland, upland meadow, pasture, hayfield, and old field habitats containing short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. Forages in clumped grasses.
Long-eared owl *Asio otus*		CSC	Nests in woodlands; forages over open rangeland, clearings, and fallow fields.
Burrowing owl* *Athene cunicularia*		CSC	Nests in burrows in areas of low-growing vegetation in grasslands and agricultural fields.

Table 4.4-3
Special-Status Wildlife Species Known to Occur or Potentially Occurring in Yuba County

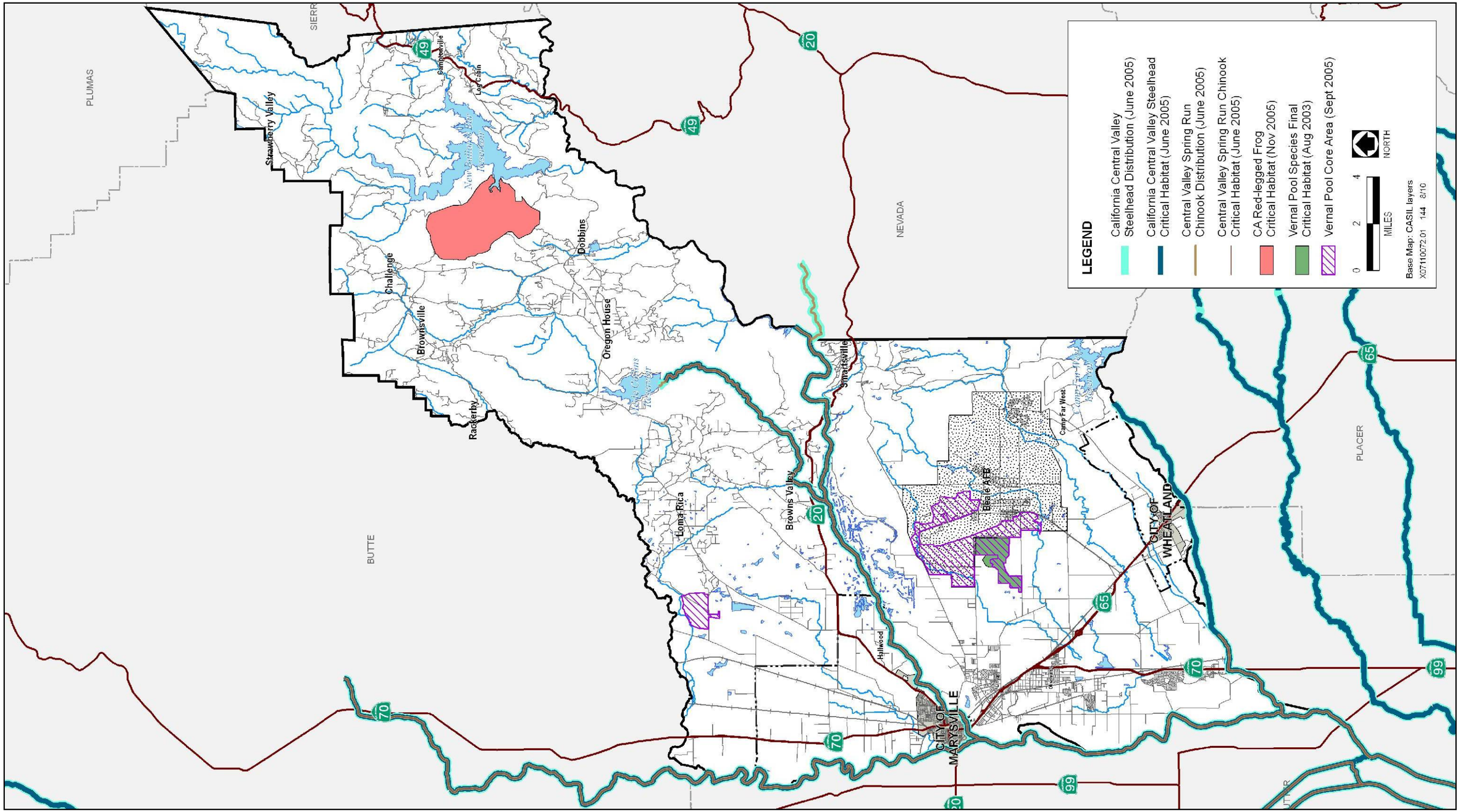
Species[1]	Status[2]		Habitat
	USFWS/NMFS	DFG	
Swainson's hawk* *Buteo swainsoni*		T	Nests in riparian forest and scattered trees; forages in grasslands and agricultural fields.
Northern harrier *Circus cyaneus*		CSC	Habitat types include brackish and freshwater marshes, alpine meadows, grasslands, prairies, and agricultural lands. Wintering habitat includes freshwater and saltwater wetlands, coastal dunes, grasslands, deserts, meadows, and croplands. Breeding habitat includes freshwater wetlands, coastal brackish wetlands, open wet meadows and grasslands, shrub-steppe, desert sinks, areas along rivers and lakes, and crop fields.
Western yellow-billed cuckoo* *Coccyzus americanus occidentalis*	C	E	Nests in large blocks of riparian habitats (particularly woodlands with cottonwoods and willows) and forages in cottonwood trees.
White-tailed kite *Elanus leucrus*		FPS	Trees and shrubs in grasslands and savannas.
Greater Sandhill Crane* *Grus canadensis tabida*		FPS	Summers in open terrain near shallow lakes or freshwater marshes; winters in plains and valleys near bodies of fresh water.
Bald eagle* *Haliaeetus leucocephalus*	T	E, FPS	Found near aquatic habitats (rivers, lakes, reservoirs) with forested shorelines; nests in large trees that are open and accessible.
California black rail* *Laterallus jamaicensis coturniculus*		T, FPS	Nests in high portions of shallow freshwater marshes, wet meadows, and flooded grassy vegetation vegetated by fine-stemmed emergent plants.
Bank swallow* *Riparia riparia*		T	Nests in colonies and creates nests by burrowing into vertical banks consisting of fine-texture soils; breeds in California from April to August and spends the winter months in South America.
Mammals			
Pacific fisher *Martes pennanti*	C	CSC	Found in intermediate to large-tree stages of coniferous forests and deciduous riparian areas with high percentage of canopy closure. Uses cavities, snags, logs, and rocky areas for cover and denning. Needs large areas of mature, dense forest.
Pacific Townsend's big-eared bat* *Corynorhinus townsendii townsendii*		CSC	Hibernates in caves, mines, and on old buildings.

Notes: DFG = California Department of Fish and Game; DPS = distinct population segment; ESU = Evolutionarily Significant Unit; USFWS = U.S. Fish and Wildlife Service; NMFS = National Marine Fisheries Service

[1] Species proposed for coverage under the *Yuba-Sutter Habitat Conservation Plan/Natural Community Conservation Plan* are indicated by an asterisk (*).

[2] Legal Status Definitions

Federal Listing Categories (USFWS)		State Listing Categories (DFG)	
E	Endangered	E	Endangered
T	Threatened (legally protected)	T	Threatened (legally protected)
C	Candidate	CSC	Species of Special Concern
NMFS	Species under the jurisdiction of the National Marine Fisheries Service	FPS	Fully Protected Species



Source: DFG and USFWS 2007

Critical Habitat **Exhibit 4.4-3**

Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*) is federally listed as threatened. This species is found in scattered locations in the Central Valley from Shasta County to Tulare County, along the Coast Ranges from Solano County to San Luis Obispo and Santa Barbara Counties, and in Southern California in Riverside and San Diego Counties.

The vernal pool fairy shrimp inhabits ephemeral pools with clear to tea-colored water. Occupied pools are usually in grass-bottomed or mud-bottomed swales or basalt flow depressions in unplowed grasslands (59 FR 48136–48153, September 16, 1994). The species is distributed sporadically in vernal pool complexes. Vernal pool fairy shrimp have been observed in vernal pools from December to early May. This species can mature quickly and, therefore, is able to persist in short-lived, shallow pools.

In Yuba County, vernal pool fairy shrimp are known to occur in suitable vernal pool habitats, including populations near Beale AFB, Wheatland, and potentially other locations in the foothills and valley portion of the County (CNDDB 2010).

Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) is federally listed as threatened. It is patchily distributed throughout the remaining riparian forests of the Central Valley from Redding to Bakersfield. The beetle appears to be only locally common (i.e., found in population clusters that are not evenly distributed across the Central Valley).

Extensive loss of California's Central Valley riparian forests has occurred since 1900, declining by 80–96% depending on the region (USFWS 2006). Although wide-ranging, the valley elderberry longhorn beetle is thought to have suffered a long-term decline because of human activities that have resulted in widespread alteration and fragmentation of riparian habitats and, to a lesser extent, upland habitats that support the beetle. Low density and limited dispersal capability may cause the beetle to be particularly vulnerable to population isolation as a result of habitat fragmentation. Insecticide and herbicide use in agricultural areas and along road rights-of-way may be factors limiting the beetle's distribution. The age and quality of individual elderberry shrubs/trees and stands as a food plant for beetle may be a factor in its limited distribution.

USFWS released a five-year status review for the valley elderberry longhorn beetle on October 2, 2006 (USFWS 2006). This review reported an increase in known beetle locations from 10 at the time of listing in 1980 to 190 in 2006. Because of this observed population increase and the concurrent protection and restoration of several thousand acres of riparian habitat suitable for valley elderberry longhorn beetles, the USFWS status review determined that this species is no longer in danger of extinction, and recommended that the species no longer be listed under the ESA. This recommendation is not a guarantee that the species will be delisted, however, since formal changes in the classification of listed species require a separate USFWS rulemaking process distinct from the five-year review. If valley elderberry longhorn beetles are removed from the ESA list, the delisting is unlikely to be finalized before late 2008.

Valley elderberry longhorn beetle occur in Yuba County where riparian conditions support elderberry shrubs (*Sambucus mexicanus*), including locations along the Yuba River, Best Slough, and Honcut Creek, among others (CNDDB 2010).

California Red-Legged Frog

The California red-legged frog was federally listed as a threatened subspecies in 1996. USFWS released the recovery plan for the California red-legged frog in 2002 (USFWS 2002). The objective of this plan is to sufficiently reduce threats and improve the population status of the species to warrant delisting. The plan includes

conservation measures, recovery strategies, and recovery actions. USFWS intends to focus recovery actions in core areas identified in the plan.

Yuba County contains one of the few known occurrences of California red-legged frog in the Sierra foothills. The Yuba County core area, which includes the Little Oregon Creek watershed, covers 3,776 acres in northeastern Yuba County, north of Marysville Road and south of La Porte Road (Exhibit 4.4-3). This area includes the second of five known extant California red-legged frog populations identified in the Sierra foothills since the time of listing and is located in the easternmost portion of the subspecies' historic range.

The Little Oregon Creek watershed unit represents the California red-legged frog's adaptation to a wide range of habitat and ecological variability, is known to be occupied, contains high-quality habitat, and contains the features essential for the conservation of the subspecies. This unit consists of private land and is mapped entirely from occurrence records subsequent to the time of listing. Threats that may require special management in this unit include:

- necessary wildland fire suppression activities, which may dewater aquatic habitats and thereby result in the desiccation of egg masses or direct death of adults from water drafting;
- timber harvest activities, which can alter or remove upland habitat; and
- predation by nonnative species.

Foothill Yellow-Legged Frog

The foothill yellow-legged frog is designated as a species of special concern by DFG. This species occurs in the Coast Ranges from the Oregon border south to the Transverse Mountains in Los Angeles Co., in most of northern California west of the Cascade crest, and along the western flank of the Sierra south to Kern Co.

This species is characteristically found close to water in association with perennial streams and ephemeral creeks that retain perennial pools through the end of summer. In rivers, breeding areas are often associated with confluences of tributary streams that are predominantly perennial (Seltenrich and Pool 2002). These frogs require shallow, flowing streams with some cobble-sized substrate for depositing large masses of eggs. Egg laying normally follows the period of high-flow discharge associated with winter rainfall, usually between late March and early June. Eggs hatch in about 15–30 days depending on water temperature, and tadpoles metamorphose into juvenile frogs in 3–4 months.

Foothill yellow-legged frogs could occur in suitable aquatic habitat including middle to low elevations in perennial creeks and streams in the Slate Creek watershed in northeastern Yuba County (CNDDB 2010).

California Tiger Salamander

The California tiger salamander (*Ambystoma californiense*) is a large terrestrial salamander restricted to California grassland and oak savanna environments with seasonal or perennial ponds or vernal pools for breeding. It is listed as threatened under the ESA throughout its range, except in Sonoma and Santa Barbara Counties, where it is listed as endangered. California tiger salamanders spend most of the year in mammal burrows or other underground refuges, where they remain active or enter a state of dormancy. Migration to breeding locations begins with the first rain events of the fall and winter. California tiger salamanders are known to migrate up to 1-1/4 miles (2 kilometers) from upland refuges to breeding sites, usually moving during rain events at night. Vernal pools are particularly important breeding habitats for California tiger salamander because the pools dry completely in the late summer and fall and do not support breeding populations of nonnative predators that require permanent water, such as fish or bullfrogs.

California tiger salamander has not be identified as occurring in Yuba County, but is on the USFWS list of species that may be affect by projects in Yuba County. Therefore, it is addressed in this EIR.

Northwestern Pond Turtle

The northwestern pond turtle (*Actinemys marmorata marmorata*) is designated as a species of special concern by DFG. It is one of two subspecies of the western pond turtle, along with the southwestern pond turtle (*A. m. palida*), which is also a species of special concern. The western pond turtle is found in suitable aquatic habitats west of the crest of the Sierra Nevada in California and in parts of Oregon, Washington, and Mexico. The northwestern subspecies is generally found from San Francisco Bay north to the Columbia River drainage in Oregon and Washington.

The western pond turtle still occupies most of its historic range, but many local populations are declining or have been extirpated (57 FR 45761–45762, October 5, 1992). These declines are primarily a result of loss of wetland habitats to agricultural and urban uses and flood control and water diversion projects.

The western pond turtle is generally associated with permanent or nearly permanent wetlands in a wide variety of environments below an elevation of 6,000 feet (Zeiner, Laudenslayer, and Meyer 1988). The species lives in quiet waters of lowland ponds, marshes, lakes, and reservoirs and in streams with deep pools, rocks, logs, and streamside vegetation that provide escape cover and basking sites (Stebbins 1972). Western pond turtles are highly aquatic but leave the water to bask and lay eggs. They may lay their eggs along sandy wetland margins or at upland locations as far as 1,300 feet from water (Holland and Bury 1992).

In Yuba County, northwestern pond turtle occur in suitable aquatic habitat including rivers, sloughs, and other waterways and ponds in unincorporated Yuba County (CNDDB 2010).

Giant Garter Snake

The giant garter snake (*Thamnophis gigas*) is federally and state listed as threatened. Giant garter snakes inhabit a variety of aquatic habitats, such as agricultural wetlands, irrigation and drainage canals, marshes, sloughs, ponds, lakes, and streams. They are primarily restricted to aquatic habitat and nearby basking areas during their active period (April 1–October 1). Giant garter snakes retreat to small mammal burrows and other soil crevices above prevailing flood elevations during the winter dormancy period (November to mid-March), when they are particularly sensitive because of limited opportunities for escape from disturbance (DFG 2005). They are threatened by land use practices and other human activities, including development of wetland and suitable agricultural habitats.

In Yuba County, giant garter snake occurs near the southern boundary of the County and adjacent Sutter County, south of the Bear River, and east of Highway 70 (CNDDB 2010).

California Black Rail

California black rail (*Laterallus jamaicensis coturniculus*) is state listed as a threatened species and designated as fully protected in the California Fish and Game Code. Although first described as birds of the coastal salt marshes, California black rails have since been found regularly inhabiting freshwater marshes (DFG 2005). Preferred habitat varies from almost pure pickleweed along the coast to sedges, saltgrass, and bulrush in inland areas. Nesting occurs from March to early June (DFG 2005).

The major threat to the California black rail has been, and currently is, the loss or degradation of wetland habitat. This species has been found at several Sierra Nevada locations in Yuba, Butte, Placer, and Nevada Counties, where it nests in shallow freshwater marshes or flooded grassy vegetation characterized by water depths of about one inch that do not fluctuate during the year. This sparrow sized rail may raise two broods each breeding season, which begins as early as March and extend as late as early September.

In Yuba County, the California black rail has been documented in the Spenceville and Daugherty Wildlife Areas, and could occur at other locations with suitable freshwater marsh habitat (CNDDB 2010).

Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*), formerly federally listed as threatened, was removed from the federal list of threatened and endangered species on June 28, 2007. Bald eagle is still state listed as endangered and is protected by the federal Bald and Golden Eagle Protection Act (16 USC 668). Historically, it nested throughout California. However, the current bald eagle nesting population is restricted primarily to mountainous habitats in the northern Sierra Nevada, Cascade Range, and northern portion of the Coast Ranges (DFG 2005). Bald eagle nesting territories in California are found primarily in ponderosa pine and mixed conifer forests. Bald eagle nest sites are always associated with a lake, river, or other large water body that supports abundant fish or waterfowl as prey. Bald eagles winter along rivers, lakes, and reservoirs that support abundant fish or waterfowl and have large trees or snags for perch sites. They often roost communally during winter in areas isolated from human disturbance.

In Yuba County, bald eagle nest and winter at New Bullards Bar Reservoir (CNDDB 2010).

Western Yellow-Billed Cuckoo

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is state listed as an endangered species and is a candidate for federal listing. This species requires large patches (25 acres or larger) of mixed old-growth riparian forests composed of willow and cottonwood trees with dense understory. The lack of extensive stands of riparian vegetation is a severely limiting factor determining the occurrence of yellow-billed cuckoo.

In Yuba County, Western yellow-billed cuckoo have been historically observed near the confluence of the Yuba and Feather Rivers, and along the Feather River (CNDDB 2010).

Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is state listed as a threatened species. Swainson's hawks prefer to nest in riparian areas with isolated trees bordered by suitable foraging habitat (i.e., grasslands, active agriculture, or fallow fields). Agricultural fields provide important foraging habitat for Swainson's hawks. Alfalfa, fallow fields, rice fields, dry and irrigated pastures, and other low-growing row crops (including corn after harvest) are preferred foraging habitats for Swainson's hawks (DFG 2005). Swainson's hawks are summer residents in the Central Valley. Swainson's hawks arrive in April to breed and generally nest within a riparian corridor.

Swainson's hawks occur at lower elevations in Yuba County where suitable habitat is present (CNDDB 2010).

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia hypugea*) is designated as a species of special concern by DFG. In California, burrowing owls are found throughout the Central Valley, in the interior portion of the Coast Ranges, and along the coast.

The population of burrowing owls has declined primarily because native grassland habitats have been converted to agricultural uses. Current threats to remaining populations include urban development and conversion from agricultural crop types that are compatible with burrowing owl occurrence to those that are incompatible.

Burrowing owls live and breed in burrows, typically in abandoned ground squirrel colonies. Optimal habitat conditions include open, dry, and nearly level grasslands or prairies. In the Central Valley, burrowing owls often nest along roadsides adjacent to agricultural fields, along field borders, in annual grasslands and dryland pastures, and along levee embankments that are open to adjacent fields.

One historical occurrence of western burrowing owl in Yuba County is near Hammonton, approximately four miles east of the City of Marysville (CNDDB 2010).

Bank Swallow

Bank swallow (*Riparia riparia*) is state listed as threatened. The species nests in colonies and creates nests by burrowing into vertical banks consisting of fine-texture soils. Currently, bank swallows are locally common only in restricted portions of California where sandy, vertical bluffs or riverbanks are available. Some 75% of the state's remaining population is concentrated on the banks of Central Valley streams, including several colonies on the Sacramento River, particularly the upper reaches between Red Bluff and Butte City. In this alluvial plain, the river system provides suitable soil types and erosion needed for prime nesting habitat. The birds build nests within 2- to 3-foot-deep burrows that are dug perpendicularly into near-vertical earthen banks along streams, coastal bluffs, and sand and gravel pits. The colonies that make up the breeding population in California each year have ranged in size from five to more than 3,000 burrows; the average sized colony is about 350 burrows (DFG 2005).

In Yuba County, bank swallow occur along the Feather River in areas where suitable habitat is present (CNDDB 2010).

Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) is designated a species of special concern by DFG. During the breeding season, tricolored blackbirds are found in the Central Valley, in the low foothills of the Sierra Nevada and Coast Ranges from Shasta County south to Kern County, along the coast from Sonoma County south to the Mexican border, and on the Modoc Plateau.

The tricolored blackbird is generally considered a marsh species, nesting primarily in tule and cattail marsh habitats. Tricolored blackbirds also nest in non-marsh habitats, such as blackberry brambles, thistle stands, and nettle stands (USFWS 1991). Tricolored blackbirds nest in small (50–100 individuals) to large colonies (as many as 50,000 individuals).

In Yuba County, tricolored blackbird occur in foothill locations with suitable marsh habitat (CNDDB 2010).

Greater Sandhill Crane

The greater sandhill crane (*Grus canadensis tabida*) is state listed as threatened and is fully protected under the Fish and Game Code. Historically, the greater sandhill crane was a fairly common breeder on the northeastern plateau of California. The population has been greatly reduced in numbers and breeds only in parts of Siskiyou, Modoc, and Lassen Counties, and in Sierra Valley in Plumas and Sierra Counties. During the breeding season, sandhill crane can be found in and near wet meadows, and other freshwater wetland habitats. It winters primarily in the Sacramento and San Joaquin Valleys from Tehama County south to Kings County in annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open emergent wetlands.

Sandhill crane is proposed for coverage by the Yuba-Sutter NCCP/HCP. Greater sandhill crane has not been identified as occurring in Yuba County, but is included in the Yuba-Sutter NCCP/HCP. Therefore, it is addressed in this EIR.

Pacific Townsend's Big-Eared Bat

Pacific Townsend's big-eared bat is designated as a species of special concern by DFG. This species occurs throughout California except in subalpine and alpine regions. Pacific Townsend's big-eared bat lives in a variety of communities, including coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands and deserts, and high-elevation forests and meadows. Throughout most of its geographic range, it is most common in mesic sites (Kunz and Martin 1982). Known roosting sites in California include limestone caves, lava tubes, mine

tunnels, buildings, and other human-made structures (Pearson et al. 1952). Habitat for Townsend's big-eared bats must include appropriate roosting, maternity, and hibernacula sites free from disturbances by humans. A single visit by humans can cause the bats to abandon a roost. Females typically roost in large maternity colonies which are highly susceptible to disturbances by humans (Barbour and Davis 1969). Males usually roost singly or in small groups and are probably not affected as much as females by disturbances. Both sexes hibernate in buildings, caves, and mine tunnels, either singly (males) or in small groups (Pearson et al. 1952).

Pacific Townsend's big-eared bat has not been identified as occurring in Yuba County, but is proposed for coverage in the Yuba-Sutter NCCP/HCP. Therefore, it is addressed in this EIR.

Special-Status Fish Species

A total of seven special-status fish species occur, or have the potential to occur in Yuba County waterways. Of the seven species, the Central Valley steelhead distinct population segment (DPS), the Central Valley spring-run chinook salmon evolutionary significant unit (ESU), and the southern DPS of North American green sturgeon are federally listed as threatened species. The Sacramento River winter-run ESU is the only fish species federally listed as endangered. The National Marine Fisheries Service (NMFS) determined that listing is not warranted for Central Valley fall/late fall–run chinook salmon ESU; however, it is still designated as a species of concern. USFWS delisted Sacramento splittail from federal listing as threatened on September 22, 2003. The remaining species, hardhead, is considered a species of special concern by DFG. Brief descriptions follow for the special-status species with potential to occur in Yuba County waterways.

Central Valley Steelhead Distinct Population Segment

The Central Valley steelhead DPS is federally listed as threatened and critical habitat that includes rivers in Yuba County has been designated for the species. The Central Valley steelhead DPS includes all naturally spawned populations of steelhead in the Sacramento and San Joaquin Rivers and their tributaries (63 FR 13347, March 19, 1998). Unlike salmon, steelhead do not necessarily die after spawning and can spawn more than once in their lifetime. In central California, most spawning steelhead are 3 years old, with 1 year spent in the ocean (Busby et al. 1996).

In Yuba County, critical habitat for Central Valley steelhead includes the lower Yuba, Feather, and Bear River hydrologic units upstream to endpoints (barriers to migration).

Chinook Salmon

Chinook salmon is an anadromous fish species that requires cold, freshwater streams with suitable gravel for reproduction. Chinook salmon are found in the Feather and Yuba Rivers, with limited potential to occur in the Bear River.

The Central Valley fall/late fall–run chinook salmon ESU is a federal Species of Concern. Fall-run chinook salmon is the most widely distributed and most numerous run occurring in the Sacramento and San Joaquin Rivers and their tributaries (Moyle 2002). The Sustainable Fisheries Act of 1996 defines essential fish habitat (EFH) to include those habitats that fish rely on throughout their life cycles and requires consultation with NMFS on any project that might adversely affect EFH. EFH for the fall-run chinook includes migration, spawning, and rearing habitat in the lower Feather, Yuba, and Bear Rivers. EFH for the late fall-run chinook salmon includes the Sacramento River and selected smaller tributaries, excluding the Feather River and other waters of Yuba County.

The Central Valley spring-run chinook salmon, federally listed as threatened, is at much greater risk of population decline because of its lower fecundity than the fall/late fall–run and because it needs coldwater habitat to oversummer while waiting for gonadal tissue to mature. Critical habitat is designated to include selected waters in the Sacramento River basin from approximately Redding (River Mile 302) to approximately Chipps Island (River

Mile 0) at the westward margin of the Sacramento–San Joaquin Delta, including the lower portions of the Feather, Yuba, and Bear Rivers (50 Code of Federal Regulations Part 226).

The Sacramento River winter-run chinook salmon is the least abundant of Central Valley chinook, as it historically relied on the spring-fed tributaries to the upper Sacramento River for oversummering habitat. However, coldwater releases from Shasta and Englebright Lakes have provided habitat that has enabled the winter-run chinook salmon to survive. Critical habitat is designated to include the Sacramento River from approximately Redding (River Mile 302) to approximately Chipps Island (River Mile 0). However, the endangered winter-run chinook may stray into the lower Feather or Yuba Rivers on their upstream migration.

Green Sturgeon

On April 7, 2006, NMFS listed the southern DPS of the North American green sturgeon as threatened under the ESA. The southern DPS includes individual reproductive populations south of the Eel River, including the Sacramento River and major tributaries. The green sturgeon is a primitive, bottom-dwelling fish found from Ensenada, Mexico, to the Bering Sea and Japan (Wang 1986). Individuals congregate in the bays of these systems in summer months, while some may travel upstream to spawn in spring and summer months. Spawning occurs in the lower reaches of large rivers with swift currents and large cobble. Adults broadcast spawn in the water column and fertilized eggs sink and attach to bottom substrate until they hatch (PSMFC 2006). Green and white sturgeon adults have been observed periodically in small numbers in the Feather River (Beamesderfer et al. 2004). Critical habitat has yet to be established for the green sturgeon.

Sacramento Splittail

Sacramento splittail has been delisted from its federal status of threatened but remains a California Species of Special Concern. This large cyprinid (minnow family) is endemic to California and occurs in sloughs, lakes, and rivers of the Central Valley (Moyle 2002). Adult splittail migrate from brackish areas to spawn in freshwater. Sacramento splittail spawns on terrestrial vegetation and debris on floodplains inundated by high spring flows (Moyle 2002). Sacramento splittail occurs in the lower Feather River (CNDDB 2007).

Hardhead

Hardhead is a California Species of Special Concern. It is a large minnow that resembles the pikeminnow. It prefers clear, deep pools and runs with sand-gravel-boulder substrates and slow water velocities. Hardhead is widely distributed in low- to mid-elevation streams in the main Sacramento–San Joaquin River drainage and are likely found in the Feather and Yuba Rivers. In the Sacramento River drainage, hardhead are present in most of the larger tributary streams as well as in the Sacramento River. Despite the species' widespread distribution, hardhead populations are increasingly isolated from one another, making them vulnerable to local extinctions (Moyle 2002). As a result, hardhead is much less abundant than it once was (Moyle 2002).

Deer Herds

Deer herds throughout most of California exhibited a serious long-term decline during the late 1960s and early 1970s. The California Department of Fish and Game (DFG) responded with the initiation of a herd planning program designed to address this problem. In 1976, a statewide Plan for California Deer was approved. In 1977, AB 1521 added emphasis to the program. Subsequently, a new deer management policy was adopted by DFG. The policy calls for deer management planning on a herd basis, with each herd plan containing specific program elements but generally conforming to the goals of the statewide plan.

Two resident deer populations that can be found in Yuba County are the Sacramento Valley Herd and the Camp Beale Herd, both of which are a part of the Mother Lode Deer Management Unit. There are no unique biological or geographical features that define a herd's boundary. Rather, the herds are composed of resident deer populations that have similar habitat types in common (oak woodland and chaparral in the foothills and remnant

marsh and riparian vegetation in the Valley). The eastern boundary of the Mother Lode Deer Management Unit is an area of overlap with neighboring migratory herds, which include the Bucks Mountain Herd, the Mooretown Herd, the Downieville Herd, Nevada City Herd, and possibly the Eastern Tehama Herd. This area of overlap is variable in size and depends on topography, severity and onset of winter, and forage conditions. During winter, migratory deer may descend to low elevations and winter with resident deer. Similarly, Mother Lode deer may occupy home ranges within neighboring migratory herd winter range.

In addition to resident deer populations, Yuba County provides winter range for two migratory herds, the Mooretown Deer Herd and Downieville Deer Herd. The Mooretown herd is located in portions of Plumas, Sierra, Butter, Nevada, and Yuba counties, and these deer winter primarily in Yuba and Sutter counties from about 400 feet to 3,500 feet elevation. The Downieville herd winters primarily in the portions of Yuba County upslope of Bullard's Bar Reservoir between 1,800 and 2,000 feet elevation. The 1996 General Plan included an exhibit showing generalized locations of resident and migratory deer in Yuba County (see Appendix F). According to discussions with DFG staff, updated mapping and analysis is not available (Newman 2010, Whitmore 2010).

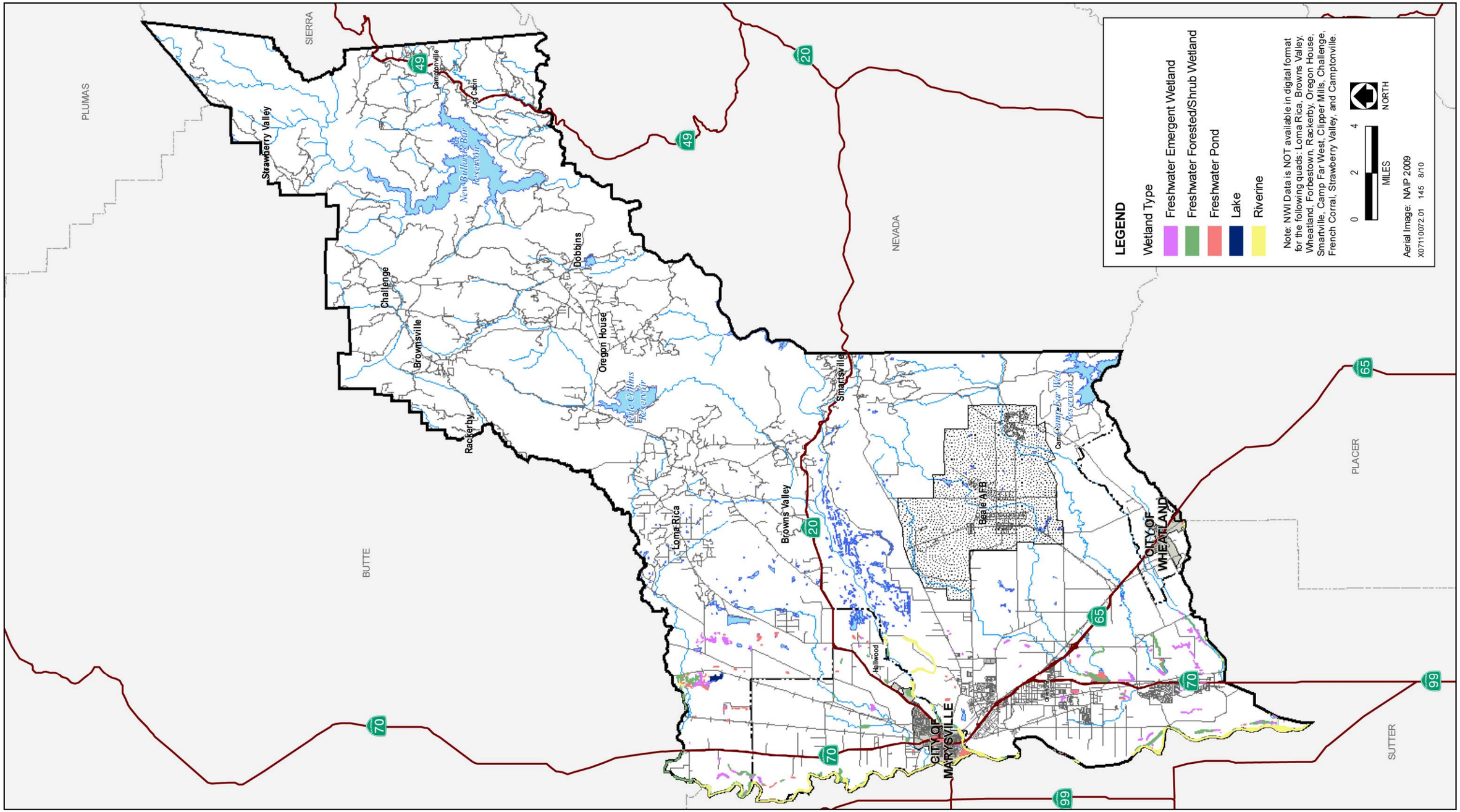
Residential development in the foothills of the western Sierra Nevada Mountains has been a major factor in the loss of winter range habitat for migratory deer. This habitat loss has seriously threatened the welfare of migratory deer. Most of the deer winter range in California is on private land. Subdivision and development of parcels allow land use changes which result in a permanent loss of deer habitat. Habitat losses are due to the elimination of forage and cover plants; disturbance from noise, traffic, and domestic dogs; and public use as a result of improved road access and subdivisions. One of the direct effects of residential development in deer winter range is development of barriers that interfere with deer movement in and out of winter range and separate food and water source areas from shelter sites. Barriers to deer movement include areas with high housing densities, deer-proof or deer-resistant fencing, reservoirs, major streams or rivers, and major roads and highways. According to statistics kept by DFG, the number of deer killed by hunters has gone up and down since the 1980s, but has mostly remained constant since 2000 (with a substantial one-year drop in 2005) (DFG 2010). According to DFG, it is difficult to draw conclusions from the deer kill data, but the numbers are remaining relatively constant (Whitmore 2010).

Sensitive Natural Communities

Sensitive natural communities are those protected by, or of special concern to federal, state, or local resource conservation agencies and organizations. DFG and CNPS both have programs that identify and track rare and/or diminishing native plant communities within California. Although some of these communities represent important biological resources and may be unique to California, they may have no legal or protected status. Regardless, substantial losses of some of these plant communities may be considered significant under CEQA. In Yuba County, such vegetation communities consist of northern hardpan vernal pools, fresh emergent wetlands, wet meadows, oak woodlands, and various types of riparian forest and scrub. These sensitive natural communities occur largely in the Central Valley and Sierra Nevada foothill regions of the county and along river and stream corridors.

Sensitive natural communities discussed below are those that fall under the general category of riparian communities, freshwater emergent wetland, vernal pool complexes, and wet meadow.

No acreage total is given for vernal pools because their seasonal nature makes them difficult to quantify and map at this scale. Instead areas supporting vernal pools were mapped as vernal pool complexes, which include individual vernal pools and vernal pool systems (i.e., interconnected systems of vernal pools and swales) and their surrounding grassland matrix. There are approximately 8,719 acres of vernal pool complex mapped within Yuba County. The extent of some of the wetland and riparian communities can be derived from the data in the National Wetlands Inventory (Exhibit 4.4-4). On this map, some of the features identified as freshwater forested/shrub wetland would be considered Valley-Foothill Riparian (in the FRAP classification) and some of the features identified as freshwater emergent wetland are northern hardpan vernal pools. To identify the exact location and extent of vernal pool and other wetland types, an on-site delineation of these habitat types is typically necessary.



Source: Yuba County GIS 2007, NWI CASIL 1993 AND 1996

NWI Wetland Habitats **Exhibit 4.4-4**

Oak Woodlands

Blue oak–foothill pine and blue oak woodlands are not tracked as sensitive habitats in the CNDDB. However, the passing of Senate Bill (SB) 1334 mandated counties to require feasible and proportional habitat mitigation for impacts to oak woodlands as part of the CEQA process under Public Resources Code (PRC) 21083.4. SB 1334 and PRC 21083.4 were the direct consequences of a growing concern over the incremental loss of oak woodland habitat throughout the state as a result of habitat conversions, residential and commercial uses and other compounding factors, such as lack of regeneration, spread of Sudden Oak Death syndrome, and pressures from invasive species. More recently, global climate change has added to the urgency to protect large tracts of unfragmented habitat to provide migration corridors for species, to preserve the state's biodiversity, and to allow for adaptive resource management.

Blue oak woodland, together with blue oak–foothill pine woodland, is the predominant vegetation type at elevations below 3,000 feet across much of Yuba County. Blue oak woodland is usually characterized by a dense understory of annual grasses or a poorly developed shrubby understory featuring species such as poison-oak, California coffeeberry (*Rhamnus californica*), and buckbrush (*Ceanothus cuneatus*). Interior live oak and canyon live oak are often found in blue oak woodland. These species can also be the dominant tree species where they may be considered as distinct habitats. Interior live oak trees are often associated with river floodplains, low foothills, and upland slopes. In low-elevation foothill woodlands, interior live oak occurs as widely spaced trees or clumps that may be concentrated around rock outcrops. Interior live oak becomes a more significant part of the blue oak woodland canopy with increasing elevation, particularly on north-facing slopes. Canyon live oak trees are found on low foothills, mountain canyons, upland slopes, and exposed ridges.

Blue oak–foothill pine woodland is characterized by a mixture of hardwoods, foothill pine (*Pinus sabiniana*), and shrubs. This habitat is found generally in the foothills where it intergrades with blue oak woodland and annual grassland at lower elevations, extending up to about 3,000 feet elevation, where it frequently intergrades with mixed chaparral. The understory is commonly characterized by clusters of mixed shrubs with interspersed openings dominated by annual grasses. Blue oak trees are dominant at lower elevations but are usually outnumbered by foothill pine at higher elevations. Associated tree species include interior live oak, canyon live oak, and California buckeye (*Aesculus californica*).

Riparian Communities

Riparian communities were once extensive on the low-gradient, depositional reaches of the major rivers of the Sacramento and northern San Joaquin valleys, including the Feather, Yuba, and lower Bear Rivers. Today, much of this habitat has been converted to other land uses and riparian forest and woodland habitat exists as scattered remnant patches along these rivers and other watercourses in the valley and foothills of the county.

The vegetation ranges from a dense closed-canopied, multi-layered forest to open woodlands. Plant diversity within the riparian habitat varies considerably depending on hydrological factors, soils, and other environmental conditions. Dominant tree species may include valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*), Sycamore (*Platanus racemosa*), or willow. Other important tree species that may be present in an understory tree layer include box elder (*Acer negundo*), Northern California black walnut (*Juglans californica* var. *hindsii*), and red willow (*Salix laevigata*). The understory typically consists of a shrub and herbaceous layer. Common shrubs and vines include wild rose (*Rosa california*), Himalayan blackberry (*Rubus discolor*), blue elderberry (*Sambucus mexicana*), poison-oak, wild grape (*Vitis californica*), California coffeeberry, and arroyo willow (*Salix lasiolepis*). Common wildlife associated with riparian habitats includes black-headed grosbeak, bushtit, striped skunk, raccoon, and gray fox. Special-status wildlife species that depend on riparian forests and woodlands include northwestern pond turtle, red-legged frog, Swainson's hawk, Western yellow-billed cuckoo, and bank swallow.

In Yuba County, the most established riparian vegetation occurs along the largest rivers— Feather River, Yuba River, and Bear River—and south Honcut Creek. Important riparian corridors also occur along Dry Creek and other tributaries to Honcut Creek and the Yuba River. Agricultural, residential, and industrial water use and land development have substantially reduced the extent of riparian habitats in the county. The biological importance of riparian vegetation and the dependence of many declining animal species on riparian habitat have made this habitat type a focus of many conservation efforts.

The CNDDB classifies riparian forest and woodland communities present in Yuba County as Great Valley valley oak riparian forest, Great Valley mixed riparian forest, and Great Valley cottonwood riparian forest. These riparian forest and woodland habitats are classified as Valley foothill riparian and valley oak woodland in the CWHR.

Montane riparian scrub is found on low gradient reaches of snowmelt streams in the eastern, higher-elevation, portions of the county. There are 195 acres of montane riparian scrub mapped within Yuba County, but because this community often occurs in very small patches that would not be captured at this mapping scale, there may be more than 195 acres present. This community typically consists of shrubby thickets dominated by willows and mountain alder (*Alnus incana* ssp. *tenuifolia*).

Freshwater Emergent Wetland

Freshwater emergent wetland is a herbaceous plant community dominated by aquatic plants and flooded frequently enough and for long enough duration that only plant species specially adapted to saturated soil conditions can survive. In Yuba County, common dominant species in freshwater emergent wetland include rushes (*Juncus* spp.), cattails (*Typha* spp.), bulrushes (*Scirpus* spp.), and sedges (*Carex* spp.). The vegetation cover may vary in size from small clumps to vast areas covering several kilometers. This plant community type is found throughout the mid to lower elevations of the county, often in association with riparian habitats along rivers or creeks, lakes, reservoirs, or stock ponds. Freshwater emergent wetlands are often also referred to as freshwater marshes.

The acreage of freshwater emergent wetlands in California has decreased dramatically since the turn of the century as a result of alteration of the hydrologic condition supporting long-term soil saturation and conversion to other uses, primarily agriculture. These habitat types are considered sensitive by DFG and also typically fall under the jurisdiction of USACE pursuant to the federal CWA.

Vernal Pool Complex

The vernal pool complex habitat type consists of northern hardpan vernal pools in an annual grassland matrix. There are 8,719 acres of vernal pool complex mapped in Yuba County. Northern hardpan vernal pools are found on the eastern margins of the Central Valley and characterized by a silicate-cement hardpan (i.e., a soil layer near the ground surface that restricts the percolation of water). Vernal pools are ephemeral (seasonal) wetlands that form in shallow depressions underlain by some type of hardpan. These depressions fill with rainwater and runoff from adjacent areas during the winter and may remain inundated during the spring to early summer. Rising spring temperatures cause the water to evaporate, promoting the growth of concentric bands of diverse plant species, especially native wildflowers, along the shrinking edge of the pool.

The vernal pool vegetation in California is characterized by a high percentage of native species, several of which are restricted to vernal pools. Many of these plant species, as well as a number of animal species, are listed under the ESA and CESA as endangered, threatened, or rare. In Yuba County, the most extensive complexes of vernal pools are found in the western portion of the county, where they occur in mosaics with annual grassland on low mounding hill topography.

The recovery plan for vernal pool ecosystems (USFWS 2005) was developed to recover, conserve, and protect self-sustaining populations of plant and animal species occurring within vernal pool ecosystems in California and

southern Oregon. The objectives of the recovery plan are to reduce or eliminate threats affecting conservation of sensitive species and to conserve vernal pools and their habitat to promote natural ecosystem processes and functions.

The recovery plan employs an ecosystem-level strategy for recovery that emphasizes habitat protection and management based upon five elements: habitat protection, adaptive management, rangewide species monitoring, continued research, and participation and outreach.

The recovery plan is implemented through establishment of core areas. The southern half of the Honcut core area and the entire Beale core area are located within Yuba County (Exhibit 4.4-3). Vernal pools in the Beale core area are designated critical habitat for vernal pool tadpole shrimp, a species federally listed as endangered and vernal pool fairy shrimp, a species federally listed as threatened.

Montane Wet Meadow

Wet meadow is a herbaceous-dominated wetland plant community that occurs in the higher elevation, eastern portions of the county on sites with permanently saturated, fine-textured soils. Just seven acres of montane wet meadow are mapped in Yuba County, but more wet meadow habitat may be present because it often occurs in small patches that are below the minimum mapping unit used by California Department of Forestry and Fire Protection for FRAP.

This community is similar to the freshwater emergent wetland community found at lower elevations in being highly variable in size and associated with riparian habitats along rivers, creeks, lakes, reservoirs and ponds. However, wet meadow species are adapted to colder temperatures and to periods of frost or snow. Characteristic species include rushes, sedges, bulrushes, and a variety of wildflowers.

4.4.3 Environmental Impacts and Mitigation Measures

Methodology

The analysis of impacts to biological resources associated with implementation of the 2030 General Plan is based on the information collected for the General Plan Update Biological Resources Background Report (Yuba County 2007). Information on special-status species was updated by running current database searches of the CNDDB (CNDDB 2010), the CNPS Inventory (CNPS 2010), and the USFWS Sacramento Field Office (USFWS 2010).

The potential effects of growth and associated land use conversion occurring under the 2030 General Plan were determined by comparing the proposed land use diagram with the vegetation map of the County and identifying habitats that could be converted due to changes in land use designations when compared to existing conditions.

Table 4.4-4 provides an approximate estimate of the existing acreage by habitat type that is located within the Valley Growth Boundary and Rural Communities, as designated in the County's Land Use Diagram. It is possible that land use change accommodated under the 2030 General Plan could affect these areas. New and expanded trails and roadways identified in the Community Development Element, but not located within the Valley Growth Boundary or Rural Community Boundary areas are also included in this analysis. However, because the County does not control land use entitlements in these areas, development in the city of Marysville, city of Wheatland, and Beale Air Force Base is not included in this analysis. Lands designated as Natural Resources on the land use diagram include agricultural, mineral resources, and recreational open space (e.g., park) areas that may not necessarily support natural habitats. Therefore, it cannot be assumed that all Natural Resources areas provide high biological resources values. Furthermore, the Natural Resources areas include forest and grazing lands that would support ongoing timber harvest and livestock grazing operations.

Table 4.4-4 Acreage by Vegetation Type within the Valley Growth Boundary and Rural Communities			
Habitat Type	Existing	Habitat Loss	
	Acres Existing	2030 GP Acreage	2030 GP Percent
Coniferous Forest Habitats	**74,824**	**2,394**	**3**
Sierran Mixed Conifer Forest	28,411	205	1
Douglas Fir	33,105	784	2
Ponderosa Pine	13,234	1,405	11
Closed –Cone Pine - Cypress	74	0	0
Woodland Habitats	**104,289**	**33,310**	**32**
Montane Hardwood Conifer	14,528	2,055	14
Montane Hardwood	40,006	7,590	19
Blue Oak Foothill- Pine Woodland	3,464	1,490	43`
Blue Oak Woodland	46,117	22,042	48
Live Oak Woodland	133	133	100
Other Oak Woodland	41	0	0
Shrub Dominated Habitats	**2,474**	**261**	**10**
Mixed Chaparral	1,773	260	15
Montane Chaparral	701	1	0
Herb Dominated Habitats	**62,232**	**23,380**	**38**
Annual Grassland	53,513	22,928	43
Vernal Pool Complex	8,719	452	5
Riparian Habitats	**7,180**	**1,768**	**25**
Riparian Forest	3,567	551	15
Riparian Scrub	2,257	369	16
Urban Riparian Forest	11	11	100
Montane Riparian Scrub	195	66	34
Valley Oak Woodland	1,150	771	67
Wetland Habitats	**5,878**	**1,102**	**19**
Freshwater Emergent Wetland	5,871	1,102	19
Wet Meadow	7	0	0
Other	**90,748**	**7,705**	**8**
Agriculture	89,012	7,525	8
Riverine	1,693	147	9
Other Woody Vegetation	43	33	77
Total	**347,625**	**69,920**	**~20**

Some habitat types (e.g., vernal pools and other seasonal wetlands) were not mapped in detail in the vegetation baseline map due to minimal mapping unit restrictions. Areas containing vernal pools were mapped as vernal pool complexes that include systems of vernal pools interspersed within a grassland matrix. The actual amount of wetland habitat within the vernal pool complex is unknown. Likewise, other relatively small wetlands could be present within any of the habitats mapped. Potential impacts on these resources are described qualitatively in this

analysis. The analysis of impacts on special-status species is based on the distribution of known occurrences of special-status species in the County and the availability of suitable habitat that may support additional previously undocumented occurrences.

Goals and policies pertaining to management and protection of biological resources in the County are mostly found in the Natural Resources Element of the 2030 General Plan. While the County's goals, policies, and actions promote designing development projects to avoid or minimize impacts on biological resources to the extent feasible, they do not necessarily ensure that substantial adverse effects would not occur within areas designated for development. The impact analysis in this EIR considers implementation of policies and actions in the General Plan.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact related to biological resources is considered significant if the proposed project would do any of the following:

- 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 DFG or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by DFG or USFWS;
- 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 nursery sites by native wildlife;
- conflict with local policies or ordinances protecting biological resources; or
- conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

IMPACT ANALYSIS

IMPACT 4.4-1 Impacts to Special Status Wildlife and Fish Species. *37 special-status wildlife and fish species are known to occur within areas that could be affected by implementation of the 2030 General Plan. Special-status species could occur in suitable habitats throughout areas that could be affected by implementation of the 2030 General Plan. Implementation of the 2030 General Plan would result in loss or degradation of existing populations or of suitable habitat for these species. This impact is considered* ***potentially significant****.*

Suitable habitats for special status wildlife and fish species occur throughout areas that could be affected by implementation of the 2030 General Plan. Special-status wildlife populations that exist in Yuba County could be affected by proposed land use changes either directly during land conversion or indirectly through modification of suitable habitat, changes in vegetation as a result of land development, and habitat fragmentation. Wildlife could be killed or injured, and nests destroyed at the time of conversion to urban or other development. The 2030 General Plan could affect up to 2,394 acres of coniferous forest habitats, 33,310 acres of woodland habitats, 261 acres of shrub-dominated habitats, 23,380 acres of herb dominated habitats, 1,768 acres of riparian habitats, 1,102 acres of wetland habitats, and 7,705 acres of agricultural and other habitats (Table 4.4-4).

Most special-status wildlife species are not evenly distributed throughout potential habitat locations, however any special-status wildlife species that use these habitats could be affected by proposed land use changes either directly, or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of changes in land use and management practices, altered hydrology from the construction of adjacent residential development and roadways, and habitat fragmentation. In addition, special status wildlife species could be impacted by land-use changes and land conversion adjacent to suitable habitat locations.

Land conversion would range from rural development which would consist of a mix of roads, infrastructure, and larger residential lots with open space intermixed to more heavily developed areas, such as commercial development. These heavily developed areas are predominantly planned for the valley portion of Yuba County including areas near the communities of Linda and Olivehurst-Plumas Lake. Rural community development would occur in large portions of the county's foothill habitats, stretching from Smartsville to Loma Rica. This type of development would not usually result in total habitat conversion; however the increased human presence and disturbance from roads, houses, domesticated pets, and infrastructure would decrease the suitability of these habitats for special-status wildlife species.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR5.1:** New developments that could adversely affect special-status species habitat shall conduct a biological resources assessment and identify design solutions that avoid such adverse effects. If, after examining all feasible means to avoid impacts to special-status species habitat through project design, adverse effects cannot be avoided, then impacts shall be mitigated in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species, including pre-construction surveys conducted according to applicable standards and protocols, where necessary.

- **Policy NR5.2:** The County will coordinate its environmental review and mitigation requirements with the Yuba-Sutter NCCP/HCP, once adopted.

- **Policy NR5.5:** The County will support cooperative restoration, development, and promotion of natural resources with the U.S. Fish and Wildlife Service, the Army Corps of Engineers, the Bureau of Reclamation, the U.S. Forest Service, and other public agencies with an interest in Yuba County's water and wildlife assets.

- **Policy NR5.6:** New developments and public investments near Yuba County's streams and rivers shall be designed to avoid tree removal, erosion, or other modifications that would adversely affect salmonid habitat.

- **Policy NR5.7:** New private developments adjacent to riparian areas shall provide a buffer designed and maintained to preserve existing wildlife habitat; provide habitat conditions favorable to native local wildlife; restrict activities that may adversely affect wildlife habitat quality; and restore degraded habitat, where feasible.

- **Policy NR5.9:** The County will encourage measures on agricultural lands that conserve or restore habitat.

- **Policy NR5.10:** The County will support the use of mitigation fees from the Yuba-Sutter Natural Community Conservation/Habitat Conservation Plan to fund preservation and restoration elements of the County's open space strategy.

- **Policy NR5.11:** Any new developments adjacent to the Spenceville Wildlife Refuge, Marysville Wildlife Area, Feather River Wildlife Area, Daugherty Hill Wildlife Area, or Starbend Fishing Access shall be buffered from wildlife areas or otherwise designed to avoid adverse direct and indirect effects on wildlife. Buffers related to firearm use, if necessary, should occur within the public wildlife area.

- **Policy NR5.12:** New developments that could affect wildlife movement corridors shall conduct a biological assessment and avoid placing any temporary or permanent barriers within such corridors, if they are determined to exist on-site.

- **Policy NR5.14:** The County will discourage development that would substantially and adversely affect the designated winter and critical winter range of the Mooretown or Downieville deer herd.

- **Policy NR5.15:** Roads, water lines, sewer lines, drainage facilities, and other public facilities constructed to serve unincorporated County development shall be located and designed to avoid substantial impacts to stream courses, associated riparian areas, and wetlands, to the greatest extent feasible.

- **Action NR5.1: Environmental Review and Mitigation.** The County will maintain information on biological resources, including data gathered for this General Plan and the NCCP/HCP, and will use this information to determine whether projects could have potentially significant impacts on biological resources, and whether project-level biological assessments would be required prior to project approval. Private and public projects will be required to comply with provisions of the California Environmental Quality Act (CEQA), including documentation and mitigation of potentially significant impacts. The County will identify a range of exemptions and streamlining for infill development projects where the County is the CEQA lead agency, including streamlining of biological resource information that is necessary to entitle such development projects. For projects that would affect the function and value of river, stream, lake, pond, or wetland features, each of these features shall be delineated. For wetlands, the delineation shall be conducted in accordance with the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and verified by USACE. The County will identify standard mitigation and survey requirements, if necessary, for use with project level CEQA review, as well as National Environmental Policy Act (NEPA) review, where needed. The standard mitigation and survey requirements will be consistent with applicable guidance from trustee and responsible agencies, such as the California Department of Fish & Game, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Mitigation monitoring shall be conducted to ensure performance criteria are met.

    - Related Goals: Goal NR5, Goal NR10, Goal HS3, Goal HS8, Goal CD11
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Project applicant funding for private plans and projects, various sources of funding for public projects
    - Time Frame: Ongoing, as projects are proposed under the 2030 General Plan

Conclusion

The Open Space Diagram in the Natural Resources Element and Land Use Diagram in the Community Development Element are based, in part, on an analysis of sensitive habitats in the unincorporated County, as well as water recharge areas, agricultural resources, forest resources, and other valuable natural resources in the County. Successful implementation of the 2030 General Plan would reduce impacts on special-status wildlife species by requiring new development to avoid, minimize, and/or compensate for adverse effects on special-status wildlife and suitable habitat for these species. The policies listed above would encourage consultation with regulatory agencies, design solutions to avoid impacts, coordination with existing and future environmental regulations (the Yuba-Sutter NCCP/HCP), mitigation for impacts, and buffers to riparian areas and designated wildlife areas.

However, avoidance of special-status species and their habitats is not mandatory and the 2030 General Plan does not designate any land specifically for habitat conservation to benefit sensitive species. Therefore, the extent to which significant impacts would be reduced by implementing the General Plan policies cannot be known in

advance of specific project designs. Furthermore, complete avoidance may not be possible, while still allowing full build out of the Valley Growth Boundary and Rural Community Boundary areas.

Some of these species and their habitats, such as riparian and aquatic species (e.g., California red-legged frog, giant garter snake, and western yellow-billed cuckoo) have already declined drastically. The loss of additional habitat on the scale that could result from implementing the 2030 General Plan could result in substantial impacts to these species.

Mitigation Measure

The County has included all feasible mitigation as policies and actions in the 2030 General Plan. No additional feasible mitigation is available beyond compliance with existing regulations and 2030 General Plan policies and actions. This impact is considered **significant and unavoidable**.

IMPACT 4.4-2 Impacts to Special-Status Plants. *Adopting and implementing the 2030 General Plan would accommodate development in areas of the County that support habitat for special-status plant species, which could result in loss of special-status plants either through direct removal or through habitat degradation, if they are present. This impact is considered potentially significant.*

There are 25 special-status plant species that are known to occur in Yuba County and two others that have potential to occur. Implementing the 2030 General Plan could result in vegetation removal in habitats that could support these species. Special-status plant species could be affected through direct removal or loss or modification of their habitat. The potential to adversely affect special-status plants is reduced somewhat by the fact that most of the habitat areas that have high potential to support special-status plants (e.g., vernal pool complexes, woodlands, and forests) are not proposed for development under the 2030 General Plan. Furthermore, most of the areas that support known populations of special-status plants are not proposed for development under the 2030 General Plan. Impacts on special-status plants would vary depending upon the habitats in which they occur.

Generally, the amount of habitat affected by future development is expected to be a fraction of the total existing habitat. The maximum amount of vernal pool complex, woodland, and forest habitat that could be affected is 5, 32, and 3 percent of existing habitat, respectively (Table 4.4-4). However, because special-status plants are unevenly distributed across the landscape, and much of the potential habitat has not been surveyed, it is assumed that any loss of suitable habitat would have the potential to affect one or more species.

Special-status plants that occur in vernal pool complex would have a high probability of being affected because up to 452 acres of vernal pool complex, a habitat known to support a large number of special-status plant species, could be removed as a result of implementation of the 2030 General Plan. These habitats have the potential to support a number of special-status plant species and removing portions of this habitat could result in loss of populations of these species. Furthermore, when special-status populations are retained within or adjacent to development sites, habitat modification and fragmentation can degrade habitat quality to a degree that it is no longer suitable for special-status plants to regenerate and these plant populations can eventually die out. Impacts could result from land use change, agricultural activities, timber harvesting, mineral mining, development activities, infrastructure improvements, and similar activities allowed under the General Plan.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan contains the following policies that could contribute to the protection of special-status species in the County:

- **Policy NR5.1:** New developments that could adversely affect special-status species habitat shall conduct a biological resources assessment and identify design solutions that avoid such adverse effects. If, after examining all feasible means to avoid impacts to special-status species habitat through project design, adverse

effects cannot be avoided, then impacts shall be mitigated in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species, including pre-construction surveys conducted according to applicable standards and protocols, where necessary.

- **Policy NR5.5:** The County will support cooperative restoration, development, and promotion of natural resources with the U.S. Fish and Wildlife Service, the Army Corps of Engineers, the Bureau of Reclamation, the U.S. Forest Service, and other public agencies with an interest in Yuba County's water and wildlife assets.

Conclusion

Implementing the 2030 General Plan policies listed above is expected to reduce adverse effects on special-status plant species in the county to a less-than-significant level because it would require new developments to identify and avoid special-status plant populations and their habitats to the extent feasible and to mitigate unavoidable impacts in coordination with state and federal agencies, which use standards and protocols designed to mitigate biological resource impacts to less-than-significant levels (see the Regulatory Setting for more detailed discussion). With the implementation of the above mentioned policies, along with policy diagrams in the 2030 General Plan, implementing the 2030 General Plan would be unlikely to result in the irreversible decline of any special-status plant species or substantially reduce the number or restrict the range of a special-status plant species. Therefore, the impact is considered **less than significant**.

In addition, the 2030 General Plan includes Policy NR5.2, which requires the County to coordinate its environmental review and mitigation requirements with the Yuba-Sutter NCCP/HCP, once adopted.

Mitigation Measure

No mitigation is required.

IMPACT 4.4-3 **Loss and Degradation of Sensitive Habitats.** *Implementation of the 2030 General Plan would accommodate development in areas that support oak woodland and riparian habitats. Development in these areas would result in direct impacts on these sensitive habitats through vegetation removal. Loss and degradation of these habitat types could also result from indirect effects, such as altered hydrology, introduction of invasive species, and habitat fragmentation. This impact is considered* ***potentially significant****.*

Implementing the 2030 General Plan could affect up to 551 acres of riparian forest, 369 acres of riparian scrub, 66 acres of montane riparian, 771 acres of valley oak woodland, 22,042 acres of blue oak woodland, 1,490 acres of blue oak foothill pine woodland, and 133 acres of live oak woodland (Table 4.4-4). In addition, development activities adjacent to oak woodland habitats could have indirect impacts affecting oak tree root systems, such as trenching, grading, soil compaction; or placement of fill, impervious surfaces, irrigation, and landscaping within the drip lines of oak trees, which can lead to root damage ultimately resulting in death of the tree.[1]

Potential indirect impacts on riparian habitats include degradation caused by pollutants transported by urban runoff, changes in vegetation as a result of changes in land use and management practices, and altered site hydrology from the construction of adjacent urban development and roadways or alteration of stream channels. Additional indirect impacts on sensitive habitats could result from habitat fragmentation, introduction of invasive species or noxious weeds, vegetation management practices (e.g., clearing for fire control), and intrusion by humans and domestic animals that could disturb oak woodland and riparian vegetation and reduce habitat values.

Potential impacts on riparian habitats are reduced through the implementation of the County's Land Use and Open Space Diagrams, which were developed, in part to avoid development in river and stream corridors.

[1] This discussion focuses on riparian and oak woodland habitats. Vernal pools and fresh emergent wetlands are also considered sensitive habitats and are discussed separately under Impact 4.4-5.

However, under the 2030 General Plan, there are large areas that could be developed in the foothill region where blue oak woodland is the predominant vegetation community and Yuba River and several tributaries that support riparian vegetation traverse areas planned for development.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR5.4:** New developments shall be located and designed to preserve and incorporate existing native vegetation to the maximum extent feasible. Fire safety standards may override consideration of retaining existing vegetation in certain circumstances.

- **Policy NR5.5:** The County will seek funding to enhance and restore habitat along the Yuba River, in coordination with development of recreational facilities and public access.

- **Policy NR5.7:** New private developments adjacent to riparian areas shall provide a buffer designed and maintained to preserve existing wildlife habitat; provide habitat conditions favorable to native local wildlife; restrict activities that may adversely affect wildlife habitat quality; and restore degraded habitat, where feasible.

- **Policy NR5.15:** Roads, water lines, sewer lines, drainage facilities, and other public facilities constructed to serve unincorporated County development shall be located and designed to avoid substantial impacts to stream courses, associated riparian areas, and wetlands, to the greatest extent feasible.

- **Action NR5.3: Wetlands and Riparian Buffers.** Through review of proposed private and public projects near wetlands and riparian areas, the County will require buffering to protect these important habitats. Setbacks are expected to range from 33 to 150 feet in width. Where stream courses are contained within levees, as in the case of the Bear, Feather, and Yuba rivers, required setbacks shall be measured from the outside toe of the levee. Where levees are not present, the buffer shall be measured from the edge of the active floodway. Setbacks will be included as a part of conditions of approval for proposed projects. The depth of the setback shall be determined based upon site-specific conditions and communication with appropriate trustee and responsible agencies, such as the California Department of Fish & Game, the U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Depending on the vegetation type, ongoing management of buffers may be necessary to address invasive species, human disturbance, and to sustain habitat and water quality functions. Buffers should generally be subject to a permanent covenant, such as a conservation easement, and shall include an ongoing maintenance agreement with a land trust or other qualified organization. In the case of vernal pool wetlands, sufficient area shall be preserved to maintain the hydrologic integrity of each vernal pool to be preserved. Low-impact recreation could be allowed in buffer areas so long as impacts to these sensitive habitats are avoided or fully mitigated. Human and pet disturbance in sensitive habitat areas should be discouraged as a part of buffer and project design.

  - Related Goals: Goal NR5, Goal NR10, Goal HS3, Goal HS8, Goal CD11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Project applicant funds
  - Time Frame: Ongoing, as projects are proposed

- **Policy NR10.1:** Building placement, grading, and circulation should be planned to retain as much existing native vegetation as feasible, with a priority on preserving existing oak trees that have a diameter at breast height (dbh) of 6 inches or greater and all other trees that have a dbh of 30 inches or greater. The County's policies and standards for fire safety may override consideration of retaining existing vegetation in certain circumstances.

- **Action NR10.1: Oak Woodlands and Tree Preservation.** Following adoption of the 2030 General Plan, the County will adopt and implement a tree preservation and mitigation ordinance. This ordinance will implement state requirements for oak woodlands mitigation (as required by Public Resources Code Section 21083.4,

including certain exemptions). The tree preservation ordinance will address native oak trees measuring 6 inches or more in diameter at breast height (dbh) and all other trees greater than 30 inches dbh. The ordinance will describe the process by which the County determines the significance of impacts related to tree removal. For oak woodlands, mitigation can occur through: conservation easements; planting (up to 50% of mitigation requirement); restoration; contribution to the Oak Woodlands Conservation Fund; or equally effective mitigation formulated by the County during development of this ordinance.

- Related Goals: Goal NR4, Goal NR5, Goal NR9, Goal NR10, Goal HS8
- Agency/Department: Community Development and Services Agency
- Funding Source: General fund and/or fees
- Time Frame: Adopt ordinance by 2015

Conclusion

Implementing the 2030 General Plan policies and actions listed above would reduce the impacts on sensitive habitats, but not to a less-than-significant level because the loss of oak woodland and riparian habitat acreage and function could be extensive and would contribute substantially to the regional loss of these resources.

Implementing Action NR 5.3 would substantially reduce impacts on riparian habitats since it requires private and public projects to provide setbacks to protect riparian habitat as a condition of project approvals and requires riparian buffer areas to be managed for habitat conservation. However, complete avoidance may not be possible, while still allowing full buildout of the 2030 General Plan. There are 1,768 acres of riparian habitat mapped within areas that could potentially experience land use change under the 2030 General Plan and the amount of existing riparian habitat could be underrepresented in the FRAP mapping because this habitat often exists as small patches that can be difficult to distinguish from surrounding upland vegetation without on-the-ground investigation. The degree to which the General Plan policies and actions would reduce this impact cannot be predicted with certainty, but even if only a fraction of this acreage were lost, this would still represent a **significant** impact.

Policies NR10.1 and NR10.2 would reduce significant impacts on individual oak trees, but not on oak woodlands, since these policies would allow individual or small stands of oak trees to become completely surrounded by urban development. Isolated stands of oak trees within small fragmented areas surrounded by urban development cannot compensate for the whole suite of ecological services provided by large contiguous tracts of oak woodland habitat consisting of oak trees and an understory matrix of grassland and shrubs. Preserving individual trees without preserving sufficient surrounding understory habitat prohibits natural regeneration of oaks, eliminates habitat for species that depend on both oak trees and the understory vegetation to satisfy their life history requirements (e.g., species that nest in oak trees and forage in the understory grasslands), excludes species that require large habitat tracts, and eliminates access to preserved oaks for species that can't fly or that are sensitive to human disturbance.

Action NR10.1 would substantially reduce impacts on oak woodlands through development of an oak woodland preservation and mitigation ordinance consistent with state law. However, this ordinance has not been developed and a significant loss of oak woodland could potentially occur prior to the implementation of such an ordinance. Even if the acreage of oak woodlands is substantially reduced through avoidance, minimization, and mitigation required under the 2030 General Plan, there still could potentially be losses of many acres of valley oak woodland, as well as other oak woodland habitats. This impact would remain **significant**.

Mitigation Measure 4.4-3a: Oak Woodland Habitats.

The following measures shall be implemented until the County has adopted an oak woodland preservation and mitigation ordinance. The County oak woodland preservation and mitigation plan may incorporate many of the measures listed below.

- During evaluation of development proposals, require that impacts on oak woodlands such as direct conversions, habitat fragmentation and adverse effects from adjacent land uses be avoided to the greatest extent feasible through project design and modification. This shall be accomplished through mapping oak woodland resources on the project site and establishing buffers around existing stands to prevent adverse effects.

- Require implementation of BMPs while working near oak woodlands to avoid inadvertent damage to oak trees. BMPs should include establishment of buffers to prevent root and crown damage, soil compaction, introduction and spread of invasive species and other indirect effects.

- For those impacts on oak woodland that cannot be avoided, the County shall require the project applicant to minimize adverse affects. All impacts that cannot be avoided shall be mitigated to ensure that loss of oak woodland habitat in the county is reduced to the maximum extent feasible. Mitigation shall include the following steps: mapping of oak woodlands on the project site, quantification of oak woodland impacts resulting from project implementation, determination of appropriate mitigation measures (avoidance, minimization, compensation), development of an oak woodland mitigation plan, and implementation of the plan including monitoring and remedial measures.

- Measures proposed in the oak woodland mitigation plan may include planting acorns and container stock from a local seed source; however planting may not account for more than 50% of the required mitigation and must occur on lands that are protected in perpetuity. Other measures to be included in the mitigation plan may include the enhancement of degraded stands of oak woodland, purchase of fee title of land and transfer to a public agency for management, and purchase of conservation easements.

- Oak woodland habitat placed under conservation easements should be at appropriate ratios to offset the loss of habitat functions and values of the oak woodland to be lost. Oak woodland habitat preserved this way should have similar tree sizes and densities, species composition, site condition, and landscape context to the oak woodland to be removed to serve the same function and have similar habitat value. The County may also consider the establishment of an oak woodland conservation fund which project applicants may contribute to for a percentage of their mitigation requirements, however a cap should be established for fund contributions, similar to the cap for replacement planting; fund moneys would be used solely for purchase of conservation easements or for public lands to protect oak woodland resources.

- Wherever possible, mitigation lands shall be contiguous with lands already protected and managed for the long term protection of oak woodland and the associated plant and wildlife species to maximize the likelihood of mitigation success. The oak woodland plan shall be developed by a qualified professional such as a professional biologist, arborist or registered forester using the best available science and shall clearly state all mitigation measures required.

- The plan shall designate responsible parties for funding, implementing mitigation, monitoring, reporting and annual review, and shall include remedial action measures if the initial plan fails or if success levels fall below the thresholds specified in the plan. The County shall require the mitigation plan and proof of sufficient means to implement the plan prior to project approval and shall require annual reports for the implementation timeframe of the plan.

Mitigation Measure 4.4-3b: Riparian Habitats

The following measures shall be implemented as necessary to avoid significant impacts to riparian habitats.

- If complete avoidance is not feasible, and projects require encroachment into the riparian habitat, project applicants shall be required to develop a riparian habitat mitigation plan resulting in a no- net- loss of riparian habitat functions and values.

- Mitigation may be accomplished through replacement, enhancement of degraded habitat, or off -site mitigation at an established mitigation bank.

- If a proposed project requires work on the bed and bank of a stream or other water body, the project applicant shall also obtain a streambed alteration agreement under Section 1600 et al. of the Fish and Game Code from DFG prior to project implementation, and shall implement all requirements of the agreement in the timeframes required therein.

Conclusion

Implementing 2030 General Plan policies and actions, along with the mitigation measures above would reduce significant impacts related to the loss of oak woodland and riparian habitats by requiring avoidance through project design and establishment of riparian habitat buffers. Where complete avoidance is not feasible, projects will be required to quantify and mitigate impacts on these habitats.

However, implementing these measures would still not reduce the impacts to a less-than-significant level. There is no feasible mitigation available to fully compensate for the potential loss of thousands of acres of oak woodland habitat or hundreds of acres of riparian habitat. Even with the combination of preservation and creation of habitat, there would be a net loss of these sensitive habitats in the County, at least on a temporal scale until created habitats matured to a point where they would provide similar habitat functions and values as those lost.

Mitigating the expected losses of oak woodland and riparian habitat acreage and function to a less-than-significant level is infeasible because:

- it is unknown if habitat acreage having similar tree sizes and densities, species composition, site condition, and landscape context to the habitats to be removed would be available for purchase and preservation in perpetuity; and

- it is unlikely that sites suitable to successfully establish new valley oak woodlands are available in the County.

Creating new woodland habitat through tree planting would result in temporal losses of woodland resources until the created habitat matured to a point where it would provide similar habitat functions and values as those lost (a process that would take decades). In addition, PRC 21083.4 institutes a cap on planting oaks for habitat mitigation, specifically stating that not more than 50 percent of required mitigation can be in the form of replanting. Furthermore, the quality of sensitive habitats that are preserved within and adjacent to new developments would be diminished because they would be converted from large contiguous tracts of natural habitat to smaller habitat patches dissected by paved roads and fragmented by rural residential and urban development. The County has incorporated all available feasible mitigation. This impact would remain **significant and unavoidable**.

IMPACT 4.4-4 Interference with Movement or Migratory Patterns of Fish or Wildlife Species. *Construction of infrastructure, roadways, or developments as part of the buildout of the 2030 General Plan could result in modifications to potential migratory routes or resting locations for fish or wildlife species. In addition, buildout of the 2030 General Plan would accommodate land use change that could alter migratory patterns for wildlife species. This impact is considered* ***potentially significant****.*

A number of migratory fish and wildlife species occur within areas that could be affected by implementation of the General Plan. Fish species found in Yuba County include anadromous species that migrate long distances, and while in the 2030 General Plan largely avoids riparian and riverine habitats, alterations to steams could result in barriers to fish movement. In addition, new road crossings and other infrastructure development could result in barriers to fish movement. The 2030 General Plan could affect up to 1,768 acres of riparian habitats, 147 acres of

riverine habitat, and 1,102 acres of freshwater emergent wetlands. These land conversions could impact habitat for anadromous fish species directly through mortality during construction, habitat alteration, or through water quality impacts or creation of barriers.

Multiple deer herds are also known to move throughout public and private land in the County. The 2030 General Plan could affect up to 56,690 acres of potentially suitable deer habitat, including grasslands and woodlands. Rural community development would occur in much of this habitat which is located in the foothills of the County between Smartsville and Loma Rica. While rural development would not result in total land conversion, habitat loss to development, installation of deer-proof fences, and new road construction could impede movement of deer. Deer migrate seasonally in the Sierra foothills along an east-west elevation gradient, moving to higher elevations in the summer, and lower elevations in winter months. The 2030 General Plan allows rural community development to stretch from the southern to the northern boundary of the County through the foothills.

The 2030 General Plan could affect up to 2,394 acres of coniferous forest habitats, 33,310 acres of woodland habitats, 261 acres of shrub-dominated habitats, 23,380 acres of herb dominated habitats, 1,768 acres of riparian habitats, 7,525 acres of agriculture, and 1,102 acres of wetland habitats (Table 4.4-4). Migratory bird species are likely to be found in all of these habitat types and could be directly impacted during construction, or through habitat loss and increased predation from domestic animals in rural communities.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR5.6:** New developments and public investments near Yuba County's streams and rivers shall be designed to avoid tree removal, erosion, or other modifications that would adversely affect salmonid habitat.

- **Policy NR5.7:** New private developments adjacent to riparian areas shall provide a buffer designed and maintained to preserve existing wildlife habitat; provide habitat conditions favorable to native local wildlife; restrict activities that may adversely affect wildlife habitat quality; and restore degraded habitat, where feasible.

- **Policy NR5.9:** The County will encourage measures on agricultural lands that conserve or restore habitat.

- **Policy NR5.10:** The County will support the use of mitigation fees from the Yuba-Sutter Natural Community Conservation/Habitat Conservation Plan to fund preservation and restoration elements of the County's open space strategy.

- **Policy NR5.11:** Any new developments adjacent to the Spenceville Wildlife Refuge, Marysville Wildlife Area, Feather River Wildlife Area, Daugherty Hill Wildlife Area, or Starbend Fishing Access shall be buffered from wildlife areas or otherwise designed to avoid adverse direct and indirect effects on wildlife. Buffers related to firearm use, if necessary, should occur within the public wildlife area.

- **Policy NR5.12:** New developments that could affect wildlife movement corridors shall conduct a biological assessment and avoid placing any temporary or permanent barriers within such corridors, if they are determined to exist on-site.

- **Policy NR5.14:** The County will discourage development that would substantially and adversely affect the designated winter and critical winter range of the Mooretown or Downieville deer herd.

- **Policy NR5.15:** Roads, water lines, sewer lines, drainage facilities, and other public facilities constructed to serve unincorporated County development shall be located and designed to avoid substantial impacts to stream courses, associated riparian areas, and wetlands, to the greatest extent feasible.

- **Action NR5.1: Environmental Review and Mitigation.** The County will maintain information on biological resources, including data gathered for this General Plan and the NCCP/HCP, and will use this information to

determine whether projects could have potentially significant impacts on biological resources, and whether project-level biological assessments would be required prior to project approval. Private and public projects will be required to comply with provisions of the California Environmental Quality Act (CEQA), including documentation and mitigation of potentially significant impacts. The County will identify a range of exemptions and streamlining for infill development[2] projects where the County is the CEQA lead agency, including streamlining of biological resource information that is necessary to entitle such development projects.

For projects that would affect the function and value of river, stream, lake, pond, or wetland features, each of these features shall be delineated. For wetlands, the delineation shall be conducted in accordance with the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and verified by USACE. The County will identify standard mitigation and survey requirements, if necessary, for use with project level CEQA review, as well as National Environmental Policy Act (NEPA) review, where needed. The standard mitigation and survey requirements will be consistent with applicable guidance from trustee and responsible agencies, such as the California Department of Fish & Game, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Mitigation monitoring shall be conducted to ensure performance criteria are met.

- Related Goals: Goal NR5, Goal NR10, Goal HS3, Goal HS8, Goal CD11
- Agency/Department: Community Development and Services Agency
- Funding Source: Project applicant funding for private plans and projects, various sources of funding for public projects
- Time Frame: Ongoing, as projects are proposed under the 2030 General Plan

Conclusion

Successful implementation of the policies and actions of the 2030 General Plan would avoid, minimize, and/or compensate for potential adverse effects to migratory wildlife and habitat used in wildlife movement. The policies and actions listed above include protection for anadromous fish habitat, deer ranges and migratory habitat, and riparian habitat, which is commonly used by various wildlife species for migration.

However, the extent to which significant impacts would be reduced by implementing the General Plan policies and actions cannot be fully known in advance of specific project designs. Furthermore, complete avoidance may not be possible, while still allowing full buildout of the 2030 General Plan.

Mitigation Measure

All available and feasible mitigation is included as General Plan policies and actions. No additional feasible mitigation beyond compliance with existing regulations and 2030 General Plan policies and actions is available. This impact is considered **significant and unavoidable**.

IMPACT 4.4-5 Potential for Direct and Indirect Impacts on Federally Protected Wetlands and Other Waters of the United States. *Implementation of the 2030 General Plan could result in direct impacts to federally protected wetlands and other waters of the United States, including vernal pools, freshwater emergent wetlands, and rivers, streams, and other water bodies. Impacts could occur through habitat conversion, encroachment, routine maintenance, or other activities in the immediate vicinity of rivers and other water bodies and in habitat supporting wetlands. Indirect impacts could result from adjacent development that leads to habitat*

[2] "Infill development," for the purposes of this General Plan, means projects that can be served by connecting to existing municipal water and sewer trunk lines that are present in the project vicinity.

modifications such as changes in hydrology. This impact is considered ***potentially significant****.*

Implementing the 2030 General Plan could affect up to 1,102 acres of freshwater emergent wetland and up to 452 acres of vernal pool complex that contains vernal pools and swales. These vernal pool and freshwater emergent wetland habitats would likely qualify as waters of the United States subject to protection under Section 404 of the CWA. In addition, 147 acres of riverine habitat qualifying as waters of the United States could be affected by full buildout of the 2030 General Plan. Other wetlands and drainage channels that are too small to have been included in the vegetation mapping used to identify habitat types in the county, or that are ephemeral in nature and not easily identified without conducting site-specific, on-the-ground resource investigations, are also likely to be present in areas designated for development under the 2030 General Plan land use designations. This type of site level analysis is outside the scope of a general plan programmatic EIR. Types of aquatic resources in this category include seasonal wetlands, seeps, ponds, and ephemeral drainage channels. Federally protected wetlands and other waters of the United States could be indirectly affected by topographic modifications and creation of impervious surfaces in adjacent uplands. Potential indirect effects include altered hydrology, reduction in water quality caused by urban runoff, erosion, and siltation; intrusion of humans and domestic animals; and introduction of invasive plant species that could result in habitat degradation.

Impacts to wetlands and other waters of the United States could result from a variety of projects and associated activities allowed under the 2030 General Plan, including residential and commercial development, infrastructure and road improvements, development of road and trails corridors, agricultural conversion, water diversions and other projects. Potential impacts on wetlands and other aquatic habitats are reduced by the design of the County's Land Use Diagram, which largely avoids development in river and stream corridors and vernal pool complexes. Still, up to 19 percent of existing freshwater emergent wetlands, 9 percent of existing riverine habitat, and 5 percent of existing vernal pool complex could be subject to development allowed under the 2030 General Plan. The full extent and distribution of existing wetlands and other waters of the United States cannot be determined until site-specific wetland delineation is conducted according to USACE methodology.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR5.4:** New developments shall be located and designed to preserve and incorporate existing native vegetation to the maximum extent feasible. Fire safety standards may override consideration of retaining existing vegetation in certain circumstances.

- **Policy NR5.5:** The County will support cooperative restoration, development, and promotion of natural resources with the U.S. Fish and Wildlife Service, the Army Corps of Engineers, the Bureau of Reclamation, the U.S. Forest Service, and other public agencies with an interest in Yuba County's water and wildlife assets.

- **Policy NR5.6:** The County will seek funding to enhance and restore habitat along the Yuba River, in coordination with development of recreational facilities and public access.

- **Policy NR5.9:** New developments shall be designed to avoid the loss of jurisdictional wetlands. If loss is unavoidable, the County will require applicants to mitigate the loss on a "no net loss" basis through a combination of avoidance, minimization, restoration, and/or constructed wetlands, in accordance with federal and state law.

- **Policy NR5.15:** Roads, water lines, sewer lines, drainage facilities, and other public facilities constructed to serve unincorporated County development shall be located and designed to avoid substantial impacts to stream courses, associated riparian areas, and wetlands, to the greatest extent feasible.

- **Action NR5.1: Environmental Review and Mitigation.** The County will maintain information on biological resources, including data gathered for this General Plan and the NCCP/HCP, and will use this information to determine whether projects could have potentially significant impacts on biological resources, and whether project-level biological assessments would be required prior to project approval. Private and public projects

will be required to comply with provisions of the California Environmental Quality Act (CEQA), including documentation and mitigation of potentially significant impacts. The County will identify a range of exemptions and streamlining for infill development projects where the County is the CEQA lead agency, including streamlining of biological resource information that is necessary to entitle such development projects.

For projects that would affect the function and value of river, stream, lake, pond, or wetland features, each of these features shall be delineated. For wetlands, the delineation shall be conducted in accordance with the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and verified by USACE. The County will identify standard mitigation and survey requirements, if necessary, for use with project level CEQA review, as well as National Environmental Policy Act (NEPA) review, where needed. The standard mitigation and survey requirements will be consistent with applicable guidance from trustee and responsible agencies, such as the California Department of Fish & Game, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Mitigation monitoring shall be conducted to ensure performance criteria are met.

- Related Goals: Goal NR5, Goal NR10, Goal HS3, Goal HS8, Goal CD11
- Agency/Department: Community Development and Services Agency
- Funding Source: Project applicant funding for private plans and projects, various sources of funding for public projects
- Time Frame: Ongoing, as projects are proposed under the 2030 General Plan

- **Action NR5.3: Wetland and Riparian Buffers**. Through review of proposed private and public projects near wetlands and riparian areas, the County will require buffering to protect these important habitats. Setbacks are expected to range from 33 to 150 feet in width. Where stream courses are contained within levees, as in the case of the Bear, Feather, and Yuba rivers, required setbacks shall be measured from the outside toe of the levee. Where levees are not present, the buffer shall be measured from the edge of the active floodway. Setbacks will be included as a part of conditions of approval for proposed projects. The depth of the setback shall be determined based upon site-specific conditions and communication with appropriate trustee and responsible agencies, such as the California Department of Fish & Game, the U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Depending on the vegetation type, ongoing management of buffers may be necessary to address invasive species, human disturbance, and to sustain habitat and water quality functions. Buffers should generally be subject to a permanent covenant, such as a conservation easement, and shall include an ongoing maintenance agreement with a land trust or other qualified organization. In the case of vernal pool wetlands, sufficient area shall be preserved to maintain the hydrologic integrity of each vernal pool to be preserved. Low-impact recreation could be allowed in buffer areas so long as impacts to these sensitive habitats are avoided or fully mitigated. Human and pet disturbance in sensitive habitat areas should be discouraged as a part of buffer and project design.

  - Related Goals: Goal NR5, Goal NR10, Goal HS3, Goal HS8, Goal CD11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Project applicant funds
  - Time Frame: Ongoing, as projects are proposed

The policies and actions listed above would reduce the potential for direct and indirect impacts on wetlands and Waters of the United States. However, the County cannot demonstrate that this would reduce impacts to a less-than-significant level. The impact is considered **significant**, requiring mitigation.

Mitigation Measure 4.4-5: Waters of the United States.

The following measures shall be implemented, in addition to the 2030 General Plan policies and actions, to reduce significant impacts on wetlands and other waters of the United States:

- A permit from the USACE will be required for any activity resulting in impacts of "fill" of wetlands and other waters of the United States. If the impact acreage is below one half acre, the project may qualify for a Nationwide Permit. If impacts exceed one half acre, a letter of permission or individual permit from the USACE will be required prior. Project applicants shall be required to obtain this permit prior to project initiation. A wetland mitigation plan that satisfies USACE requirements will be needed as part of the permit application.

- Projects applicants that obtain a Section 404 permit will also be required to obtain certification from the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA. If the project involves work on the bed and bank of a river, stream or lake, a Streambed Alteration Agreement for CDFG pursuant to Section 1600 et al. of the Fish and Game Code will also be needed. Project applicants shall be required to obtain all needed permits prior to project implementation, to abide by the conditions of the permits, including all mitigation requirements, and to implement all requirements of the permits in the timeframes required therein.

Conclusion

Implementing the General Plan policies and actions listed above, along with the additional mitigation measures, is expected to reduce significant impacts on wetland and other waters of the United States to a **less-than-significant** level by requiring delineation and avoidance of these habitats to the maximum extent feasible, establishment of wetland habitat buffers, and by providing compensation for unavoidable impacts in a manner that would ensure no net loss of overall wetland habitat.

IMPACT 4.4-6 Conflict with an Adopted HCP/NCCP or Local Policies Protecting Biological Resources. *Yuba and Sutter Counties are currently in the process of developing a combined Natural Community Conservation Plan (NCCP) / Habitat Conservation Plan (HCP). This plan has yet to be adopted. During the planning horizon of the 2030 General Plan, if the NCCP/HCP is adopted, policies within the 2030 General Plan will ensure consistency with the NCCP/HCP. This impact would be* ***less than significant****.*

The Yuba-Sutter NCCP/HCP is a cooperative planning effort initiated by the counties in connection with improvements to State Highway Routes (SRs) 99 and 70 and future development in the area surrounding those highways. The Yuba-Sutter Regional NCCP/HCP will provide a way to accommodate economic and community development; retain the economic vitality of the local agricultural community; maintain recreation, hunting, fishing, and other public uses of the local open space; simplify and expedite land use and conservation planning in the plan area; protect threatened and endangered species; and preserve plant and wildlife communities.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR3.10:** Cropland and grazing land may be used for habitat conservation and mitigation purposes, consistent with the Yuba-Sutter County Natural Community Conservation Plan/Habitat Conservation Plan, once adopted.

- **Policy NR5.2:** The County will coordinate its environmental review and mitigation requirements with the Yuba-Sutter NCCP/HCP, once adopted.

- **Policy NR5.10:** The County will support the use of mitigation fees from the Yuba-Sutter Natural Community Conservation/Habitat Conservation Plan to fund preservation and restoration elements of the County's open space strategy.

- **Action NR5.1: Environmental Review and Mitigation.** The County will maintain information on biological resources, including data gathered for this General Plan and the NCCP/HCP, and will use this information to determine whether projects could have potentially significant impacts on biological resources, and whether project-level biological assessments would be required prior to project approval. Private and public projects will be required to comply with provisions of the California Environmental Quality Act (CEQA), including documentation and mitigation of potentially significant impacts. The County will identify a range of exemptions and streamlining for infill development projects where the County is the CEQA lead agency, including streamlining of biological resource information that is necessary to entitle such development projects.

  For projects that would affect the function and value of river, stream, lake, pond, or wetland features, each of these features shall be delineated. For wetlands, the delineation shall be conducted in accordance with the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and verified by USACE. The County will identify standard mitigation and survey requirements, if necessary, for use with project level CEQA review, as well as National Environmental Policy Act (NEPA) review, where needed. The standard mitigation and survey requirements will be consistent with applicable guidance from trustee and responsible agencies, such as the California Department of Fish & Game, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Mitigation monitoring shall be conducted to ensure performance criteria are met.

  - Related Goals: Goal NR5, Goal NR10, Goal HS3, Goal HS8, Goal CD11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Project applicant funding for private plans and projects, various sources of funding for public projects
  - Time Frame: Ongoing, as projects are proposed under the 2030 General Plan

- **Action NR5.2: Conservation Planning.** The County, in collaboration with other participating agencies, will participate in development, adoption, and implementation of a Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). Mitigation and conservation measures from the NCCP/HCP will be incorporated into the County's monitoring and implementation of the General Plan, Specific Plans, and Community Plans, as appropriate.

  - Related Goals: Goal NR5, Goal NR10, Goal HS3
  - Agency/Department: Community Development and Services Agency, partnering with other regional agencies
  - Funding Source: Mitigation fees, grant funding, General Fund, other appropriate funding sources
  - Time Frame: The County's goal is to have an adopted NCCP/HCP by 2015, although many other agencies and stakeholders are involved in regional conservation planning efforts, and the timeline is beyond the County's direct control.

Conclusion

Currently, no NCCP or HCP has been adopted for Yuba County and, therefore, there can be no conflicts with any adopted conservation plan. Successful implementation of the policies and actions of the 2030 General Plan would

ensure that if the Yuba-Sutter NCCP/HCP is adopted, the 2030 General Plan would be consistent with the policies of the NCCP/HCP. This impact is **less than significant**.

Mitigation Measure

No mitigation is required.

4.5 CULTURAL RESOURCES

This section summarizes an analysis of the potential impacts to cultural resources attributable to buildout of the 2030 General Plan. This section identifies potential impacts by examining the baseline sensitivity for cultural resources and comparing this sensitivity to the areas where development could be accommodated under the 2030 General Plan.

4.5.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA, 16 US Code Section 470f) requires federal agencies to consider the effects of their undertakings cultural resources listed on or determined potentially eligible for inclusion in the National Register of Historic Places (NRHP). Federal agencies must also allow the Advisory Council on Historic Preservation the opportunity to comment on the proposed undertaking, and consult with the State Historic Preservation Office (SHPO), Native American Tribes and the public regarding adverse effects on historic properties. The regulations implementing Section 106 are promulgated by the Secretary of the Interior, as codified in Title 36 Code of Federal Regulations (CFR) Part 800 (36 CFR 800 et seq.).

Section 106 applies to historic properties. Historic properties consist of cultural resources (prehistoric and historic archaeological site and aspects of the built and natural environment) that are eligible for or listed on the NRHP. Determining the NRHP eligibility of a site or district requires evaluation of the resource's significance under the criteria specified in 36 CFR 60.4. The NHPA authorizes the Secretary of the Interior to maintain and expand the NRHP which lists districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. A property may be listed in the NRHP if it has both significance and integrity as defined in 36 CFR 60.4.

Significance is present if the resource meets one or more of the following significance criteria:

(a) the resource has an association with events that have made a significant contribution to the broad patterns of our history; or,

(b) the resource has an association with the lives of persons significant in our past; or;

(c) the resource embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or,

(d) the resource has yielded, or may be likely to yield, information important in prehistory or history.

Integrity requires that the resource possess integrity of location, design, setting, materials, workmanship, feeling, and association (36 CFR 60.4).

Cultural Landscapes

Cultural landscapes consist of cultural resources that exist at a landscape-scale and usually include multiple elements, both natural and constructed. As defined by the National Park Service (NPS), a cultural landscape is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person; or exhibiting other cultural or aesthetic values.

The NPS defines four general types of cultural landscapes, which are not mutually exclusive:

(1) historic sites;
(2) historic designed landscapes;
(3) historic vernacular landscapes; and
(4) ethnographic landscapes.

Historic vernacular landscapes are most prolific, as they have developed without the direct involvement of a professional designer, planner, or engineer. They are ordinary places that reflect the customs and everyday lives of people. Examples include a farm complex, rural historic districts and architectural landscapes.

Many methods are available for identifying landscape characteristics, including plant inventories, archaeological and architectural investigations, ethnographic interviews, tree coring, aerial photography, topographic and hydrographic surveys, geophysical surveys, soil analyses, mapping, and historic research. Available tools include magnetometers, ground penetrating radar, electrical resistivity and electromagnetic conductivity equipment, global positioning systems, and geographic information systems (GIS).

Historic research is important to identifying and evaluating the landscape, but equal consideration must also be given to "reading the landscape" (Page et al. 1998). Although people read landscapes on many levels, including "landscape as nature, habitat, artifact, system, problem, wealth, ideology, history, place and aesthetic," it is recommended that the landscape always be read in its context of place and time (Birnbaum 1994).

Traditional Cultural Properties

Traditional Cultural Properties (TCPs) are resources eligible for the NRHP based on cultural significance derived from the "beliefs, customs, and practices of a living community of people that have been passed down through the generations" (U.S. Department of Interior [US DOI] 1998:1). TCPs embrace a wide range of historic properties, such as the location associated with a Native American group's origin or the origin of the world (cosmogony), or an urban neighborhood that is the traditional home of a particular cultural group and that still reflects and is associated with their beliefs and practices. Other examples include places where traditional people historically have gone and continue to visit for ceremonial practices. These examples are not intended to be exhaustive, but instead to illustrate the range of possible TCPs. National Register Bulletin 38 defines a historical property as a place that is eligible for NRHP inclusion "because of its association with cultural practices or beliefs of a living community that (a) are rooted in the community's history and (b) are important in maintaining the continuing cultural identity of the community" (US DOI 1998:1). The identification and evaluation of TCPs can be conducted only by consultation with members of the relevant group of people that ascribe value to the resource, or through other forms of ethnographic research.

Evaluation

Federal agencies must evaluate TCPs for eligibility for listing in the NRHP to determine if they are historic properties subject to management as required under Section 106 of the NHPA. Evaluation of TCPs requires two major steps: first the Federal agency evaluates the integrity of the resource as a TCP, then evaluates the resource for eligibility listing on the NRHP under the process for assessing significance and integrity of historic resources. As with any resource that is evaluated for listing in the NRHP, the TCP must be a tangible district, site, building, structure, or object (US DOI 1998:11).

These terms are not meant to limit or exclude places from evaluation as a TCP; for instance, a bare grassy expanse at Mt. Tonaachaw on Weno, an island that is part of the Federated States of Micronesia, has been evaluated as a component of a TCP (US DOI 1998:20) because it is associated with at least two different spirits who reside on or are represented by the mountain. This consideration requires merely that the TCP be a physical place or tangible object, in the broadest sense, rather than the intangible beliefs or values alone.

Integrity

The TCP must have integrity, like any property eligible for listing in the NRHP. For traditional cultural resources, this means that they must have "integrity of relationship" and "integrity of condition" (US DOI 1998:11–12). Integrity of relationship means simply that the specific place is integral and necessary to a traditional cultural group's beliefs or specific practices (US DOI 1998:11). National Register Bulletin 38 gives the example of two different cultures, one that believes that baptism at a specific river is necessary to accept individuals as members, and another that simply requires baptism in any body of water. For the first example, the river is integrated into beliefs and practices of a traditional culture and thus has integrity of relationship.

Integrity of condition requires simply that the TCP has not been altered in such a way that it no longer can serve its function for the traditional cultural group. For example, a pilgrimage route to a sacred site would no longer have integrity of condition if modern construction had physically interrupted the route and thus made it unusable. This requirement does not mean that the TCP must be completely intact without any changes to the setting or features of the resource; rather, the test is whether the resource can still function for traditional cultural purposes or whether the presence of new elements disrupts the function. National Register Bulletin 38 offers an example of a resource that has integrity despite changes to the setting. One reach of the Klamath River in northern California is within the ancestral and present territory of the Karuk people, and is the place where they carry out world renewal ceremonies and other rituals despite the presence of a modern highway, a U.S. Forest Service ranger station, and modern residences (NPS 1998:12).

If the TCP has integrity of relationship and integrity of condition, evaluation progresses to the second step of evaluating the resource for eligibility for listing in the NRHP, as described above.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (Title 14, Section 15002[i] of the California Code of Regulations). CEQA states that it is the policy of the State of California to "take all action necessary to provide the people of this state with… historic environmental qualities…and preserve for future generations examples of the major periods of California history" (California Public Resources Code [PRC] Sections 21001[b] and 21001[c]). Under the provisions of CEQA, a project would cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (CCR Section 15064.5[b]).

CEQA defines a "historical resource" as a resource that meets one or more of the following criteria:

- listed in, or eligible for listing in, the CRHR;
- listed in a local register of historical resources (as defined at PRC Section 5020.1[k]);
- identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code; or
- determined to be a historical resource by a project's lead agency (CCR Section 15064.5[a]).

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California…Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources" (14 CCR Section 15064.5[a][3]).

CEQA also requires consideration of impacts on unique archaeological sites (PRC Section 21083.2, 14 CCR Section 15069.5[c][3]). In practice, most archaeological sites that meet the definition of a unique archaeological resource will also meet the definition of a historical resource (Bass, Herson, and Bogdan 1999).

CEQA defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria (PRC Section 21083.2[g]):

- contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;
- has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on historical resources and unique archaeological sites are significant if they materially impair those characteristics that contribute the resource's significance as a historical resource or unique archaeologically resource. If an impact on a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (14 CCR Section 15126.4[a][1]). Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the resource. Generally, the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less-than-significant level (California Office of Historic Preservation 2001a, 2001b; see also 14 CCR Section 15126.4[a][1]).

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

No regional or local plans, policies, regulations, or laws pertaining to cultural resources are applicable.

4.5.2 ENVIRONMENTAL SETTING

An understanding of the county's history and cultural resources is important to the development of the General Plan. Land use change, construction, infrastructure planning, and interpretive projects can be implemented in a way that protects and enhances the value of the county's cultural resources.

In particular, the California Gold Rush of 1849–855 brought population to the area and established many of the existing communities. Mining practices along the Yuba River reshaped the river, leaving dredge tailings, mines, adits, and historic structures that allow a glimpse into the county's rich historic past. As a result of the development boom during and following the Gold Rush, the reclamation of land with flood control structures allowed for the development of a substantial local agricultural industry and enabled settlement in areas that would otherwise be undevelopable. The county's diverse geography, with access to water and food provided an ideal place for human settlement . Many remnants of a rich Native American history can be found throughout the county today.

PREHISTORIC SETTING

Fredrickson (1973 and 1974) proposed a sequence of cultural patterns for the central districts of the North Coast Range, placing them within a framework of cultural periods that he believed were applicable to California as a whole. He proposed and used the concept of the cultural pattern as an adaptive mode shared in general outline by a number of analytically separable cultures. These different cultural modes could be characterized by:

- similar technological skills and devices;
- similar economic modes, including participation in trade networks and practices surrounding wealth; and
- similar mortuary and ceremonial practices.

The **Paleo-Indian Period (8,000 to 12,000 years ago)** saw the first demonstrated entry and spread of humans into California. Known occupation sites are situated along lake shores, and a developed milling tool technology may have existed at this time. The social units were not heavily dependent upon exchange of resources, with exchange activities occurring on an ad hoc basis. Most resources were acquired by the group changing habitat.

Characteristic artifacts of this period include fluted projectile points and chipped stone crescents. Traditionally, Paleo-Indians are viewed as big-game hunters. However, more recent research suggests that they pursued much more varied subsistence and economic systems than previously thought.

The beginning of the **Lower Archaic Period (5,000 to 8,000 years ago)** coincided with the mid-Holocene climatic change and generally drier conditions that brought about the drying up of the pluvial lakes. Subsistence appears to have been focused on the consumption of plant foods over food obtained by hunting. Settlement appears to have been semisedentary with little emphasis on wealth. Most tools were manufactured of local materials and exchange remained on an ad hoc basis. Distinctive artifact types of this period are large dart points, the milling slab, and handstones.

The Middle Archaic Period (3,000 to 5,000 years ago) began at the end of mid-Holocene period when the climate became similar to present-day conditions. Cultural change during this time was primarily in response to environmental technological factors. Economies were more diversified, possibly with the introduction of acorn technology. Hunting remained an important source of food. Human populations became more sedentary, followed by a general growth and expansion of native populations. Little evidence shows development of regularized exchange relations. Artifacts characterized by this period include the bowl mortar and pestle and the continued use of large projectile points.

At about this time, evidence for Native American use of the northern and central Sierra Nevada appears (Yuba County 1994). The Martis Complex, thought to date from about 2000 B.C. to A.D. 500 and based on projectile point types, exclusive use of basalt for flaked stone tools, and use of mano and metate, is recognized at sites in and around the Tahoe Basin region. A slightly different cultural complex has been identified in the Oroville region, from A.D. 1500 to Euro-American contact. This was thought to represent Northwestern Maidu Indians, who occupied the foothills of Yuba County at the time of contact. A contrasting school of thought suggests that the Martis culture was restricted to the highest elevations of the Sierra Nevada, and that the cultures of the Martis period relate more closely to central California cultures. The Mesilla Complex occupied the mountains of eastern Yuba County along the western slopes of the northern Sierra Nevada. The Mesilla Complex may have represented a wave of immigration of Penutian-speaking peoples who settled in the Central Valley and became identified as Nisenan.

The growth of sociopolitical complexity marks the **Upper Archaic Period (1,500 to 3,000 years ago)**. The development of status distinctions based upon wealth is well documented at this time. Group-oriented religions emerged and may have been the origin of the Kuksu religious system at the end of the period. There was greater complexity of exchange systems with evidence of regular, sustained exchanges between groups. Shell beads gained in significance as possible indicators of personal status and as important trade items. Archaeological assemblages of this period indicate the retention of large dart points of different styles, but the bowl mortar and pestle replace the milling stone and handstone throughout most of the state.

Several technological and social changes distinguished the **Emergent Period (200 to 1,500 years ago)**. The bow and arrow were introduced at this time, ultimately replacing the dart and atlatl. Territorial boundaries between groups were well established and may have closely resembled those documented in the ethnographic literature. It became increasingly common during this period that distinctions in an individual's social status could be linked to

acquired wealth. Exchange of goods between groups became more regularized with more trade goods, including raw materials and manufactured products, entering into the exchange networks. In the latter portion of this period (150 to 450 years ago), exchange relations became highly regularized and sophisticated. The clam disk bead served as a monetary unit for exchange and increasing quantities of goods moved greater distances. Specialists arose to govern various aspects of production and exchange. It was during the latter decades of this period that large-scale Euro-American-related impacts on Native American groups took place.

ETHNOGRAPHIC SETTING

Yuba County is situated within the lands occupied and traditionally used by the Nisenan, sometimes referred to as the Southern Maidu. The language of the Nisenan, which includes several dialects, is classified within the Maiduan family of the Penutian linguistic stock (Kroeber 1925; Shipley 1978). The western boundary of Nisenan territory was the western bank of the Sacramento River. The eastern boundary was "the line in the Sierra Nevada mountains where the snow lay on the ground all winter" (Littlejohn 1928).

Nisenan settlement locations depended primarily on elevation, exposure, and proximity to water and other resources. Permanent villages were usually located on low rises along major watercourses. Several major Nisenan villages were located near the confluence of the Feather and Bear Rivers, near the site of present-day Marysville (Wilson and Towne 1978). Wilson and Towne (1978) indicate that village size ranged from three houses to up to 40 or 50. During expeditions in 1833, John Work (Maloney 1944) indicated that these villages along the Feather River were composed of up to 200 individuals. Houses were domed structures measuring 10 to 15 feet in diameter and covered with earth and tule or grass. Brush shelters were used in the summer and at temporary camps during food-gathering rounds. Larger villages often had semisubterranean dance houses that were covered in earth and tule or brush, had a central smoke hole at the top, and an east-facing entrance. Another common village structure was the granary, which was used for storing acorns (Wilson and Towne 1978).

The Nisenan occupied permanent settlements from which specific task groups set out to harvest the seasonal bounty of flora and fauna that the rich valley environment provided. The Valley Nisenan economy involved riparian resources, in contrast to the Hill Nisenan, whose resource base consisted primarily of acorn and game procurement. The only domestic plant was native tobacco (*Nicotiana* sp.), but many wild species were closely husbanded. The acorn crop from the blue oak (*Quercus douglasii*) and black oak (*Q. kelloggii*) was so carefully managed that use of this plant food can be considered the equivalent of agriculture. Acorns could be stored in anticipation of winter shortfalls in times of resource abundance. Deer, rabbit, and salmon were the chief sources of animal protein in the aboriginal diet, but many insect and other animal species were taken when available.

HISTORICAL SETTING

Two major historic themes exist in Yuba County: agriculture and the Gold Rush.

Early Exploration

Europeans first explored the area that is now Yuba County in 1808, when Spanish explorer Gabriel Moraga led an expedition from Mission San Jose to the northern Sacramento Valley (Hoover et.al.1990; Gordon 1988). The earliest Euro-American settlement in what is now Yuba County coincided with the establishment of land grants by the Mexican government. John A. Sutter obtained the first such grant in the region in 1841. Sutter's New Helvetia Rancho encompassed lands on the east bank of the Feather River, including portions of Yuba County (Beck and Haase 1974).

Agriculture and Flood Control

Agriculture and ranching became the primary industries of the Yuba County region during the early historic period. Regional ranching originated on the New Helvetia and Johnson's ranchos in the early 1840s. The Gold

Rush of 1848 precipitated growth in agriculture and ranching as ranchers and farmers realized handsome returns from supplying food and other goods to local miners (Fryman 1996). Frequent floods, however, plagued the residents of the Yuba-Feather-Bear River floodplain and posed a significant threat to the viability of agricultural interests and further settlement of Yuba County.

Initial efforts at flood control were usually uncoordinated and consisted of small levees and drains constructed by individual landowners. These features proved insufficient to protect cultivated land, and much land east of the Feather River remained marshland that was unsuitable for agriculture (U.S. Geological Survey 1910, 1911). In 1861, the California Legislature created the State Board of Swampland Commissioners to affect reclamation of swamp and overflow lands. The State Board of Swampland Commissioners established 32 districts that attempted to enclose large areas prone to flooding with natural levees. Lack of cooperation among the landowners in the districts led to chronic financial crises. When the California Legislature terminated the State Board of Swampland Commissioners in 1866, responsibility for swamps and overflowed land fell to the individual counties. Many counties offered incentives to landowners for reclaiming agriculturally unproductive land. If a landowner could certify that he or she had spent at least 2 dollars per acre in reclamation, the county would refund the purchase price of the property to the owner. Speculators took advantage of this program and a period of opportunistic and often irrational levee building followed (McGowan 1961; Thompson 1958).

In response to the flood of 1907, citizens of Yuba County formed Reclamation District 784 (RD 784). At the time of its formation, RD 784 encompassed 22,762 acres of land, much of which was owned by the Farm Land Investment Company. RD 784 built substantial levee and drainage systems to restrain floodwaters from the Bear and Feather Rivers and incorporated levees built by the Farm Land Investment Company and other landowners.

In 1911, the California Legislature established the State of California Reclamation Board to exercise jurisdiction over reclamation districts and levee plans. That year, the state approved and began implementation of the Sacramento River Flood Control Project. The ambitious project included the construction of levees, weirs, and bypasses along the river to channel floodwaters away from population centers. Under the Sacramento River Flood Control Project, new reclamation districts were created and existing districts, such as RD 784, were placed under the jurisdiction of the Reclamation Board.

In 1920, RD 784 voters approved a plan to improve levees along the Yuba, Bear, and Feather Rivers and to improve drainage near Messick Lake, Plumas Lake, and other backwater marshes along the Feather River. The U.S. Army Corps of Engineers assisted RD 784 with the construction of a levee system at the eastern boundary of the district. Reclamation efforts in RD 784 promoted settlement and development of the land between Rio Oso and Marysville.

The Gold Rush

California can be divided into 11 geomorphic provinces, each of which has distinct features, mineral deposits, and geography (Clark 1992). Yuba County lies almost entirely within the Sierra Nevada geomorphic province which, of the 11, has the highest quantities of gold. Almost half of California's gold production has come from alluvial, or placer, deposits, found in quartz gravels and in and along stream channels. They have been mined by hydraulic, hard-rock, and dredge mining methods. Of these, hydraulic mining has caused the most lasting changes to the environment because of the thousands of tons of soils deposited in river channels downstream from the mines.

Jonas Spect may have been the first person to find gold in Yuba County in June 1848 at Rose's Bar on the Yuba River (Yuba County 1994). Mining communities quickly sprang up along the river above Marysville, many of which are now buried beneath hydraulic mine waste. Many of the earliest miners focused on sand bars in the river, which had high gold content and were easily accessible. As the bars were exhausted, mining moved further from the rivers, focusing on other mining methods, including dredging in the Yuba River. In 1905, the Yuba Consolidated Goldfields began operations 9 miles east of Marysville, in the Hammonton Gold District.

Besides Hammonton, the Browns Valley, Brownsville, Camptonville, Clipper Mills, Dobbins, and Smartsville mining districts were all established in the County. These towns, established during the Gold Rush, survive today.

City of Marysville

Marysville is the largest city in Yuba County. The land upon which the city of Marysville sits was once a part of one of John A. Sutter's ranches. In 1842, Sutter leased the land to Theodore Cordua for 19 years. Cordua created a stock ranch and built a house and trading post near what is now D Street (Hoover et al 1990). In 1844, Cordua obtained an additional seven leagues (30,996 acres) of land from the Mexican government, adjacent to the land being leased from Sutter. A half-share of the Cordua ranch was purchased by Charles Covillaud, a native of France, and a former employee of Cordua. In January of 1849, the other half was sold to two brothers-in-law of Covillaud's wife, Michael Nye and William Foster. The brothers sold out to Covillaud in September of that same year. Although the land was later sold by Covillaud to a Jose M. Ramirez, when a formal town was laid out in 1850, it was named after Covillaud's wife, Mary (Hoover et al 1990).

Marysville was laid out in the path of thousands of miners, merchants, and capitalists who flocked to the region during the Gold Rush. It was officially incorporated on February 5, 1851. Within the first month of its formal status as a town, the population grew from 300 to approximately 1,500. By 1853, Marysville's tent city had been replaced by brick buildings, iron works, machine shops, and factories. The population around this time was estimated at 10,000. For a brief period, in 1852, Marysville was considered California's third largest city, after San Francisco and Sacramento (Downtown Marysville Business Improvement District 2009).

A levee system was erected around the city in the late 19th century to protect it from flooding. This same levee system hampered further growth in the latter part of the 20th century. As the City of Yuba City and nearby unincorporated areas continued to grow and expand, Marysville remained an incorporated city but did not experience much expansion. The ad hoc construction of buildings and infrastructure that has taken place throughout the city over time has modified the built environment. However, the economic base that provided Marysville its early foundation as a city is still visible in the several historic buildings located throughout the city.

DOCUMENTED CULTURAL RESOURCES SITES WITHIN YUBA COUNTY

The County directed an extensive record search by the North Central Information Center (NCIC) of the California Historic Resources Information System to support this General Plan Update. The NCIC was asked to provide information regarding documented cultural resource sites within Yuba County, excluding federal lands. Federal land was excluded because the County's planning policies have little if any influence on these lands which instead are governed by the relevant federal agencies. Based on the extensive records search, a series of cultural resource exhibits have been prepared to guide policy development and environmental analysis under the 2030 General Plan and EIR.

The numbers and types of sites in these exhibits are listed in Table 4.5-1. It is important to note that these sites have been identified generally during the course of archaeological survey efforts resulting from planned development of some kind, including federal projects, new construction, or other similar activities. The marked site density visible in the central portion of the county is a result of, among other things, surveys conducted for the proposed Marysville Dam. Known sites tend to be clustered in regions where surveys have been done for proposed projects such as roadway or highway corridors and regions near urban or hydroelectric activity, because these types of projects include requirements for identification of cultural resources. This should be considered when reviewing actions in less-developed areas, as the density and types of known sites are presumed to continue into unexplored areas. However, examining groupings of similar site types helps to more accurately predict types and densities of sites in similar geographic locations within Yuba County.

Table 4.5-1
Known Sites in Yuba County[1]

Quadrangle Name[2]	Prehistoric Sites	Mining-Related Sites[3]	Other Historic Sites[4]	Combined Prehistoric and Historic Sites	No. of sites	NRHP or SHL[5]
Browns Valley	110	54	35	1	200	
Camp Far West	25	59	30	-	114	
Camptonville	56	94	40	2	192	
Challenge	74	99	40	2	215	
Clipper Mills	16	35	8	1	60	1
Forbestown	4	51	12	-	67	
French Corral	55	19	22	2	98	
Honcut	-	-	-	5	15	
Loma Rica	135	39	39	5	218	
Marysville	-	-	-	-	-	
Nicolaus	3	-	9	-	12	
Olivehurst	5	1	31	-	37	
Oregon House	252	48	67	5	372	
Rackerby	44	64	35	3	146	
Smartsville	243	290	114	4	651	2
Strawberry Valley	8	68	15	1	92	
Wheatland	1	-	6	-	7	4
Yuba City	1	4	385	-	390	12
Totals	**1,032**	**925**	**888**	**31**	**2,876**	**19**

Notes:
[1] Excludes portions of the county owned or operated by the Federal Government (U.S. Forest Service).
[2] [3] Very small portions of Yuba County fall on the American House, Gridley, and Sutter quadrangles but are not included here because no known sites or studies are on those quadrangles within Yuba County.
[3] Sites likely related to mining activity, although some ditches may have been used for agriculture.
[4] Sites may be related to mining (such as roads) but are not conclusive in origin.
[5] National Register of Historic Places or State Historic Landmark
Source: NCIC record search conducted in 2008; Data compiled by AECOM (formerly called EDAW) in 2009.

4.5.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, the proposed project would result in a potentially significant impact on cultural resources if it would:

- cause a substantial adverse change in the significance of an archaeological resource or a historical resource as defined in Section 21083.2 of CEQA and Section 15064.5 of the State CEQA Guidelines, respectively; or,

- 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.

Section 15064.5 of the State CEQA Guidelines defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

IMPACT ANALYSIS

IMPACT 4.5-1 Damage to Identified Historical Resources and Unique Archaeological Resources. *The 2030 General Plan contains policies and a growth template that would allow construction and development, as depicted in the Land Use Diagram. Yuba County has a high density of identified cultural resources. Many of these resources, upon evaluation, are likely to qualify as historical resources or unique archaeological resources under CEQA. Construction activity under the General Plan could affect one or more of these resources, resulting in significant impacts by either direct disturbance through excavation or by changes to the setting. These impacts are* ***potentially significant****.*

Table 4.5-1 above lists identified cultural resources. A total of 2,876 resources have been identified within Yuba County. While the individual CRHR evaluation of each resource is beyond the scope of analysis for this General Plan Program EIR, it is reasonable to assume that many of these resources are CRHR-eligible since previous investigations have identified significant cultural resources within Yuba County. In addition, some of these resources are likely to qualify as unique archaeological resources.

Ground-disturbing construction would result from buildout of the lands designated for development within unincorporated Yuba County, particularly within the Valley Growth Boundary and Rural Community areas. This future development could result in significant impacts to historical resources and unique archaeological resources through either direct physical impacts or by changes to the setting.

Direct physical impacts would result from activity such as excavation, grading, or ground compaction required for construction of new land uses. Changes to the setting would occur where new land uses and built environment features are placed rural, undeveloped land. Changes to the setting could result in significant impacts where the natural or undeveloped setting forms part of the significance or integrity of a resource.

Relevant Policies and Actions of the 2030 General Plan

Goal NR6–Cultural Resources of the Natural Resources Element of the 2030 General Plan indicates that Yuba County policy is to identify, protect, and preserve Yuba County's important prehistoric and historic resources. This goal is to be implemented through the following policies:

- **Policy NR6.1:** The County will require environmental assessment and mitigation to reduce or avoid impacts to significant cultural resources, as feasible, per state and federal legislation and regulations.
- **Policy NR6.2:** If potential paleontological or prehistoric resources are detected during construction, work shall stop and consultation is required to avoid further impacts.
- **Policy NR6.3:** New developments, roads, water and sewer lines, and stormwater infrastructure should be located to avoid impacts to significant cultural resources.
- **Policy NR6.4:** The County will encourage adaptive reuse of historic structures in a way that maintains the character defining elements of the historic structure.

- **Policy NR6.5:** Priority investment should go to preserving or rehabilitating historic structures that are grouped in close proximity, are particularly good examples of a specific architectural style, or are associated with important people or events in the County's history.

- **Policy NR6.6:** The County will disseminate information to property owners regarding tax incentives and other federal and state programs that support the rehabilitation of historic structures.

- **Action NR6.1: Environmental Review and Mitigation.** Building on the analysis in the General Plan Program EIR, new development projects that could have significant adverse impacts to prehistoric or historic resources will be required to assess impacts and provide mitigation. The following steps, or those deemed equally effective by the County, will be followed:

    - Request information from the Native American Heritage Commission regarding Native American groups that may have important sites in areas that could be affected by project development.

    - Involve the local Native American community in determining the appropriate mitigation of impacts to significant prehistoric sites.

    - Consult the County's historic and cultural resources database and updated information from the North Central Information Center regarding cultural resource sites, structures, or landscapes that could be affected by project activities.

    - Based upon the sensitivity of the subject proposed project area (see Exhibit NR-6), additional technical work may be required. Where a cultural resources survey has not been performed:

        - a pedestrian survey may be required in areas of low sensitivity;

        - a pedestrian survey will be required in areas of moderate and high sensitivity; and

        - Based on findings of the pedestrian survey, additional technical studies may be required, such as geoarchaeological sensitivity analysis, Native American consultation, ethnographic studies, or other analysis scaled according to the nature of the individual project.

    - For new developments that would alter historic structures (structures 50 years old or older), a qualified architectural historian shall conduct a record search and assess the potential for the project to result in significant impacts to historical resources that occur as part of the existing built environment.

    - Determination of impacts, significance, and mitigation (i.e., site monitors, avoidance, and/or other measures) shall be made by a qualified professional archaeologist or architectural historian, as appropriate.

    - If impacts cannot be avoided through project design, appropriate and feasible treatment measures are required. Such measures may consist of, but are not limited to actions such as data recovery excavations, photographic documentation, or preparation of design drawings documenting the resource subject to significant impacts.

    - Provide the North Central Information Center with appropriate California Department of Parks and Recreation site record forms and cultural resources reports documenting resources that may be identified through technical work performed to review projects accommodated under the 2030 General Plan.

    - If human remains are discovered during construction of projects occurring under General Plan buildout, the project proponent and landowner shall comply with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 7050.5.

- Related Goals: Goal NR6
- Agency/Department: Community Development and Services Agency
- Funding Source: Project applicant funds
- Time Frame: Ongoing, as construction occurs under the General Plan

Implementation of the County's General Plan will require consistency findings for discretionary actions, such as project and plan approvals. The General Plan is also used to update County codes, which may include measures to avoid cultural resources. Applicants for entitlements requiring General Plan consistency findings will need to comply with the policies of the Yuba County General Plan, as described above. These policies include avoidance of resources where possible, adaptive reuse of existing resources such as historic structures, and technical studies and preparation of treatment to minimize impacts that cannot be avoided. The 2030 General Plan also requires consultation with local Native American groups when determining appropriate mitigation.

Conclusion

Although the General Plan is structured to avoid cultural resource impacts, the development of unincorporated Yuba County could affect the setting of one or more significant cultural resources. This impact is considered **significant**.

Mitigation Measure

The proposed policies of the 2030 General Plan constitute the feasible mitigation available to reduce impacts on cultural resources. Beyond technical work to identify, evaluate, avoid where possible, and mitigate impacts on known cultural resources no further mitigation is available. This impact is **significant and unavoidable.**

IMPACT 4.5-2 Damage of Previously Unidentified Cultural Resources. *Buildout of the areas designated for development within the planning area identified 2030 General Plan has the potential to damage or disturb previously unidentified cultural resources. The density of known cultural resources within Yuba County is high; indicating that additional resources occur that have not been recorded and which could be damaged by construction prior to discovery. This impact is potentially significant.*

The 2030 General Plan would allow buildout of the unincorporated County as indicated in the Land Use Diagram. The density of identified resources indicates that many areas in unincorporated Yuba County are likely to contain cultural resources. Many of these resources are anticipated to be previously unidentified, and may be uncovered during construction of neighborhoods, commercial districts, developed recreational facilities, and other activities that could occur under the General Plan. Where agricultural land uses have altered the landscape such resources may not be easily identifiable based on surface manifestations. Archaeological resources can occur below the land surface where soil has been deposited over older land forms. Buried archaeological resources may consist of historic or prehistoric material.

Construction that would occur during buildout of the 2030 General Plan would require ground-disturbing work that could inadvertently damage or destroy previously unidentified cultural resources. For resources that qualify as historical resource, unique archaeological resources, or historic properties such damage would be significant if it diminished the qualities that contribute to the significance of these resources.

Relevant Policies and Actions of the 2030 General Plan

Goal NR6 in the Natural Resources Element of the 2030 General Plan indicates that Yuba County policy is to "identify, protect, and preserve Yuba County's important prehistoric and historic resources." The following policies to implement this goal would reduce the potential for damage to previously unidentified cultural resources:

- **Policy NR6.1:** The County will require environmental assessment and mitigation to reduce or avoid impacts to significant cultural resources, as feasible, per state and federal legislation and regulations.

- **Policy NR6.2:** If potential paleontological or prehistoric resources are detected during construction, work shall stop and consultation is required to avoid further impacts.

- **Policy NR6.3:** New developments, roads, water and sewer lines, and stormwater infrastructure should be located to avoid impacts to significant cultural resources [the avoidance of identified resources would reduce the risk of damage to previously unidentified elements of the same resource].

- **Action NR6.1: Environmental Review and Mitigation.** Building on the analysis in the General Plan Program EIR, new development projects that could have significant adverse impacts to prehistoric or historic resources will be required to assess impacts and provide mitigation. The following steps, or those deemed equally effective by the County, will be followed:

    - Request information from the Native American Heritage Commission regarding Native American groups that may have important sites in areas that could be affected by project development.

    - Involve the local Native American community in determining the appropriate mitigation of impacts to significant prehistoric sites.

    - Consult the County's historic and cultural resources database and updated information from the North Central Information Center regarding cultural resource sites, structures, or landscapes that could be affected by project activities.

    - Based upon the sensitivity of the subject proposed project area (see Exhibit NR-6), additional technical work may be required. Where a cultural resources survey has not been performed:

        - a pedestrian survey may be required in areas of low sensitivity;

        - a pedestrian survey will be required in areas of moderate and high sensitivity; and

        - Based on findings of the pedestrian survey, additional technical studies may be required, such as geoarchaeological sensitivity analysis, Native American consultation, ethnographic studies, or other analysis scaled according to the nature of the individual project.

    - For new developments that would alter historic structures (structures 50 years old or older), a qualified architectural historian shall conduct a record search and assess the potential for the project to result in significant impacts to historical resources that occur as part of the existing built environment.

    - Determination of impacts, significance, and mitigation (i.e., site monitors, avoidance, and/or other measures) shall be made by a qualified professional archaeologist or architectural historian, as appropriate.

    - If impacts cannot be avoided through project design, appropriate and feasible treatment measures are required. Such measures may consist of, but are not limited to actions such as data recovery excavations, photographic documentation, or preparation of design drawings documenting the resource subject to significant impacts.

    - Provide the North Central Information Center with appropriate California Department of Parks and Recreation site record forms and cultural resources reports documenting resources that may be identified through technical work performed to review projects accommodated under the 2030 General Plan.

- If human remains are discovered during construction of projects occurring under General Plan buildout, the project proponent and landowner shall comply with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 7050.5.

- Related Goals: Goal NR6
- Agency/Department: Community Development and Services Agency
- Funding Source: Project applicant funds
- Time Frame: Ongoing, as construction occurs under the General Plan

Implementation of the County's General Plan will require consistency findings for discretionary actions, such as project and plan approvals. The General Plan is also used to update County codes, which may include measures to avoid cultural resources. Applicants for entitlements requiring General Plan consistency findings will need to comply with the policies of the Yuba County General Plan, as described above. Relevant policies that reduce the risk of impacts to previously unidentified resources include background research and monitoring of areas of sensitivity for unidentified resources during construction. The 2030 General Plan also requires consultation with local Native American groups when determining appropriate mitigation. Consultation with such groups may result in identification of additional resources or areas of sensitivity.

In addition to monitoring areas of sensitivity for prehistoric archaeological resources as indicated above in Action NR6.1, applicants for entitlements to construct improvements shall be required to retain a professional archaeologist to monitor ground-disturbing work in areas of high sensitivity for previously unidentified historic-era resources, if areas of sensitivity are identified during background research or on-the-ground surveys.

Conclusion

Because the density of resources in the County is relatively high, there is a reasonable potential that buildout of the General Plan will involve one or more projects that inadvertently disturb one or more previously unidentified cultural resources. Many of these resources are likely to qualify as historical resources or unique archaeological resources under CEQA or historic properties. Damage to such resources would be a **significant** impact.

Mitigation Measure

The proposed policies of the 2030 General Plan constitute the feasible mitigation available to reduce impacts on previously unidentified cultural resources. Beyond technical work to identify resources in advance, consult with relevant information repositories and the Native American community, monitor construction and stop work if resources are identified, no further mitigation is feasible. For these reasons this impact remains **significant and unavoidable.**

IMPACT 4.5-3 Disturbance and Damage to Human Remains. *Buildout of the 2030 General Plan would allow construction in areas that could contain previously undiscovered buried human remains. Previously identified cultural resources within the County include prehistoric archaeological sites with human burials. In addition, historic archaeological deposits may include human remains and cemeteries. It is possible that ground-disturbing work that would be performed during buildout of the General Plan will encounter such remains, and potentially result in damage. This impact is potentially significant.*

Previously identified resources within Yuba County include prehistoric archaeological sites, historic-era mining-related sites, historic-era other cultural resources, and resources with combined prehistoric and historic components. Prehistoric archaeological deposits frequently include burials and associated grave goods. Historic-era cultural resources may also contain previously unidentified human remains.

Buildout of the 2030 General Plan would require ground-disturbing construction. The density of previously identified resources within the County in general suggests that this construction could inadvertently damage and

disturb buried human remains. Where the surface manifestations of subterranean deposits have been removed by agriculture or have been covered by recent soil deposits there may be no indication that such remains exist, thus such remains may not be avoided prior to construction.

Relevant Policies and Actions of the 2030 General Plan

Goal NR6 of the Natural Resources Element of the 2030 General Plan indicates that the County will "identify, protect, and preserve Yuba County's important prehistoric and historic resources." The following policies would reduce the risk of inadvertent damage to buried human remains:

- **Policy NR6.1:** The County will require environmental assessment and mitigation to reduce or avoid impacts to significant cultural resources, as feasible, per state and federal legislation and regulations.
- **Policy NR6.2:** If potential paleontological or prehistoric resources are detected during construction, work shall stop and consultation is required to avoid further impacts.
- **Policy NR6.3:** New developments, roads, water and sewer lines, and stormwater infrastructure should be located to avoid impacts to significant cultural resources.
- **Policy NR6.4:** The County will encourage adaptive reuse of historic structures in a way that maintains the character defining elements of the historic structure.
- **Policy NR6.5:** Priority investment should go to preserving or rehabilitating historic structures that are grouped in close proximity, are particularly good examples of a specific architectural style, or are associated with important people or events in the County's history.
- **Policy NR6.6:** The County will disseminate information to property owners regarding tax incentives and other federal and state programs that support the rehabilitation of historic structures.
- **Action NR6.1: Environmental Review and Mitigation.** Building on the analysis in the General Plan Program EIR, new development projects that could have significant adverse impacts to prehistoric or historic resources will be required to assess impacts and provide mitigation. The following steps, or those deemed equally effective by the County, will be followed:
    - Request information from the Native American Heritage Commission regarding Native American groups that may have important sites in areas that could be affected by project development.
    - Involve the local Native American community in determining the appropriate mitigation of impacts to significant prehistoric sites.
    - Consult the County's historic and cultural resources database and updated information from the North Central Information Center regarding cultural resource sites, structures, or landscapes that could be affected by project activities.
    - Based upon the sensitivity of the subject proposed project area (see Exhibit NR-6), additional technical work may be required. Where a cultural resources survey has not been performed:
        - a pedestrian survey may be required in areas of low sensitivity;
        - a pedestrian survey will be required in areas of moderate and high sensitivity; and

    - Based on findings of the pedestrian survey, additional technical studies may be required, such as geoarchaeological sensitivity analysis, Native American consultation, ethnographic studies, or other analysis scaled according to the nature of the individual project.

- For new developments that would alter historic structures (structures 50 years old or older), a qualified architectural historian shall conduct a record search and assess the potential for the project to result in significant impacts to historical resources that occur as part of the existing built environment.

- Determination of impacts, significance, and mitigation (i.e., site monitors, avoidance, and/or other measures) shall be made by a qualified professional archaeologist or architectural historian, as appropriate.

- If impacts cannot be avoided through project design, appropriate and feasible treatment measures are required. Such measures may consist of, but are not limited to actions such as data recovery excavations, photographic documentation, or preparation of design drawings documenting the resource subject to significant impacts.

- Provide the North Central Information Center with appropriate California Department of Parks and Recreation site record forms and cultural resources reports documenting resources that may be identified through technical work performed to review projects accommodated under the 2030 General Plan.

- If human remains are discovered during construction of projects occurring under General Plan buildout, the project proponent and landowner shall comply with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 7050.5.

- Related Goals: Goal NR6
- Agency/Department: Community Development and Services Agency
- Funding Source: Project applicant funds
- Time Frame: Ongoing, as construction occurs under the General Plan

Implementation of the County's General Plan will require consistency findings for discretionary actions, such as project and plan approvals. The General Plan is also used to update County codes, which may include measures to avoid cultural resources. Applicants for entitlements requiring General Plan consistency findings will need to comply with the policies of the Yuba County General Plan, as described above.

In addition to monitoring areas of sensitivity for prehistoric archaeological resources as indicated above in Action NR6.1, applicants for entitlements to construct improvements will be required to retain a professional archaeologist to monitor ground-disturbing work in areas of high sensitivity for previously unidentified human remains, as appropriate.

Conclusion

Because prehistoric and historic archaeological sites that contain human remains can occur below ground with little or no surface manifestation it may not be feasible to entirely avoid impacts to interred human remains during buildout of the 2030 General Plan, despite implementation of the County's proposed policies and this mitigation measure. If buried human remains are encountered during construction without prior discovery they may be inadvertently damaged or destroyed. The impact is considered **significant**.

Mitigation Measure

Compliance with the requirements of the 2030 General Plan represents the feasible measures that may be used to avoid impacts to interred human remains that could be encountered during ground-disturbing construction. No

additional feasible mitigation is available to reduce this impact to a less-than-significant level. This impact would remain **significant and unavoidable**.

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4.6 GEOLOGY, SOILS, MINERAL RESOURCES, AND PALEONTOLOGICAL RESOURCES

This section contains an analysis of impacts related to geology, soils, mineral resources, and paleontological resources in unincorporated Yuba County. The section provides a description of existing soils, geologic and seismic conditions, as well as a brief analysis of regulations and plans pertinent to the implementation of the 2030 General Plan.

4.6.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Soil and Water Resources Conservation Act of 1977

The Soil and Water Resources Conservation Act of 1977, as amended (RCA) provides the U.S. Department of Agriculture (USDA) broad strategic assessment and planning authority for the conservation, protection, and enhancement of soil, water, and related natural resources. Through RCA, USDA:

- appraises the status and trends of soil, water, and related resources on non-Federal land and assesses their capability to meet present and future demands;
- evaluates current and needed programs, policies, and authorities; and
- develops a national soil and water conservation program to give direction to USDA soil and water conservation activities.

Earthquake Hazards Reduction Act of 1977

The U.S. Congress passed the Earthquake Hazards Reduction Act in 1977 to "reduce the risks to life and property from future earthquakes in the United States" through the establishment and maintenance of an effective earthquake hazards and reduction program (Federal Emergency Management Agency (FEMA) 1977). To accomplish this, the act established the National Earthquake Hazards Reduction Program (NEHRP). This program was significantly amended in 1990 with the National Earthquake Hazards Reduction Program Act (NEHRPA), which refined the descriptions of agency responsibilities, program goals, and objectives. The NEHRP's mission is to:

- improve understanding, characterization, and prediction of earthquake hazards and vulnerabilities;
- improve building codes and land use practices;
- reduce risks through post-earthquake investigations and education;
- develop and improve design and construction techniques; improve mitigation capacity; and
- accelerate the application of research results.

The NEHRPA designates FEMA as the program's lead agency and assigns several planning, coordinating, and reporting responsibilities. Other NEHRPA agencies are the National Institute of Standards and Technology, the National Science Foundation, and the U.S. Geological Survey.

Clean Water Act

The Clean Water Act (CWA) regulates discharges into waters of the United States, including a range of potential point and nonpoint sources of water-transported pollutants, and the discharge of fill into waters, such as wetlands and intermittent stream channels. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters through prevention and elimination of pollution.

The law requires that a CWA Section 404 permit be obtained from the U.S. Army Corps of Engineers (USACE) for any dredged or fill materials discharged into wetlands or waters of the United States whether the discharge is temporary or permanent. A National Pollutant Discharge Elimination System permit is required through the appropriate regional water quality control board (RWQCB).

CWA Section 401 requires that water quality certifications or waivers be issued by the U.S. Environmental Protection Agency (EPA), the states, or both (see below). Projects must be consistent with the State Non-point Source Pollution Management Program (CWA Section 319). Projects effecting waterbodies identified as impaired would also need to comply with Section 303(d) of the CWA. Waterbodies subject to Section 303(d) of the CWA are discussed further in Section 4.9 of this EIR, "Hydrology and Water Quality."

- Clean Water Act (CWA) Section 402 mandates that certain types of construction activity comply with the requirements of Environmental Protection Agency's National Pollution Discharge Elimination System (NPDES) stormwater program. Construction activities that disturb one or more acres of land must obtain coverage under the NPDES general construction activity stormwater permit, which is issued by the RWQCB. Obtaining coverage under the NPDES general construction activity stormwater permit generally requires that the project applicant complete the following steps: File a Notice of Intent with RWQCB that describes the proposed construction activity before construction begins;

- Prepare a Storm Water Pollution Prevention Plan (SWPPP) that describes Best Management Practices (BMPs) that would be implemented to control accelerated erosion, sedimentation, and other pollutants during and after project construction; and

- File a notice of termination with RWQCB when construction is complete and the construction area has been permanently stabilized.

The SWRCB adopted Order 2009-0009-DWQ for a new statewide NPDES Construction General Permit # CA000002 on September 2, 2009 that took effect on July 1, 2010 (SWRCB 2010). This General Permit imposes more minimum BMPs and establishes three levels of risk-based requirements based on both sediment risk and receiving water risk. All dischargers are subject to narrative effluent limitations. Risk level 2 dischargers are subject to technology-based numeric action levels (NALs) for pH and turbidity. Risk level 3 dischargers are subject to NALs and numeric effluent limitations (NELs). Certain sites must develop and implement a SWPPP and Rain Event Action Plan (REAP) and all projects must perform effluent monitoring and reporting, along with receiving water monitoring and reporting. The General Permit requires that key personnel (e.g., SWPPP preparers, inspectors, etc.) have specific training or certifications to ensure their level of knowledge and skills are adequate to ensure their ability to design and evaluate project specifications that will comply with General Permit requirements. For projects commencing on or after July 1, 2010, the applicant must electronically submit Permit Registration Documents (PRDs) prior to commencement of construction activities including the Notice of Intent, Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, a signed certification statement by the Legally Responsible Person (LRP), and the first annual fee.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Governor's Office of Planning and Research Guidelines

The Governor's Office of Planning and Research (OPR) has established guidelines to ensure that general plan content meets the requirements of the California Government Code. Section 65302 of the California Government Code mandates that the Land Use Element address the distribution of mineral resources and provisions for their continued availability.

In addition, the Open Space Element must address open space land, which (per section 65560[b]) includes any parcel of land or water that is significantly unimproved and devoted to an open space use, such as areas

containing major mineral deposits, including those in short supply. Open space for public safety also includes areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones and unstable soil areas.

See the Natural Resources Element of the 2030 General Plan for the County's intent related to areas with significant mineral resources and the Public Health & Safety Element for information related to geologic, soils, and seismic hazards.

California Geologic Survey

The California Geological Survey (CGS) provides information pertaining to soils, geology, mineral resources, and geologic hazards.

Mineral Resource Protection Laws

CGS maintains and provides information about California's nonfuel mineral resources. CGS offers information about handling hazardous minerals and mineral land classifications from the California Surface Mining and Reclamation Act of 1975 (SMARA).

Surface Mining and Reclamation Act of 1975

SMARA requires all jurisdictions to incorporate mapped mineral resources designations approved by the California Mining and Geology Board within their general plans. SMARA was enacted to limit new non-extractive development in areas with significant mineral deposits. The California Department of Conservation's Office of Mine Reclamation and the State Mining and Geology Board (SMGB) are jointly charged with ensuring proper administration of the act's requirements. The California Mining and Geology Board promulgates regulations to clarify and interpret the act's provisions, and also serves as a policy and appeals board.

The Office of Mine Reclamation (OMR) provides an ongoing technical assistance program for lead agencies and operators, maintains a database of mine locations and operational information statewide, and is responsible for compliance-related matters (OMR 2008).

Hazardous Minerals

CGS monitors minerals related to environmental and public health issues such as asbestos, mercury, and radon. In cooperation with the California Air Resources Board (ARB), CGS provides geologic information on natural asbestos occurrences in California to state and local government agencies, as well as to the general public.

In cooperation with other agencies and university research groups, CGS provides information about activities at historical mine sites related to mercury issues. Also, CGS works with the California Department of Health Services to provide information and advice related to radon occurrence in California.

Asbestos

Asbestos is a naturally occurring mineral in California. Asbestos occurrences are most commonly associated with the mineral serpentinite and partially serpentinized ultramafic rocks (CGS 2007b). Asbestos is a known carcinogen and inhalation of asbestos fibers may result in the development of lung cancer, mesothelioma, and gastrointestinal cancer (U.S. EPA 1993). The foothills and mountainous portions of Yuba County contain areas of partly to completely serpentinized ultramafic rocks and potentially contain asbestos, as described in more detail later in this report.

In support of concerns raised about the possible health hazards that may occur during activities that disturb asbestos-containing rocks and soils, CGS issued Special Publication 124 Guidelines for Geologic Investigations

of Naturally Occurring Asbestos in California (CGS 2002). These guidelines provide a starting point for geologists involved in conducting or reviewing naturally occurring asbestos investigations (CGS 2002).

ARB and the U.S. Occupational Safety and Health Administration (OSHA) also have regulations related to asbestos. In 2000, ARB updated its adopted asbestos Airborne Toxic Control Measure to reduce the threshold for asbestos content in ultramafic rock in surfacing materials to 0.25%, as determined by ARB Method 435 (ARB 2000).

ARB thereby regulates human exposure to airborne asbestos. OSHA regulates human exposure to asbestos through worker safety regulations, as described in Title 29 of the California Federal Regulations, Section 1910 (29 CFR 1910) and 29 CFR 1926, as listed on the OSHA Web site (OSHA 2011). The OSHA asbestos standards provide detailed information regarding asbestos sampling and analysis and mandated work practices.

Radon

Radon gas forms during the decay of uranium, which is naturally found in rock, water, and soil. Radon migrates to the surface via cracks or fractures in the earth's crust, and is sometimes carried through overlying substrate by other soil gases such as methane, ethane, propane, carbon dioxide, and helium (California Department of Health Services 2003).

Breathing air with elevated levels of radon gas may result in an increased risk of developing lung cancer. Not everyone exposed to radon will develop lung cancer, but the U.S. Environmental Protection Agency (EPA) and the National Cancer Institute estimate the annual number of lung cancer deaths in the United States attributable to radon is between 7,000 and 30,000.

Radon-222 is the isotope of most concern to public health because it has a much longer half-life (3.8 days) than other radon isotopes (radon-219 at 4 seconds and radon 220 at 55.3 seconds). The longer half-life allows radon-222 to migrate farther through soil, making more radon-222 available to enter buildings than any of the other radon isotopes.

The average concentration of radon in American homes is about 1.3 picocuries per liter (pCi/L) and the average concentration in outdoor air is about 0.4 pCi/L. The U.S. EPA recommends that individuals avoid long-term exposures to radon concentrations above 4 pCi/L.

The only way to know what the radon level is in a building or home is to test the air. Fortunately, radon testing is relatively simple and inexpensive. If indoor-air testing indicates radon levels exceeding 4 picocuries per liter, the U.S. EPA recommends remediation actions be considered (CGS 2007c).

Mercury

Past gold mining activities have left a legacy of mercury contamination (because mercury was used extensively for ore extraction), and the Yuba River is considered a major source of mercury loading in the Sacramento River watershed. The potential health risks associated with mercury include neurological dysfunction, particularly in children. It is ingested by humans mainly through fish and food consumption. It is persistent in the environment, and will bioaccumulate (i.e., greatly magnify its concentration from water and sediments up the food chain to fish and other organisms). Diazinon, one of the most widely used pesticides in the United States, can be toxic at high exposures, as described above. Group A pesticides, some of which are no longer manufactured in the United States, are classified as known, probable or possible human carcinogens.

Alquist-Priolo Earthquake Fault Zoning Act of 1972

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The purpose of the act was to prevent construction of buildings used for human

occupancy on the surface trace of active faults. There are no Alquist-Priolo Earthquake Fault Zones Yuba County (CDMG 2007a).

California Seismic Hazards Mapping Act of 1990

The Seismic Hazards Mapping Act was passed by the California Legislature after the 1989 Loma Prieta earthquake. The Act directs CGS to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the act is to reduce threats to public safety and to minimize loss of life and property by identifying and mitigating these seismic hazards. There are no Zones of Required Investigation in Yuba County (CGS 2009).

California Building Standards Code, State Housing Law, and Fire Protection Codes

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations [CCR] Title 24). Information on current code requirements can be found on the California Building Standard Commission's website (http://www.bsc.ca.gov/).

The applicability of California Building Standard Code (CBSC) is identified in the California Health and Safety Code (HSC). There are two portions of law addressing the application of the CBSC. First is the California Building Standards Law found in Division 13, Part 2.5, and second is the State Housing Law found in Division 13, Part 1.5. These portions of law establish that the CBSC is the applicable code for all occupancies throughout the state, unless local amendments apply. The 2009 Model Codes are incorporated into the 2010 CBSC. They are adopted only in part by some state agencies. Yuba County has adopted state codes by reference in Yuba County Ordinance Title X.

The Department of Housing and Community Development has adopted regulations implementing the State Housing Law in the California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1 (CCR, T-25), for residential structures subject to the State Housing Law. These regulations, the CBSC, and the requirements of the State Housing Law, are applicable in all parts of the state.

Building standards in the CBSC are adopted by the State Fire Marshal to provide protection from fire and other public safety objectives. These provisions are adopted as state law administered in part by local fire protection districts organized under HSC (see Division 12, Part 2.7).

California Building Standards Commission

The California Building Standards Commission (BSC) is responsible for coordinating, managing, adopting, and approving building codes in California. In July 2009, the BSC adopted and published the 2009 International Residential Building Code (IBC) as the 2010 California Residential Building Code (CBC). This new code became effective on January 1, 2011 and updated all the subsequent codes under CCR Title 24.

California Building Code

The 2007 CBC replaces the previous "seismic zones" (assigned as a number from 1 to 4, where 4 required the most earthquake-resistant design) with new Seismic Design Categories A through F (where F requires the most earthquake-resistant design) for structures designed for a project site. With the shift from seismic zones to seismic design, the CBC philosophy has shifted from "life safety design" to "collapse prevention," meaning that structures are designed for prevention of collapse for the maximum level of ground shaking that could reasonably be expected to occur at a site. Chapter 16 of the CBC specifies exactly how each seismic design category is to be determined on a site-specific basis through the site-specific soil characteristics and proximity to potential seismic hazards. Recent updates to the CBC become effective on January 1, 2011 (but these amendments did not focus on geologic or soils constraints).

The California Building Standards Commission has adopted the following various model codes by various agencies into the 2010 California Code of Regulations Title 24 Parts 1-12, with the effective date of January 1, 2011 (Griffin, 2010).

- Part 1 California Administrative Code
- Part 2 California Building Code
- Part 2.5 California Residential Code
- Part 3 California Electrical Code
- Part 4 California Mechanical Code
- Part 5 California Plumbing Code
- Part 6 California Energy Code
- Part 7 California Elevator Safety Construction Code - not adopted by Yuba County
- Part 8 California Historical Building Code
- Part 9 California Fire Code
- Part 10 California Existing Building Code
- Part 11 California Green Building Standards
- Part 12 California Referenced Standards

Each Model Code adopted by the California Building Standards Commission has a section in it that gives cities, counties, and fire department the authority to amend the CBC provided the local modification complies with the State Health and Safety Code Section 18941.5(b) for Building Standards Law, Health and Safety Code Section 17958.5 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Prevention. Amendments and findings are required to be filed with the California Building Standards Commission. Title 25 California Code of Regulations adopted by Housing and Community Development regulate Manufactured Homes and Factory Built Homes.

Local Amendments to State Building Codes, Housing Law, and Fire Protection Codes

Local governments may amend the building standards contained in the CBC. The provisions of law that permit these local government amendments contain subtle differences. Local governments must make specific findings about local amendments to state building, housing, and fire code requirements and file information on these amendments with the State to become effective.

For the building code, local governments must make express findings that amendments to the building standard contained in CCR, T-24 are necessary because of local climatic, geological or topographical conditions. The local government amendments must provide a more restrictive building standard than that contained in CCR, T-24.4.

State Housing Law provides for amendment of building standards related to residential construction and for amendment of CCR, T-25. The governing body of the local government must make an express finding that amendments to either the building standards for residential construction contained in CCR, T-24, or the regulations of the Department of Housing and Community Development contained in CCR, T-25, are necessary because of local climatic, geological or topographical conditions. There is an exception in CCR, T-25, § 52 to the requirement for an express finding where alternate abatement procedures are determined by the local enforcement agency to be the equivalent of those contained in CCR, T-25. Unlike the California Building Standards Law, there is no specific requirement in the State Housing Law that local government amendments provide either more restrictive building standards than those contained in CCR, T-24, or more restrictive regulations than those contained in CCR, T-25.

Local government amendments to building standards in the CBSC adopted by the State Fire Marshal for fire and panic safety are permitted under this provision of state law for fire protection districts organized under HSC, Division 12, Part 2.7. The “governing body” shall be deemed to be the district board and the district shall be deemed to be the local agency. The district board must make an express finding that amendments to building

standards for fire and panic safety that are contained in CCR, T-24 are necessary because of local climatic, geological or topographical conditions. The district is required to notify the city, county, or city and county where the amendments will apply of the proposed amendments, and receive their comments. Upon adoption, the amendments are required to be presented for ratification to the city, county, or city and county where it will apply. The amendment is not effective until copies of both the express findings and the amendments, with the amendments expressly marked and identified as to the applicable findings, have been filed with the BSC by the city, county, or city and county where it will apply, along with the adopting ordinance and any findings of the city, county, or city and county.

Porter – Cologne Act

The RWQCB regulates State water quality standards in Yuba County. Water quality standards are relevant to this section, as well as the Hydrology and Water Quality section of this EIR since they are related to fill, grading, and sediment discharge.

Beneficial uses and water quality objectives for surface water and groundwater resources in the area are established in the water quality control plans (basin plans) of each RWQCB, as mandated by the State Porter-Cologne Act and the CWA. The RWQCBs also implement CWA Section 303(d) total maximum daily load (TMDL) process, which consists of identifying candidate water bodies where water quality is impaired by the presence of pollutants. The TMDL process is implemented to determine the assimilative capacity of the water body for the pollutants of concern and to establish equitable allocation of allowable pollutant loading within the watershed. Section 401 of the CWA requires an applicant pursuing a federal permit to conduct any activity that may result in a discharge of a pollutant to obtain a water quality certification (or waiver) from the applicable RWQCB.The RWQCBs primarily implement basin plan policies through issuing waste discharge requirements for waste discharges to land and water. The RWQCBs are also responsible for administering the NPDES permit program, which is designed to manage and monitor point and nonpoint source pollution. NPDES stormwater permits for general construction activity are required for projects that disturb one or more acres of land.

Phase II municipal NPDES stormwater permits are required for “Urbanized Area” which is a population of 50,000 and a density of 1,000/sq mile. Yuba County must comply with the provisions of the permit by ensuring that, among other things, new development and redevelopment projects mitigate, to the maximum extent practicable, water quality impacts to stormwater runoff during the project’s construction and operational periods.

As described above, the SWRCB adopted a new statewide NPDES Construction General Permit Order 2009-0009-DWQ on September 2, 2009 that becomes effective July 1, 2010 (SWRCB 2010). This General Permit imposes more minimum BMPs and establishes three levels of risk-based requirements based on both sediment risk and receiving water risk.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Yuba County Code

Yuba County is responsible for implementation of state and federally mandated laws and regulations related to geology and soils before permitting projects under the County’s jurisdiction. Several portions of the Yuba County Ordinance Code relate to geology, soils, and other geologic hazards. Chapters 11.20 and 11.25 of the County Code apply to mineral resources and erosion control, respectively.

Chapter 11.20, Yuba County Ordinance Code—Surface Mining and Reclamation

Chapter 11.20 of the Yuba County Code provides regulations for surface mining and reclamation of mining areas under the authorization and direction of SMARA. This chapter was adopted to comply with SMARA and fulfill the purposes of the act. The provisions provided in this chapter apply to the unincorporated areas of Yuba County.

Chapter 11.25, Yuba County Ordinance Code— Grading, Drainage, and Erosion Control

Chapter 11.25 of the Yuba County Code provides regulations related to grading and excavations. The chapter sets forth means for controlling soil erosion and problems associated with grading, drainage, and other earthwork activities. The provisions provided in this chapter apply to the unincorporated areas of Yuba County.

Chapter 7.07, Yuba County Ordinance Code—Sewage Disposal

Chapter 7.07 of the County Code includes regulations related to community wastewater treatment and disposal systems, as well as septic systems. Permitting requirements of the Environmental Health Department are described. This chapter is designed to protect the public and environmental health through guidance on soil testing for septic suitability, setback from streams, size and slope of parcels for septic disposal, inspections, and related topics.

4.6.2 ENVIRONMENTAL SETTING

This section presents the geologic and seismic hazards, as well as the soil and mineral resources in areas addressed by the 2030 General Plan. This section also assesses the potential of earth-moving activities that could adversely affect scientifically important fossil remains. Paleontological resources (fossils) are the remains or traces of prehistoric animals and plants. The analysis presented in this section conforms to Society of Vertebrate Paleontology criteria. The topics in this section overlap with sections 4.10, "Land Use," and 4.2, "Agricultural and Forest Resources," of this EIR.

TOPOGRAPHY AND REGIONAL GEOLOGY

Yuba County's landscape varies from the Feather River valley to the west upward through the rolling foothills region in the central part of the county, into the Sierra Nevada in the eastern third of the county. Elevation in the county ranges from about 30 feet above mean sea level along the Feather River to approximately 4,800 feet above sea level in the northeastern corner of the county.

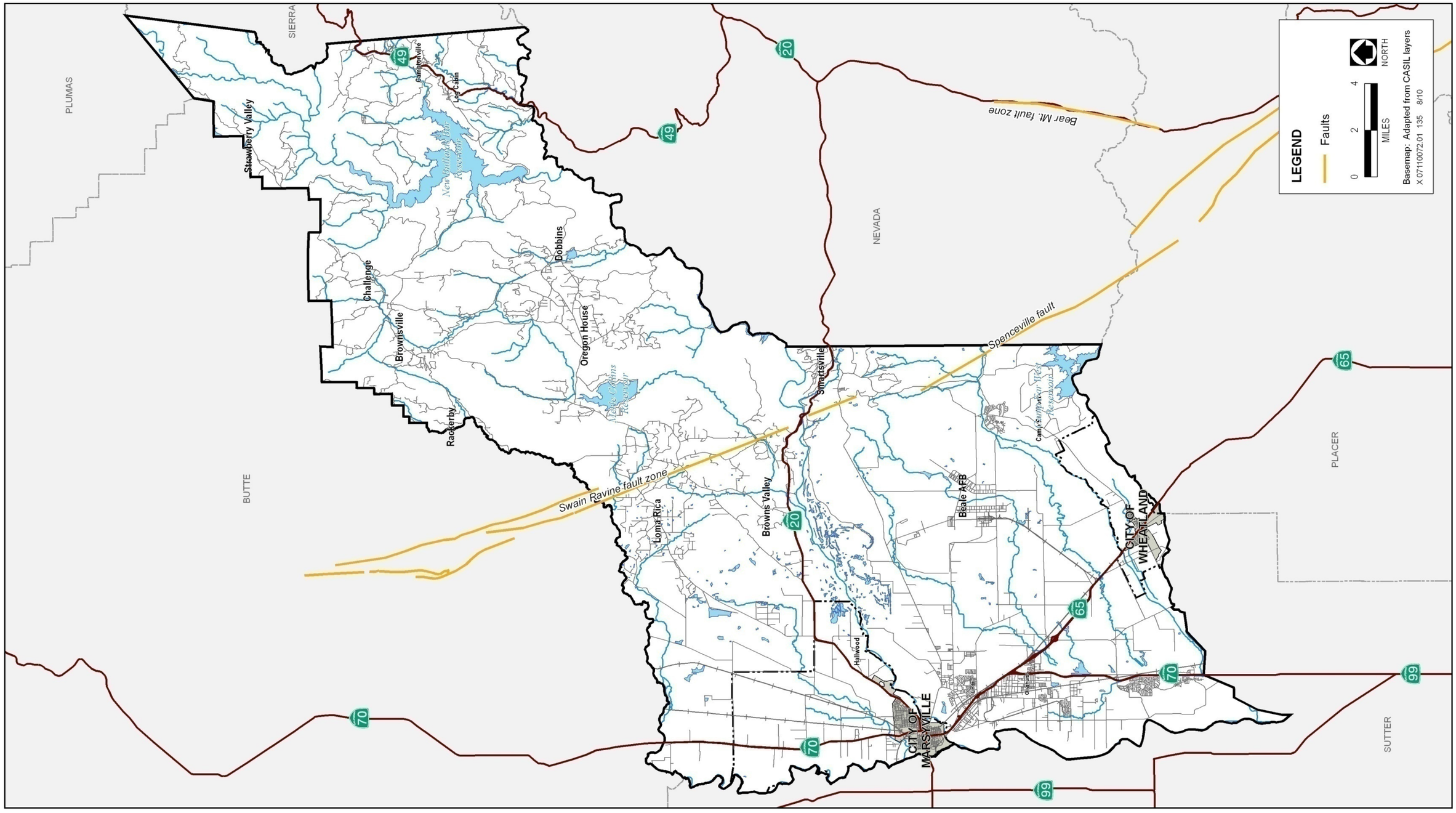
Major rivers and streams in Yuba County include:

- Feather River, along the western boundary of the County;
- Bear River along the southern boundary of the County;
- South Honcut Creek along the northern boundary of the County, and
- Yuba River, which flows westward across the central portion of the County, joining the Feather River at Marysville.

Major deposits of aggregate resources and gold deposits both occur in the valley along the Yuba River.

Faults

Yuba County is located within an area of California with relatively low seismic activity and is not located within a highly active fault zone. Seismic activity may result in geologic and seismic hazards, including seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards. Exhibit 4.6-1 shows the location of known faults in the county. The county's fault systems and associated seismic hazards are described below.



Source: Yuba County GIS 2007, USGS 2004, CASIL 1993 and 1996

Fault Traces **Exhibit 4.6-1**

Scales for Measuring Earthquakes

Earthquakes are measured either based on energy released (magnitude, such as the Richter Magnitude or Moment Magnitude scale) or the intensity of ground shaking at a particular location (Modified Mercalli scale). The Richter Magnitude scale measures the magnitude of an earthquake based on the logarithm of the amplitude of waves recorded by seismographs, with adjustments made for the variation in the distance between the various seismographs and the epicenter of the earthquake. The Richter scale starts with 1.0 and has no maximum limit. The scale is logarithmic—an earthquake with a magnitude of 2.0 is 10 times the magnitude (30 times the energy) of an earthquake with a magnitude of 1.0. The Moment Magnitude scale measures the magnitude of the earthquake based on the physical size of the fault rupture and slip displacement as well as the amount of energy released, and is more uniformly applicable than the Richter scale, providing a better estimate for larger earthquakes.

The Modified Mercalli scale is an arbitrary measure of earthquake intensity; it does not have a mathematical basis. This scale is composed of 12 increasing levels of intensity that range from imperceptible shaking (Scale I) to catastrophic destruction (Scale XII). Table 4.6-1 provides a description of the Modified Mercalli Intensity (MMI) scale.

Identification and Classification of Faults

Geologic evidence indicates that Yuba County is laced with a number of faults, i.e., fractures or fracture zones in the earth's crust along which there has been displacement of the two sides relative to one another parallel to the fracture. The displacement may be a few inches to several feet. Cumulative displacement through geologic time may reach miles.

If any surface displacement in excess of 1 or 2 inches along one of these faults were to occur beneath a building, transportation facility, main utility line, or aqueduct, the effects could be catastrophic. Therefore, it is important to know the relative likelihood of future movement along these faults and to plan accordingly.

No Alquist-Priolo Earthquake Fault Zones are located in Yuba County (CDMG 2007a), but several faults that have experienced displacement within the past 10,000 years are located within a 60-mile radius of Yuba County (CDMG 1994).

Displacement has occurred on three faults during recorded time—the Cleveland Hill Fault in south Butte County (near Oroville Dam) in 1975, the Dog Valley Fault northeast of Truckee in 1966, and the Warm Springs Valley Fault between Doyle and Calneva in 1950. Other faults with movement during the Holocene (less than 10,000 years ago) include the Dunnigan Hills Fault between Dunnigan and Zamora, the Hunting Creek Fault (north of Lake Berryessa), faults on the south end of Clear Lake, the Indian Valley Fault southeast of Lake Almanor, and the North Tahoe Fault in Lake Tahoe.

Faults in Yuba County include primarily inactive faults of the Foothills Fault System, running south-southeastward across the central portion of the county near Loma Rica, Browns Valley, and Smartsville. Jennings (1992) shows that most of the faults within the Foothill System have moved between 700,000 and 10,000 years ago. Faults include the Spenceville Fault, and the Swain Ravine Fault. A short segment of the Spenceville fault has has be shown to have moved between 9,000 and 130,000 years ago, based on the apparent offset within a paleosol (ancient soil buried within sedimentary or volcanic rock layers in that area (Saucedo and Wagner, 1992). Harwood and Helley (1987) indicate that the Spenceville fault has offset the eastern block upward.

Table 4.6-1
Modified Mercalli Index

Intensity	Effect
I	Not felt. Marginal and long period effects of large earthquakes.
II	Felt by persons at rest, on upper floors, or favorably placed.
III	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV	Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV, wooden walls and frame creak.
V	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.
VI	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle).
VII	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
VIII	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluvial areas sand and mud ejected, earthquake fountains, sand craters.
X	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI	Rails bent greatly. Underground pipelines completely out of service.
XII	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

Notes: Masonry A: Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.
Masonry B: Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.
Masonry C: Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.
Masonry D: Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.
Source: ABAG 2003

According to the Probabilistic Seismic Hazard Assessment for the State of California (CDMG 1996), Yuba County is not believed to have experienced earthquake-induced ground shaking of MMI VII or greater (the range of damage to buildings) between 1800 and 1996. Maulchin and Jones (1992) have estimated peak acceleration possible from the maximum credible earthquakes on rock and stiff-soil sites in California. Unincorporated Yuba

County falls within the high acceleration zone along the Foothills Fault System. Peak acceleration is estimated to be 0.4g to 0.5g (1g = 980.7 centimeters/second/second).

REGIONAL GEOLOGY

Geologic units within Yuba County as mapped by the California Geologic Survey (CDMG 1992) are separated into three categories:

- Tertiary and Quaternary alluvial deposits;
- the Smartsville Complex; and
- the Central Belt of the Sierra Nevada.

These categories roughly correspond with the valley, foothills, and mountain regions of the county, proceeding from west to east.

Tertiary and Quaternary (Eocene, Pliocene, Pleistocene, and Holocene) Alluvial Deposits

The majority of the western, valley portion of the county is underlain by Tertiary and Quaternary alluvium, including artificial till, dredge, or mine tailings; natural levee and channel deposits, basin deposits, landslide deposits, lake, fan, and terrace deposits.

This alluvial material includes poorly sorted stream and basin deposits ranging from clay to boulder sized. Named units include Pleistocene-aged deposits of the Modesto and Riverbank formations, which are alluvial terrace and fan deposits of gravel, sand, silt, and clay. Older alluvial deposits include Pliocene-aged Laguna formation deposits of interbedded alluvial gravel, sand, and silt; as well as Eocene-aged auriferous (gold-bearing) gravels along the Yuba River.

Aquifers in the North and South Yuba basins are comprised of these continental alluvial deposits. The cumulative thickness of the aquifer units increases from a few hundred feet near the Sierra Nevada foothills to over 1,400 feet along the western margin of the basin. The base of the aquifer system overlies the Pretertiary metamorphosed igneous and sedimentary rocks of the Sierra Nevada block.

Smartsville Complex (Jurassic)

The Smartsville complex is located in the foothills area in the central portion of the county. The complex consists of a volcanic arc assemblage of sedimentary, volcanic, and plutonic rocks. This material includes marine sandstone, conglomerate, slate, and siltstone, and Jurassic-aged volcanic rocks. Other rocks of the Smartsville complex include volcanic diorite and tonalite, mafic and felsic dikes, gabbro, diabase, and ultramafic rocks. The ultramafic rocks of the Smartsville Complex are partly to completely serpentinized, and potentially contain asbestos. Exhibit 4.6-2 illustrates the location of potentially asbestos-containing ultramafic rocks of the Smartsville Complex.

Central Belt (Paleozoic, Triassic, Jurassic, and Cretaceous)

The Central Belt of the Sierra Nevada includes plutonic rocks (granite and granitic rocks) of Jurassic and Cretaceous age, as well as a complex assemblage of metamorphic rocks of Paleozoic and Mesozoic (Triassic and Jurassic) age. The metamorphic rocks include metasedimentary and metavolcanic rocks, and potentially asbestos-bearing ultramafic rocks. Exhibit 4.6-2 illustrates the location of potentially asbestos-containing ultramafic rocks of the Central Belt.

POTENTIAL SEISMIC HAZARDS

Seismic activity along fault systems poses substantial hazards to property and human health and safety. Types of hazards that are commonly associated with seismic activity include ground shaking, fault rupture, liquefaction, lateral spreading, landslides/ avalanches, and structural hazards.

Landslides

Landslide susceptibility is a function of various combinations of factors including rainfall, rock and soil types, slope, aspect, vegetation, seismic conditions, and human construction. Generally, landslides are expected to occur most often on slopes steeper than 15%, in areas with a history of landslides, and in areas underlain by certain geologic units. In Yuba County, landslides are expected to occur primarily in the central and eastern portions of the county where topographic relief and slopes are greater.

Landslide damage also varies according to the type of slope failure that occurs. When private homes are involved in landslides, they often become total losses to their owners since resale value is greatly reduced by demonstrated conditions. Mudflows may do only minor structural damage, but because of their rapid movement, they are capable of trapping or burying people and seriously damaging everything in their way (e.g., landscaping, building interiors, parked automobiles). Even when structures are placed on stable bedrock, landslides and small land slips can present problems for access roads and utility maintenance. Slope failures can also cause blockage of water courses and resulting flood damage during months of high flow. Seismic conditions can intensify slope instability problems, particularly if shaking occurs when the ground is wet. Even moderate earthquakes can cause slope failures. For example, a Magnitude 5.3 earthquake that occurred in San Francisco in March of 1957 triggered a number of slides along the coast, blocking State Route 1. The maximum intensity of this earthquake was only MMI VII (Table 4.6-1).

Liquefaction

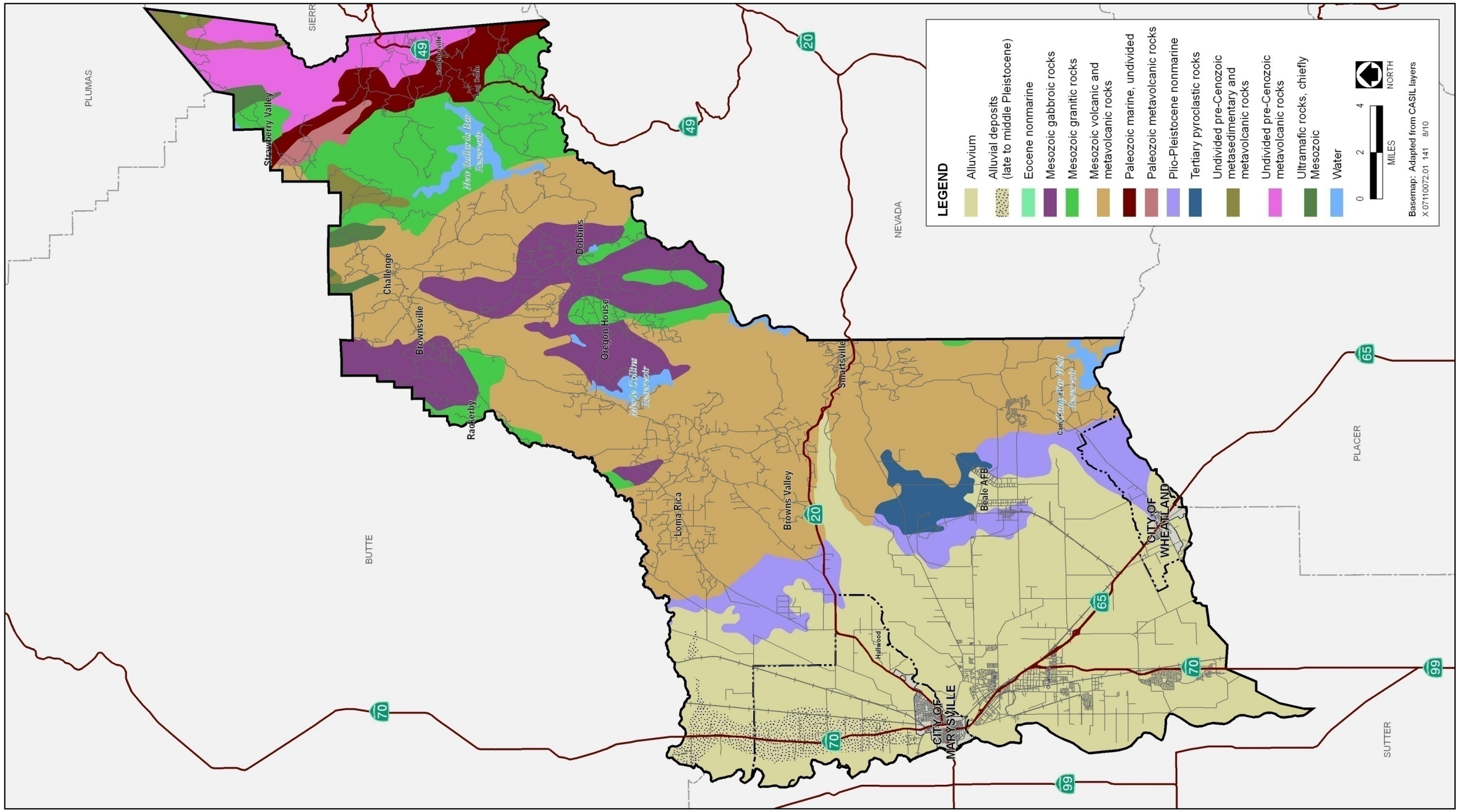
Soil liquefaction results from loss of strength during earthquake shaking. The soils most susceptible to liquefaction are clean, uniformly graded, loose, saturated, fine grained sands. The granular soil material is transformed by earthquake shaking into a fluidlike state in which solid materials are virtually in suspension, similar to quicksand.

The liquefaction of soils can cause them to move laterally outward from under buildings, roads, pipelines, transmission towers, railroad tracks, and other structures, such as bridges. Damage is usually greatest to large or heavy structures on shallow foundations, and takes the form of cracking, tilting, and differential settlement. Where gentle slopes exist, such as on stream or slough banks, liquefaction may cause landslides that spread laterally. This type of ground failure can move whole buildings downslope. Where the condition is known to exist, special structural and foundation design can usually minimize or eliminate liquefaction hazard.

Soil layers with high potential for liquefaction include unconsolidated sands and fine-grained material. Foothill and mountain areas have a low potential for liquefaction, except in areas of unconsolidated sediments (generally adjacent to stream channels).

Unreinforced Masonry Buildings and Other Potential Hazards

Yuba County is not believed to have experienced ground shaking at a level of MMI VII or above, the level at which damage to unreinforced masonry buildings would be expected, during the period of 1800 through 2002 (CDMG 2002).



Source: Yuba County GIS 2007, USGS 2004, CASIL 1993 and 1996

Geologic Units **Exhibit 4.6-2**

Volcanic Hazards

The Sierra Nevada Mountain Range, which is partly located in the easterly portion of Yuba County, is within the Pacific Mountain System. The Pacific Mountain System region is one of the most geologically young and tectonically active in North America (USGS 2001). The generally rugged, mountainous landscape of this province provides evidence of ongoing mountain building.

The Pacific Mountain System straddles the boundaries between several of Earth's moving plates—the source of the monumental forces required to build the sweeping arc of mountains that extends from Alaska to the southern reaches of South America. This province includes the active and sometimes deadly volcanoes of the Cascade Range and the young, steep mountains of the Pacific Border and the Sierra Nevada.

Nearby volcanoes and volcanic areas include Mount Lassen (potentially active, approximately 70 miles north of Yuba County), the Sutter Buttes (not active, approximately 6 miles west of Yuba County), and the Clear Lake volcanic field (potentially active, located approximately 55 miles west of Yuba County) (CDMG 1994, USGS 2003).

The Sutter Buttes, although formed by volcanic activity, are not considered active or potentially active. The most recent known eruptive activity at the Sutter Buttes took place approximately 1.4 million years ago (CDMG 1994). The most recent eruptive activity reported in the Clear Lake field occurred approximately 10,000 years ago (Wood and Kienle 1990). Volcanism in the Clear Lake volcanic field is considered to be largely nonexplosive. One major airfall tuff and no ash flows have occurred in this field. Eruptive activity at Mount Lassen has occurred as recently as 1917. This last Lassen activity started in 1914, including a climactic eruption on May 12, 1915, and final activity in 1917. USGS has indicated that it is highly likely that the Lassen area will erupt again (USGS 2010).

Yuba County is not located within any of the identified volcanic fields, nor is Yuba County located within an Area Subject to Potential Hazards from Future Eruptions (Miller 1989). There are no documented volcanoes in the county, and no known risks associated with volcanic activity.

Tsunamis and Seiches

Tsunamis are long-period waves commonly caused by vertical faulting of the ocean floor. Such earthquake-associated waves (often erroneously called tidal waves) can cause considerable damage when they reach shallow coastal areas.

A seiche is a stationary wave produced in reservoirs, lakes, and other closed or restricted bodies of water by ground shaking. The phenomenon is similar to the oscillations which result when a bowl of water is shaken. When they occur in large reservoirs, such waves can cause overtopping of dams, posing a serious threat to adjacent areas.

Yuba County is not at risk of tsunami based on its inland location, but it is possible that a seiche could occur in enclosed water bodies within the County.

SOILS

The National Resources Conservation Service (NRCS) provides soils surveys and reports for Yuba County. Exhibit 4.6-3 shows the general soil units in the county (NRCS 1998).

Soil Properties

Soil properties influence the development of building sites, including the site selection, structure design, construction, performance after construction, and site and structure maintenance. The NRCS soil database for

Yuba County indicates the limitations of soils within the County regarding dwellings, dwellings with basements, and small commercial buildings.

Soils limitations are rated numerically. The rating system indicates the extent to which the soils are limited by all of the soil features that affect building site development. The ratings are given by NRCS as decimal fractions ranging from 0.01 to 1.00, from the least limiting to most limiting. Areas defined as water or areas related to mining activities such as borrow pits, miscellaneous water features, quarries, salt ponds, and water were not rated within the NRCS soil database because construction of any dwelling or commercial buildings is considered inappropriate within such areas. Soils designated as having "No Limitations" possess features that are favorable for the specified use.

Two soils within Yuba County have no limitations with respect to dwellings, dwellings with basements, and small commercial buildings: Oakdale sandy loam, and Oakdale-Urban land complex. The vast majority of soils in Yuba County have some limitations regarding construction of these structures.

As defined by NRCS, dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

Soil limitation ratings listed in the NRCS database for Yuba County are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification).

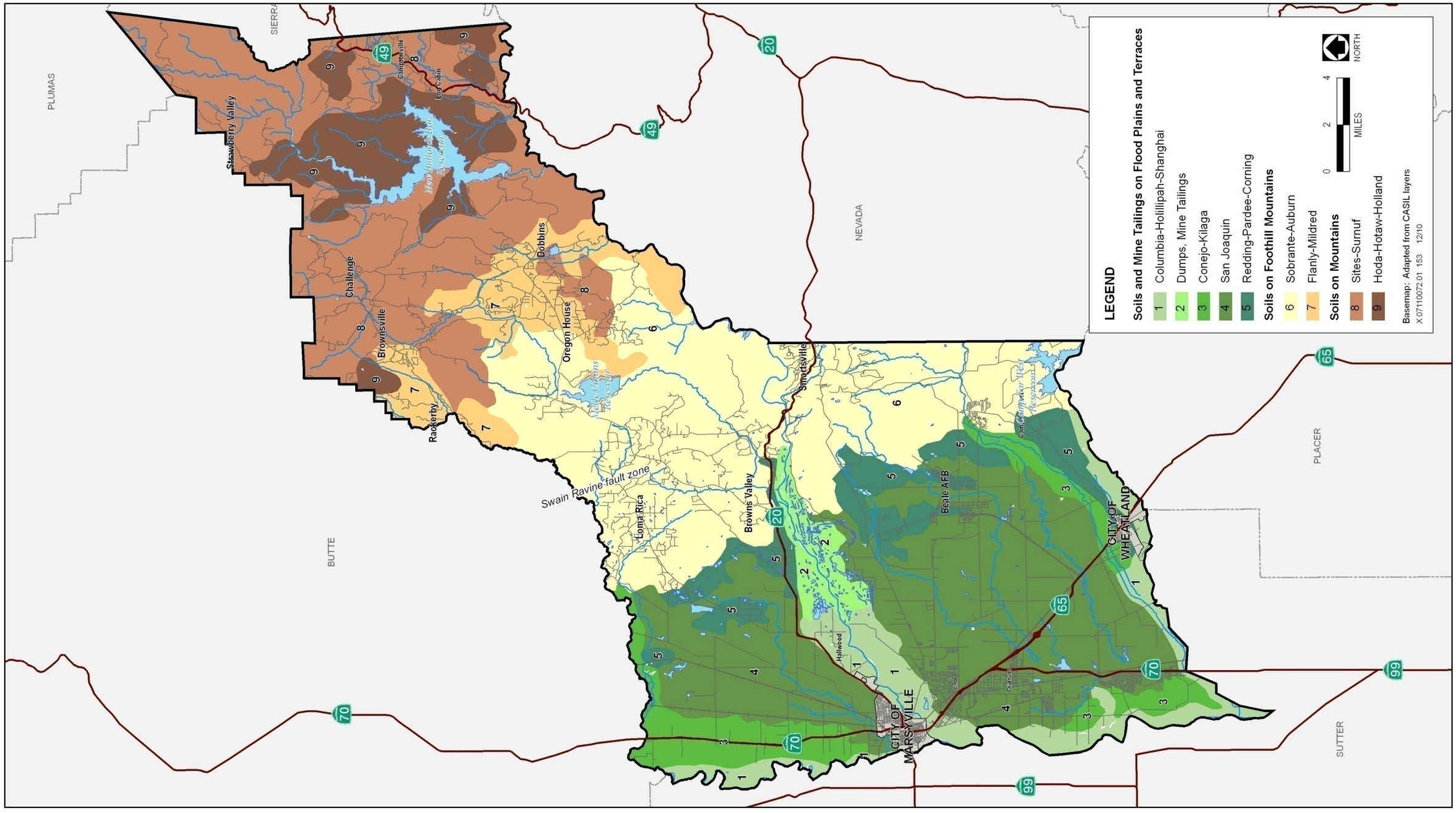
The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Soils located around rivers, ponds, and lakes are typically those with limitations related to ponding, saturation, and flooding. These limitations can affect the capacity of a soil type to support a load. Soils located in areas of steep topography, including much of eastern Yuba County, are prone to erosion when they are disturbed. A direct correlation exists between slope and erosion hazard. Areas with less topographic differences are not as prone to erosion hazards.

Exhibit 4.6-4 illustrates soil erosion hazards in Yuba County, as indicated by NRCS. In general, the areas with the highest erosion hazards are located along the Yuba River between Smartsville and the northeast boundary of the county. Areas with elevated erosion hazard are primarily located in the eastern half of the county.

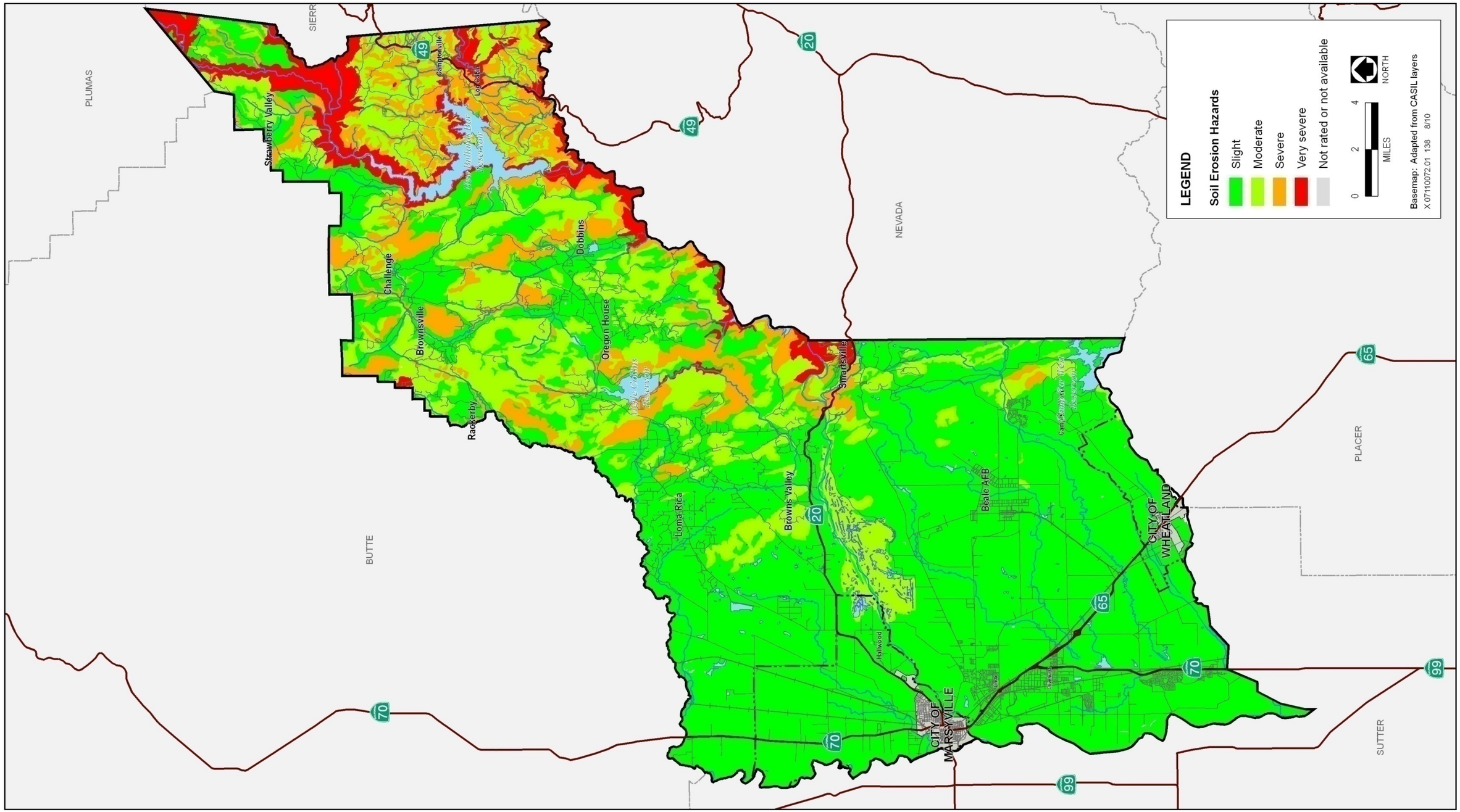
Shrink-swell potential is the relative change in volume to be expected with changes in moisture content, that is, the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils causes damage to building foundations, roads, and other structures. A high shrink-swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating.

Exhibit 4.6-5 illustrates the shrink-swell potential of Yuba County's soils. In general, most of the areas with the greatest limitations related to shrink-swell potential are located in the floodplains of the Feather River along the western edge of the county.



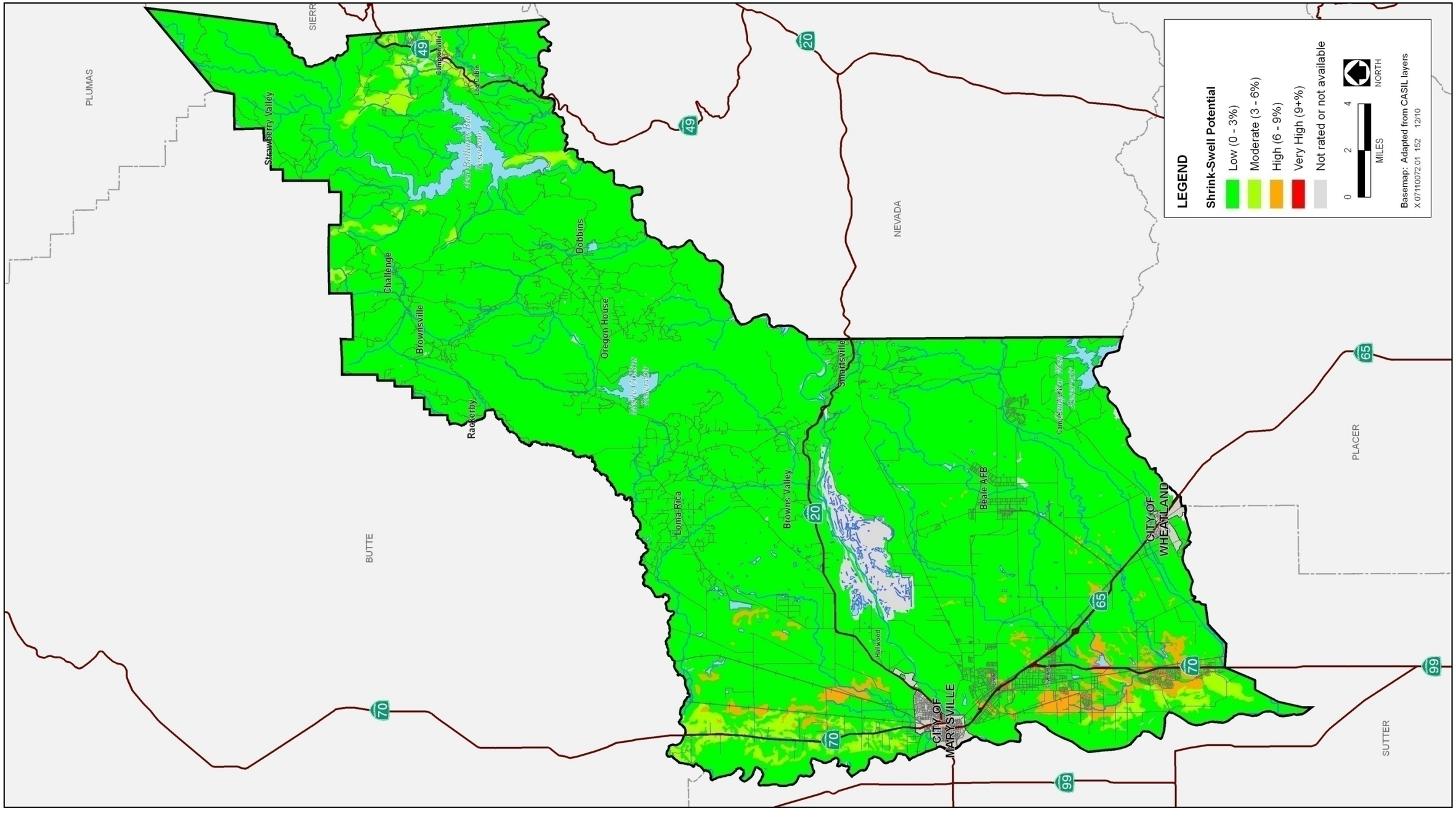
Source: Yuba County GIS 2007, USGS 2004, CASIL 1993 and 1996

Soils **Exhibit 4.6-3**



Source: Yuba County GIS 2007, USGS 2004, CASIL 1993 and 1996

Erosion Hazards **Exhibit 4.6-4**



Source: Yuba County GIS 2007, USGS 2004, CASIL 1993 and 1996

Shrink-Swell Potential **Exhibit 4.6-5**

Depth to bedrock determines the ease and amount of excavation that can occur during construction. Shallow depth to bedrock can limit the ease and amount of excavation. Hardness of bedrock also determines the degree of limitations related to excavations. If the rock is soft or fractured, excavations can be made with trenching machines, backhoes, or small rippers. If the rock is hard or massive, blasting or special equipment generally is needed for excavation. Areas with shallow bedrock are generally in areas associated with mountains, hills, and rock outcrops.

Slope gradient influences the retention and movement of water, the potential for soil slippage and accelerated erosion, the ease with which machinery can be used, soil-water states, and the engineering uses of the soil. Areas with large limitations related to slopes are associated with mountains and hills.

Soils on Floodplains and Terraces (Approximately 42% of the County's Area)

Columbia-Holillipah-Shanghai

Columbia-Holillipah-Shanghai soils are very deep, somewhat poorly drained or somewhat excessively drained alluvial soils on floodplains. These soils are used for irrigated orchard crops, including peaches, walnuts, prunes, pears, and almonds. These soils are subject to flooding without levee protection. Where these soils are protected from flooding, they include a seasonal high water table or a low available water capacity.

Dumps and Mine Tailings

These soils are very deep material dredged from river channels and floodplains during gold mining, and are located on floodplains. This unit is primarily used as a source of construction material.

Conejo-Kilaga

These soils are deep to very deep, well-drained alluvial soils on stream terraces. The Conejo-Kilaga soils are used for irrigated orchard crops (prunes, walnuts, and almonds). These soils have few limitations, although some areas have a hazard of flooding.

San Joaquin

These soils, found on low fan terraces, are moderately well-drained, alluvial soils that are moderately deep to a hardpan. They have dense clay subsoil. San Joaquin soils are used for irrigated crops – mainly rice and corn. These soils are limited by very slow permeability and a restricted rooting depth.

Redding-Corning-Pardee

These soils are moderately deep, very deep, or shallow. They are well-drained, alluvial soils with dense clay subsoil (or are underlain by bedrock). The unit is located on high fan terraces and hills. Redding-Corning-Pardee soils are used primarily for livestock grazing or urban development. The soils are limited by very slow permeability and/or a very low available water capacity and a restricted rooting depth.

Soils on Foothills and Mountains (Approximately 29% of the County's Area)

Sobrante-Auburn

These soils are moderately deep or shallow and well-drained. They formed in material weathered from basic metavolcanic rocks, found on foothills. The unit is used for livestock grazing, woodland, and homesites. It is limited by a restricted soil depth, slope, and the hazard of water erosion.

Flanly-Mildred

These soils are moderately deep, well drained, and formed in a material weathered from acid and basic intrusive igneous rocks on foothills and mountains. The unit is used for livestock grazing, woodland, and homesites. The soils are limited by the slope, very slow permeability, hazard of water erosion, and restricted rooting depth.

Soils on Mountains (Approximately 29% of the County's Area)

Sites-Surnuf

These soils are well drained and deep or very deep. They formed in material weathered from metamorphic and basic intrusive igneous rocks. The unit is used for timber production and homesites. It is limited by slope and the hazard of water erosion.

Hoda-Hotaw-Holland

These soils are well drained and moderately deep or very deep. They formed in material weathered from acid intrusive igneous rocks. The unit is used mainly for timber production. It is limited by the slope, the hazard of water erosion, and a restricted rooting depth.

Agricultural Soils

NRCS provides soils surveys and reports for Yuba County. Exhibit 4.6-3 shows the general soil units in the county. Several soil units in Yuba County are suitable for agriculture. As described in the agricultural resources background report, most of the high-yield soils are located in the low-lying western portion of the county. Additional information related to agricultural soils and agricultural resources is provided in the Agricultural Resources Report, which includes discussions of issues and opportunities related to agricultural resources in Yuba County.

Exhibit 4.6-5 shows the irrigated capability class, which broadly indicates the soil suitability for agriculture. Capability classes, the broadest groups, are designated by the Roman numerals I through VII. The numerals indicate progressively greater limitations for agricultural use and narrower choices for practical use. The classes are defined as follows:

- Class I soils have few limitations that restrict their use.
- Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
- Class III soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.
- Class IV soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.
- Class V soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class VI soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

SOIL HAZARDS

Erosion Hazards

A number of soils within Yuba County are considered to have high potential for erosion. Highly erosive soils can damage roads, bridges, buildings, and other structures. NRCS soil erosivity is based on slope and on soil erodibility factors. Soil loss is caused by sheet or rill erosion in areas where 50 to 75% of the surface has been exposed by logging, grazing, mining or other kinds of disturbance (USDA 2004). Exhibit 4.6-4 shows erosion hazards in Yuba County by NRCS erosion hazard ratings. Erosion hazards of disturbed soil are described as slight, moderate, severe, or very severe:

- Slight: Erosion is unlikely under ordinary climatic conditions.
- Moderate: Some erosion is likely and erosion control measures may be needed.
- Severe: Erosion is very likely and erosion control measures such as revegetation of bare areas may be needed.
- Very severe: Significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion control measures are costly and generally impractical.

As shown in Exhibit 4.6-4, areas that have erosion hazards with moderate to very severe potential are located in the foothill and mountain areas in the central and eastern part of the county. Areas with the most severe erosion hazards include the Yuba River and North Yuba River valleys upstream from Smartsville.

Shrink-Swell Potential

Expansive or shrink-swell soils contain significant amounts of clay minerals that swell when wet and shrink when dry. These clays tend to swell despite the heavy loads imposed by large structures. Damage (such as cracking of foundations) results from differential movement and from the repetition of the shrink-swell cycle. In some cases, this problem may be avoided by removing the top soil layer before placing a foundation.

Exhibit 4.6-5 shows the location of soils with high shrink-swell potential. Soils having high shrink-swell potential are more common on the western end of the county, with some soils with moderate shrink-swell potential also located in valleys in the easternmost part of the county. Although these soils can be an expensive nuisance, awareness of their existence prior to construction often means that the problem can be eliminated through foundation design.

MINERAL RESOURCES AND HAZARDS

The discovery of gold in the Sierra Nevada's mother lode led to the establishment of Yuba County as one of California's original 27 counties in 1850, and mining remains an important part of Yuba County's economy and identity. Yuba County is rich in a number of nonfuel mineral resources. In 2002, the total value of shipments of the manufacturing sector, of which mining is a part, was approximately $264 million (U.S. Census Bureau, 2007).

Types of Mineral Resources

Mineral resources mined or produced within Yuba County include sand and gravel, clay, stone products, silica, silver, and gold. Table 4.6-2 details the mineral resources currently produced in Yuba County, and the names of the mines that produce/mine them. These data include those facilities listed as "Producers" on the U.S. Geologic Survey's Mineral Resource Data System (MRDS) table (USGS 2005). Historically, Yuba County's mineral resource extraction has included gold, platinum, molybdenite, copper, zinc, Fullers earth, sand, gravel, and crushed stone. Although Yuba County lies within the Sierra Nevada gold belt, which contains seam-type gold deposits, most gold mining in Yuba County is placer mining at the Yuba Goldfield in the Hammonton District.

Table 4.6-2
Mineral Resources

Mine Name	Mineral Resource Produced
Western Aggregates	Alluvial Sand and Gravel
Knife River Hallwood	Alluvial Sand and Gravel
Cal Sierra Development	Gold
Sperbeck Quarry	Metabasalt
Teichert Hallwood	Alluvial Sand and Gravel
Wheatland Clay	Clay
Dantoni Pit	Alluvial Sand and Gravel
Parks Bar Quarry	Metabasalt
Blue Point Clark Rock Quarry	Metabasalt
Teichert Marysville (Yuba-Hoffman)	Alluvial Sand and Gravel
Blue Point Mine	Alluvial Sand and Gravel
Silica Resources	Alluvial Sand and Gravel
Silica Resources #2 (Formerly Garcia Sand & Gravel)	Alluvial Sand and Gravel
Simpson Lane	Alluvial Sand
Three Rivers Levee Improvement Authority, Feather River Levee Repair Project Segment 2	Levee Fill Material

Source: Department of Conservation 2010

A portion of Yuba County falls within the Mineral Resources Zone described in SMARA Mineral Land Classification Special Report 132 (Habel 1988). These classification projects assisted the SMGB in adopting and designating lands needed for their mineral content. The classification system is intended to ensure the County's consideration of statewide or regionally significant mineral deposits in planning and development administration. These mineral designations are intended to prevent incompatible land use development on areas determined to have significant mineral resource deposits.

Permitted uses within a mineral resource zone include mining, uses that support mining such as smelting and storage of materials, or uses that will not hinder future mining such as grazing, agriculture, large-lot rural development, recreation, and open space. In order to maintain the future viability of mineral resource extraction, Yuba County's Ordinance Code Chapter 11.55 includes a disclosure requirement at property transfer or issuance of a building permit. This disclosure statement identifies the possibility of disturbance associated with mining activities. In addition to disclosure of mining effects, land use decisions in Yuba County should consider the continued availability of mineral resources.

The most important zone with respect to the presence of resources is MRZ-2, which is defined as "areas where adequate information indicates that significant mineral (aggregate) deposits are present or where it is judged that there is a high likelihood for their presence." This zone is applied to known mineral deposits or where well-developed lines of reasoning, based on economic geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high. Please refer to Exhibit 4.6-6, which illustrates MRZ-2 locations.

MRZ-3 zones suggest the potential for aggregate deposits. This zone is less definitive than MRZ-2 and is defined as "areas containing mineral deposits the significance of which cannot be evaluated from available data."

Known mineral resource zones in Yuba County consist primarily of an area along the Yuba River, extending from Marysville on the west to Smartsville on the east. The approximate boundary of the area defined as MRZ-2 is illustrated in Exhibit GS-5 in the General Plan Update Geology and Soils Background Working Paper, under separate cover.

Sand and gravel resources in MRZ-2 along the Yuba River are made up of alluvial deposits from Tertiary to recent times, deposited as the Yuba River carried large volumes of sand, gravel, and silt into the Central Valley. Additional deposits were the result of upstream hydraulic mining.

Other deposits classified as MRZ-2 include Jurassic metavolcanic rocks (used primarily for riprap), Tertiary stream channel deposits (used primarily for base), and the Yuba River dredge field of recent deposits, mined both for aggregate materials and gold.

Gold, Silver, and Silica

Several mines are located in Yuba County that extract gold (one mine also extracts silver). Mines that produce gold include Browns Valley-Smartsville, Brownsville-Challenge-Dobbins, Hammonton-Yuba River (gold and silver), and Yuba Consolidated Gold Fields. Mines producing gold (and silver) ore are located along the Yuba River (including dredge tailings from historic hydraulic mining) and in the Dobbins area. Past producers of gold and silver are located throughout the Sierra Nevada in the eastern portion of the county. One producer of silica, Yuba Silica, is also present in the eastern portion of the county.

MINERAL HAZARDS

Asbestos

No asbestos is mined in Yuba County. However, small areas of potentially asbestos-bearing ultramafic rock are mapped in the northeastern area of the County.

Radon

The U.S. EPA lists Yuba County as part of Zone 2 (2006). Zone 2 has a moderate potential radon hazard (with a predicted average indoor radon screening level between 2 and 4 pCi/L). However, according to the California Department of Health Services California Indoor Radon Levels (2006), out of the 22 radon tests conducted in Yuba County in 2006, only one produced a result greater than the action level of 4 pCi/L. This test occurred in the zip code 95692, an area that includes Wheatland and much of the southeastern portion of the county.

PALEONTOLOGICAL RESOURCES

Paleontological Resource Inventory Methods

A stratigraphic inventory and paleontological resource inventory were completed to develop a baseline paleontological resource inventory of areas addressed by the 2030 General Plan, and to assess the potential paleontological productivity of each rock unit. Research methods included a review of published and unpublished literature. These tasks complied with Society of Vertebrate Paleontology (1995) guidelines.

Stratigraphic Inventory

Geologic maps and reports covering the geology were reviewed to determine the exposed rock units and to delineate their respective aerial distributions in areas addressed by the 2030 General Plan.

Paleontological Resource Inventory

Published and unpublished geological and paleontological literature was reviewed to document the number and locations of previously recorded fossil sites from rock units exposed in areas addressed by the 2030 General Plan and the surrounding region, as well as the types of fossil remains each rock unit has produced. The literature review was supplemented by an archival search conducted at the University of California Museum of Paleontology (UCMP) in Berkeley, California, on Aug. 3, 2010.

PALEONTOLOGICAL RESOURCE ASSESSMENT CRITERIA

The potential paleontological importance of a site can be assessed by identifying the paleontological importance of exposed rock units within the area. Because the aerial distribution of a rock unit can be easily delineated on a topographic map, this method is conducive to delineating parts of a site that are of higher and lower sensitivity for paleontological resources and to delineating areas that may require monitoring during development.

A paleontologically important rock unit is one that (1) has a high potential paleontological productivity rating and (2) is known to have produced unique, scientifically important fossils. The potential paleontological productivity rating of a rock unit exposed at a site refers to the abundance/densities of fossil specimens and/or previously recorded fossil sites in exposures of the unit in and near an area to be developed. Exposures of a specific rock unit at a site is most likely to yield fossil remains representing particular species in quantities or densities similar to those previously recorded from the unit in the surrounding area.

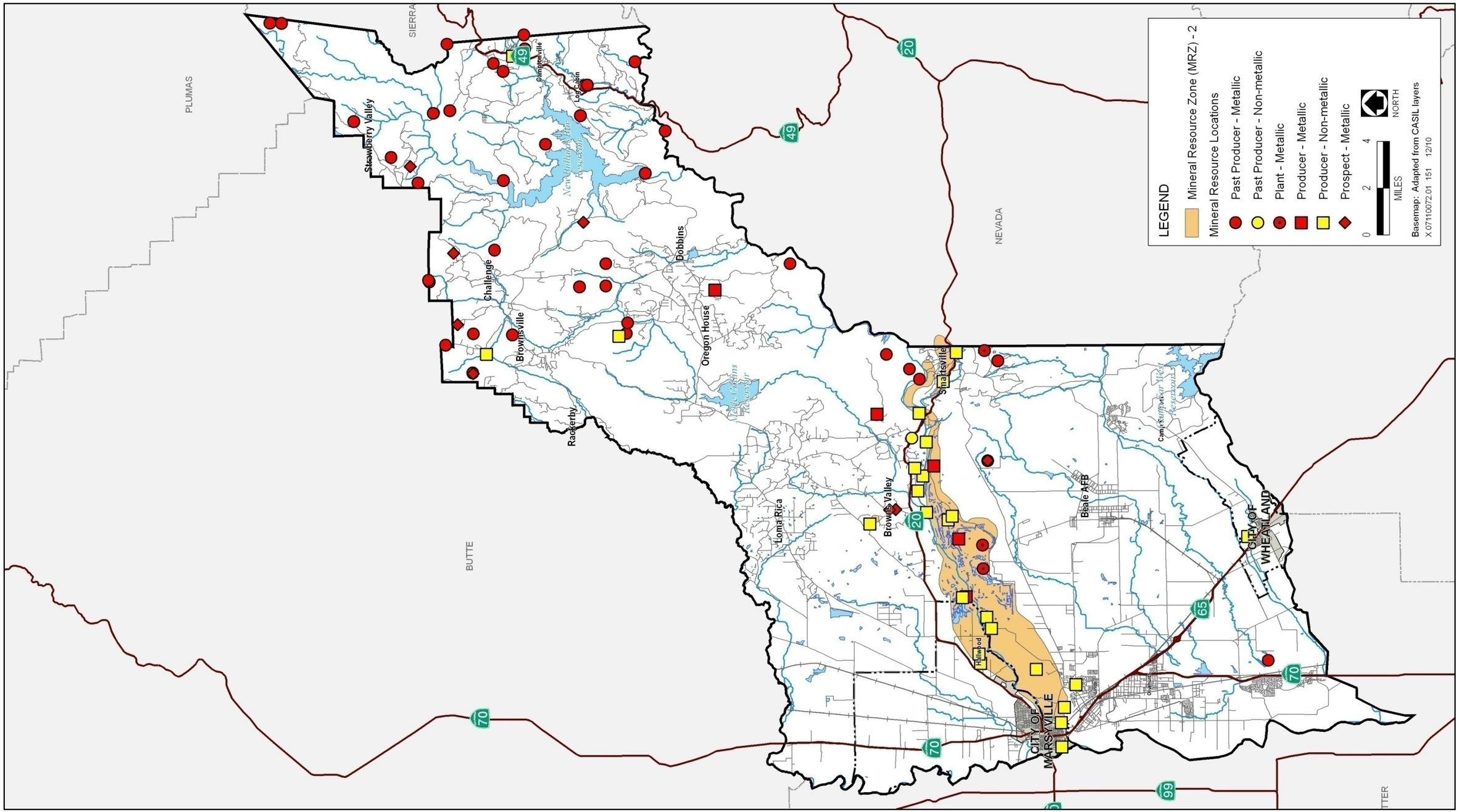
An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved, and it meets one of the following criteria:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage (i.e., a site where more than one fossil has been discovered) wherein other species are also identifiable, and important information regarding life history of individuals can be drawn;
- a skeletal element different from, or a specimen more complete than, those now available for its species; or
- a complete specimen (i.e., all or substantially all of the entire skeleton is present).

For example, identifiable vertebrate marine and terrestrial fossils are generally considered scientifically important because they are relatively rare. The value or importance of different fossil groups varies, depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions, such as part of a research project. Marine invertebrates are generally common, well developed, and well documented. They would generally not be considered a unique paleontological resource.

The following tasks were completed to establish the paleontological importance of each rock unit exposed within Yuba County and the surrounding area:

- The potential paleontological productivity of each rock unit was assessed, based on the density of fossil remains previously documented within the rock unit.
- The potential for a rock unit exposed within the County to contain a unique paleontological resource was considered.



Source: Yuba County GIS 2007, NRCS 2007

Mineral Resources **Exhibit 4.6-6**

RESOURCE INVENTORY RESULTS

Stratigraphic Inventory

Regional and local surficial geologic mapping and correlation of the various geologic units in areas addressed by the 2030 General Plan has been provided at a scale of 1:250,000 by the Department of Conservation, Division of Mines and Geology (2010, Exhibit 4.6-2).

Paleontological Resource Inventory and Assessment

Vertebrate mammalian fossils have proved helpful in determining the relative age of alluvial fan sedimentary deposits (Louderback 1951, Savage 1951, Albright 2000). Mammalian inhabitants of the Pleistocene alluvial fan and floodplain included mammoths, horses, mastodons, camels, ground sloths, and pronghorns.

The Pleistocene epoch, known as the "great ice age," began approximately 1.8 million years ago. Surveys of late Cenozoic land mammal fossils in northern California have been provided by Hay (1927), Stirton (1939), Savage (1951), Lundelius et al. (1983), and Jefferson (1991a, 1991b). On the basis of his survey of vertebrate fauna from the nonmarine late Cenozoic deposits of the San Francisco Bay region, Savage (1951) concluded that two major divisions of Pleistocene-age fossils could be recognized: the Irvingtonian (older Pleistocene fauna) and the Rancholabrean (younger Pleistocene and Holocene fauna). These two divisions of Quaternary Cenozoic vertebrate fossils are widely recognized today in the field of paleontology. The age of the later Pleistocene, Rancholabrean fauna was based on the presence of bison and on the presence of many mammalian species that are inhabitants of the same area today. In addition to bison, larger land mammals identified as part of the Rancholabrean fauna include mammoths, mastodons, camels, horses, and ground sloths.

Remains of land mammals have been found at a number of localities in alluvial deposits referable to the Riverbank Formation. Jefferson (1991a, 1991b) compiled a database of California Late Pleistocene vertebrate fossils from published records, technical reports, unpublished manuscripts, information from colleagues, and inspection of museum paleontological collections at more than 40 public and private institutions. Although Jefferson did not list any fossil sites in Yuba County, three nearby sites in Sutter County have yielded Rancholabrean vertebrate fossils recovered from Pleistocene-age sediments.

There are several localities in Yolo County, near the cities of Davis and Woodland, which have yielded Rancholabrean-age rodents, snakes, horses, antelope, Harlan's ground sloth, mammoth, and saber-toothed tiger from sediments referable to the Riverbank Formation (Hay 1927, UCMP 2008). There are at least nine recorded Rancholabrean-age vertebrate fossils sites from the Riverbank Formation in the City of Sacramento, (Hilton et al. 2000, UCMP 2008, Kolber 2004). These sites have yielded remains of mammoth, bison, coyote, horse, camel, antelope, several types of reptiles, and Harlan's ground sloth. Locations of recorded vertebrate fossil specimens recovered from the Riverbank Formation are also known throughout the Sacramento and San Joaquin Valleys (UCMP 2008).

Results of an online paleontological records search at the UCMP (2010) indicated no recorded vertebrate fossil sites within Yuba County. However, Pleistocene-age vertebrate fossils have been recorded from several localities in Sutter County (located just west of Yuba County), including the Sutter Buttes (localities V-4043 and -6402).

4.6.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Geology and Soils

Based on Appendix G of the State CEQA Guidelines, an impact on geologic resources is considered significant if the proposed project would:

- 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; or
    - 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 off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- 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;
- 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;

Mineral Resources

- Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; or
- 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.

Paleontological Resources

For the purpose of this analysis, the following applicable thresholds of significance have been used to determine whether implementing the proposed project would result in a significant impact. These thresholds of significance are based on the State CEQA Guidelines, which state that a paleontological resources impact is considered significant if implementation of the proposed project would:

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

For the purposes of this EIR, a unique resource or site is one that is considered significant under the following professional paleontological standards. A paleontologically important rock unit is one that:

- has a high potential paleontological productivity rating; and
- is known to have produced unique, scientifically important fossils.

The potential paleontological productivity rating of a rock unit exposed at a project site refers to the abundance or density of fossil specimens and/or previously recorded fossil sites in exposures of the unit in and near a project site. Exposures of a specific rock unit at a project site are most likely to yield fossil remains representing particular species in quantities or densities similar to those previously recorded from the unit in and near a project site.

An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved, and it meets one of the following criteria:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage (i.e., a site where more than one fossil has been discovered) wherein other species are also identifiable, and important information regarding life history of individuals can be drawn;
- a skeletal element different from, or a specimen more complete than, those now available for its species; or
- a complete specimen (i.e., all or substantially all of the entire skeleton is present).

The value or importance of different fossil groups varies depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions (such as for a research project). Marine invertebrates are generally common; the fossil record is well developed and well documented, and they would generally not be considered a unique paleontological resource. Identifiable vertebrate marine and terrestrial fossils are generally considered scientifically important because they are relatively rare.

In its standard guidelines for assessment and mitigation of adverse impacts on paleontological resources, the Society for Vertebrate Paleontology (SVP) (1995) established three categories of sensitivity for paleontological resources: high, low, and undetermined. Areas where fossils have been previously found are considered to have a high sensitivity and a high potential to produce fossils. Areas that are not sedimentary in origin and that have not been known to produce fossils in the past typically are considered to have low sensitivity. Areas that have not had any previous paleontological resource surveys or fossil finds are considered to be of undetermined sensitivity until surveys and mapping are performed to determine their sensitivity.

After reconnaissance surveys, observation of exposed cuts, and possibly subsurface testing, a qualified paleontologist can determine whether the area should be categorized as having high or low sensitivity. In keeping with the significance criteria of the SVP (1995), all vertebrate fossils are generally categorized as being of potentially significant scientific value.

IMPACT ANALYSIS

IMPACT 4.6-1 Potential for Exposure to Seismic Ground Shaking. *Buildout of the 2030 General Plan would not result in development of areas prone to strong seismic ground shaking. Implementation of policies and actions in the 2030 General Plan and compliance with existing regulations would reduce the potential for substantial adverse effects due to exposure to seismic ground shaking. This impact would be* ***less than significant.***

If buildings and other improvements are constructed in areas with potential seismic activity, this could expose people and property to damage related to ground shaking. However, Yuba County is located within an area of California with relatively low seismic activity and is not located within a highly active fault zone. Faults in Yuba County include primarily inactive faults of the Foothills Fault System, running south-southeastward across the central portion of the county near Loma Rica, Browns Valley, and Smartsville. Jennings (1992) shows that most of the faults within the Foothill System have moved between 700,000 and 10,000 years ago. Faults include the Spenceville Fault, and the Swain Ravine Fault. A short segment of the Spenceville fault has has be shown to have moved between 9,000 and 130,000 years ago, based on the apparent offset within a palesol in that area (Saucedo and Wagner, 1992). Harwood and Helley (1987) indicate that the Spenceville fault has offset the eastern block upward. Known fault traces are shown on Exhibit 4.6-1.

Different types of structures are subject to different levels of damage from seismic activity. Conventional one- and two-story wood-frame residential structures generally have performed very well during strong seismic ground shaking. Collapse or total destruction of wood-frame homes is rare, even during strong earthquakes, except in cases where these structures are affected by ground rupturing or landsliding, or where there is extremely high ground acceleration. Unreinforced masonry buildings and other buildings constructed before 1930 that have not been seismically retrofitted would be most likely to suffer structural failure or collapse as a result of seismic ground shaking.

Existing building code, grading, and other regulations, which were designed to reduce seismic risk, will be required of buildings and other improvements developed under the General Plan. The General Plan also includes policies and an action to address impacts.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes policies and an action related to risk from seismic ground shaking:

- **Policy HS8.1:** Development projects shall implement applicable state and local building code requirements, including structural and seismic safety measures, in order to reduce risks associated with seismic events and unstable or expansive soils.

- **Policy HS8.2:** New developments that could be adversely affected by geological and/or soil conditions shall include project features that minimize these risks.

- **Action HS8.1: Grading Permits, Erosion Control Plans, Drainage Studies, and Geotechnical Evaluations.** The County will update and maintain standards designed to avoid geologic hazards, mitigate for soils related constraints, reduce impacts to hydrological and drainage conditions, and minimize erosion resulting from site grading and preparation, construction, and ongoing operations. Projects will be conditioned to include measures to avoid geologic and soils related impacts, as necessary. The County will require a geotechnical evaluation prior to construction of buildings meant for public occupancy in areas with potential risk related to geologic condition or soil limitations, as identified on maps maintained by the County. The geotechnical evaluation shall evaluate all relevant risks, which may include but are not limited to liquefaction, erosion, landslide, expansive soils, subsidence, and seismic activity. Recommendations from the geotechnical evaluation shall be incorporated into the subject project or plan in order to reduce risk to levels acceptable to the County. The County will also incorporate geotechnical evaluations and recommendations into its own public investments, as appropriate.

    - Related Goals: Goal HS8, Goal HS3
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Project applicant funding
    - Time Frame: Ongoing, as projects are proposed

Conclusion

Development under the 2030 General Plan could increase the number of people and structures exposed to risks associated with seismic activity. The County could be affected by an earthquake with its epicenter on any of the faults in the northern Sierra Nevada and the Sacramento Valley region. At present, it is not possible to predict when or where movement will occur on these faults. It is possible that there could be a moderate or major earthquake during the lifetime of construction and development in the unincorporated County (Maulchin and Jones, 1992).

According to the Probabilistic Seismic Hazard Assessment for the State of California (CDMG 1996), Yuba County is not believed to have experienced earthquake-induced ground shaking of MMI VII or greater (the range of damage to buildings) between 1800 and 1996.Maulchin and Jones (1992) have estimated peak acceleration possible from the maximum credible earthquakes on rock and stiff-soil sites in California and this plan area falls within the high acceleration zone along the Foothills Fault System. Peak acceleration is estimated to be 0.4g to 0.5g (1g = 980.7 centimeters/second/second). High peak acceleration could be expected to cause severe ground shaking during a moderate or major earthquake in the vicinity of Yuba County. Structures should be designed to accommodate earthquake vibrations and be in accordance with the minimum guidelines established by applicable building codes.

Although potential damage to people or structures from seismic ground shaking could be a concern, the 2030 General Plan's goals, policies, and actions, combined with compliance with the CBC regulations described in the regulatory setting of this chapter, would require seismic safety requirements to be established and incorporated into the design of all new residences and buildings on a site-specific basis. Roadways, utilities, and structures would be designed to withstand seismic forces based on CBC requirements for the appropriate site-specific Seismic Design Category. General Plan policies and actions, along with compliance with applicable building codes will reduce potential damage to structures from seismic activity and related geologic hazards due to implementation of the General Plan. The impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.6-2 **Potential for Seismic Ground Failure or Other Unstable Soil Conditions** *Buildout of the 2030 General Plan could accommodate development of areas located on a geologic unit or soil that is unstable or that could become unstable with moderate potential for seismic-related ground failure, including liquefaction or landslides and subsidence. Implementation of policies and actions in the 2030 General Plan and existing regulations would reduce the potential for substantial adverse effects due to exposure to seismic ground failure or other unstable soil conditions. This impact is considered* ***less than significant****.*

Seismic induced ground failure refers to unstable soil conditions, such as soil liquefaction, associated lateral spreading, landslides, and collapse resulting from loss of strength during earthquake shaking. Other causes for unstable soils and by seasonal saturation of soils and rock materials (subsidence), or by grading and construction activities.

The liquefaction of soils can cause them to move laterally outward from under buildings, roads, pipelines, transmission towers, railroad tracks, and other structures such as bridges. Damage is usually greatest to large or heavy structures on shallow foundations and takes the form of cracking, tilting, and differential settlement. Where gentle slopes exist, such as on stream or slough banks, liquefaction may cause lateral-spreading landslides. Whole buildings can be moved downslope by this type of ground failure. Where the condition is known to exist, structural and foundation design can usually minimize or eliminate liquefaction hazard to new construction.

Subsidence and settlement are localized hazards, commonly caused by the withdrawal of fluids (such as groundwater) from subsurface reservoirs or from the collapse of surface soils over subterranean caves or mines. Settlement results when weak or porous soils (such as fill soils) are compressed as a result of construction activities.

In Yuba County, unstable soils are most likely in more mountainous areas and areas with steep topography or along rivers and streams. The major development centers of the county have high soil stability although some high erosion hazards exist near Smartsville and moderate hazards exist in Loma Rica/Browns Valley.

Liquefaction potential varies within areas addressed by the 2030 General Plan. The potential for these hazards to occur will depend on the composition of the near-surface sediments and the depth of the water table. Foothill and mountain areas have a low potential for liquefaction, except in areas of unconsolidated sediments (generally adjacent to stream channels). Areas paralleling the Feather River, which contain clean sand layers with low relative densities coinciding with a relatively high water table are estimated to have generally high liquefaction potential. Granular layers underlying certain areas in the Sacramento Valley have higher relative densities and thus have moderate liquefaction potential. Clean layers of granular materials older than Holocene are of higher relative densities and are thus of low liquefaction potential.

Landslides are a greater concern in mountainous areas with greater soil erosion potential. Generally, landslides are expected to occur most often on slopes steeper than 15%, in areas with a history of landslides, and in areas underlain by certain geologic units. In Yuba County, landslides are expected to occur primarily in the central and eastern portions of the county where topographic relief and slopes are greater.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR9.6:** Grading and drainage for new developments in foothill and mountain areas should preserve and take advantage of the natural landforms and vegetation.
- **Policy NR9.7:** New construction should be designed to avoid excessive cut and fill by following the natural contour of the subject site.
- **Policy HS2.5:** Road and building construction on slopes of more than 15% is strongly discouraged and will only be approved if consistent with County standards and the Yuba County Wildfire Safety Plan.
- **Policy HS3.8:** New developments in areas with moderate, severe, and very severe erosion potential shall provide technical documentation, to the satisfaction of the County, that adequate measures have been taken in site planning, design, and/or mitigation to avoid erosion and sediment loss.
- **Policy HS8.1:** Development projects shall implement applicable state and local building code requirements, including structural and seismic safety measures, in order to reduce risks associated with seismic events and unstable or expansive soils.
- **Policy HS8.2:** New developments that could be adversely affected by geological and/or soil conditions shall include project features that minimize these risks.
- **Policy HS8.3:** A grading permit from the County is required for movement of dirt, soil, rock, debris or other material on over one acre of land and construction of retaining walls, bridges, and fill operations exceeding four feet, unless the activity is listed in the County Code as exempt from grading requirements.
- **Policy HS8.4:** Grading permits generally require submittal of grading plans and drainage study for review and approval by the Community Development and Services Agency, and where requested, a revegetation and winterization plan, and geotechnical investigation report.

- **Policy HS8.5:** An erosion and sediment control plan meeting County standards for preventing to increased discharge of sediment is required for:

  - Projects that propose to grade more than ten thousand (10,000) square feet of area having a slope greater than ten (10) percent;

  - and grubbing areas of one acre or more regardless of slope;

  - Projects where more than two thousand five hundred (2,500) square feet will be inadequately protected from erosion during any portion of the rainy season;

  - Projects that involve grading will occur within fifty (50) feet of any watercourse; or

  - Where the County determines that the grading will or may pose a significant erosion, or sediment discharge hazard for any reason.

- **Policy HS8.6:** Project applicants may be required to show evidence of coverage, or application for coverage, under an NPDES general construction permit and a Storm Water Pollution Prevention Plan (SWPPP) with a State issued W.D.I.D. number, if applicable. Grading activities shall be located and designed to avoid contributing to the violation of provisions of any applicable NPDES stormwater discharge permit.

- **Policy HS8.7:** Grading activities shall be designed, per County standards, to avoid obstructing or impeding the natural flow of stormwaters, causing accelerated erosion, or aggravating any existing flooding condition.

- **Policy HS8.8:** For engineered grading, the peak off-site storm water discharge from the project site shall not exceed pre-construction conditions unless the applicant demonstrates that downstream storm water conveyance systems have sufficient capacity to handle the increased flow rate without exceeding established design standards, subject to County approval.

- **Policy HS8.9:** Grading activity and land disturbance shall be conducted such that the smallest practicable area of erodible land is exposed at any one time.

- **Policy HS8.10:** Grading activities shall preserve natural features, including vegetation, terrain, watercourses and similar resources, wherever feasible.

- **Policy HS8.11:** Grading activities within four hundred (400) feet of a landside levee toe shall require a registered geotechnical engineer to submit a stamped report demonstrating that the proposed action will not have an adverse impact on the integrity of the levee system. Agricultural practices are generally exempt from setback requirements except for the storage of agricultural waste.

- **Policy HS8.12:** Proponents of new developments shall notify owners of adjacent and abutting utilities prior to approval of a grading permit. The subject utility must either approve the permit, or, if 30 days pass after notifying the utility, or if the Agency Director waives the need for utility approval, the permit may also be approved.

- **Policy HS8.13:** Grading permittees shall be responsible for the prevention of damage to any adjacent public utilities or services and adjacent properties. No person(s) shall excavate or fill close to the property line without supporting and protecting such property from damage which may result. It shall be the responsibility of the permittee to control discharge of sediment and hazardous materials to any watercourse, drainage system, or adjacent property.

- **Policy HS8.14:** New developments that would involve earth disturbance of areas with slopes exceeding 5 ercent shall prepare and implement an erosion control plan, subject to County approval.

- **Action HS8.1: Grading Permits, Erosion Control Plans, Drainage Studies, and Geotechnical Evaluations.** The County will update and maintain standards designed to avoid geologic hazards, mitigate for soils related constraints, reduce impacts to hydrological and drainage conditions, and minimize erosion resulting from site grading and preparation, construction, and ongoing operations. Projects will be conditioned to include measures to avoid geologic and soils related impacts, as necessary. The County will require a geotechnical evaluation prior to construction of buildings meant for public occupancy in areas with potential risk related to geologic condition or soil limitations, as identified on maps maintained by the County. The geotechnical evaluation shall evaluate all relevant risks, which may include but are not limited to liquefaction, erosion, landslide, expansive soils, subsidence, and seismic activity. Recommendations from the geotechnical evaluation shall be incorporated into the subject project or plan in order to reduce risk to levels acceptable to the County. The County will also incorporate geotechnical evaluations and recommendations into its own public investments, as appropriate.

  - Related Goals: Goal HS8, Goal HS3
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Project applicant funding
  - Time Frame: Ongoing, as projects are proposed

Conclusion

Implementation of policies, actions, and programs in the 2030 General Plan and existing regulations (including compliance with the CBC regulations described in the regulatory setting of this chapter) would reduce the potential for substantial adverse effects due to exposure to seismic-related ground failure and unstable soils. The General Plan and existing regulations will be incorporated into development during buildout, including best management practices and engineering controls. The General Plan restricts development in areas with steep slopes – both Policy HS2.5 and the design of the County's Land Use Diagram and Open Space Diagram reduce the potential of development in areas with steep slopes, which are more susceptible to problems related to unstable soils. With incorporation of General Plan policies and existing regulations, the impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.6-3 **Soil Erosion or Loss of Topsoil.** *Buildout of the 2030 General Plan could accommodate substantial construction and development, which could potentially cause soil erosion or the loss of topsoil. Implementation of policies and actions in the 2030 General Plan and existing regulations would reduce potential soil erosion and topsoil loss. This impact is considered* ***less than significant****.*

Some soils within areas addressed by the 2030 General Plan are considered to have high potential for erosion. Highly erosive soils can damage roads, bridges, buildings, and other structures and result in damage to sensitive biological habitats such as riparian areas and waterbodies. Soil loss can be caused by sheet or rill erosion in areas where 50–75% of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance.

Erosion caused by human activity and disturbance of surface soil, wind, and water cannot be eliminated altogether, although existing regulations such as, the California Building Standards Code (which includes erosion control measures and best management practices) can reduce the potential impacts of erosion.

In Yuba County, erosion is most likely in more mountainous areas with steep topography and adjacent to rivers and streams. The major development centers of the county have low erosion potential although some high erosion hazards exist near Smartsville and moderate hazards exist in Loma Rica/Browns Valley.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR9.6:** Grading and drainage for new developments in foothill and mountain areas should preserve and take advantage of the natural landforms and vegetation.

- **Policy NR9.7:** New construction should be designed to avoid excessive cut and fill by following the natural contour of the subject site.

- **Policy HS2.5:** Road and building construction on slopes between 15-25 percent is strongly discouraged and may only be approved with a fire risk management plan meeting the requirements of the California Department of Forestry and Fire Protection, a County-approved plan for priority on-site open space, and a circulation plan that meets local and state access requirements. Road and building construction on slopes of greater than 25% is prohibited unless an exemption is granted by the Community Development & Services Agency Director and findings required for a variance are made.

- **Policy HS3.8:** New developments in areas with moderate, severe, and very severe erosion potential shall provide technical documentation, to the satisfaction of the County, that adequate measures have been taken in site planning, design, and mitigation to avoid erosion and sediment loss.

- **Policy HS8.1:** Development projects shall implement applicable state and local building code requirements, including structural and seismic safety measures, in order to reduce risks associated with seismic events and unstable or expansive soils.

- **Policy HS8.2:** New developments that could be adversely affected by geological and/or soil conditions shall include project features that minimize these risks.

- **Policy HS8.3:** A grading permit from the County is required for movement of dirt, soil, rock, debris or other material on over one acre of land and construction of retaining walls, bridges, and fill operations exceeding four feet, unless the activity is listed in the County Code as exempt from grading requirements.

- **Policy HS8.4:** Grading permits generally require submittal of grading plans and drainage study for review and approval by the Community Development and Services Agency, and where requested, a revegetation and winterization plan, and geotechnical investigation report.

- **Policy HS8.5:** An erosion and sediment control plan meeting County standards for preventing to increased discharge of sediment is required for:

    - Projects that propose to grade more than ten thousand (10,000) square feet of area having a slope greater than ten (10) percent;

    - Clearing and grubbing areas of one acre or more regardless of slope;

    - Projects where more than two thousand five hundred (2,500) square feet will be inadequately protected from erosion during any portion of the rainy season;

    - Projects that involve grading will occur within fifty (50) feet of any watercourse; or

    - Where the County determines that the grading will or may pose a significant erosion, or sediment discharge hazard for any reason.

- **Policy HS8.6:** Project applicants may be required to show evidence of coverage, or application for coverage, under an NPDES general construction permit and a Storm Water Pollution Prevention Plan (SWPPP) with a

State issued W.D.I.D. number, if applicable. Grading activities shall be located and designed to avoid contributing to the violation of provisions of any applicable NPDES stormwater discharge permit.

- **Policy HS8.7:** Grading activities shall be designed, per County standards, to avoid obstructing or impeding the natural flow of stormwaters, causing accelerated erosion, or aggravating any existing flooding condition.

- **Policy HS8.8:** For engineered grading, the peak off-site storm water discharge from the project site shall not exceed pre-construction conditions unless the applicant demonstrates that downstream storm water conveyance systems have sufficient capacity to handle the increased flow rate without exceeding established design standards, subject to County approval.

- **Policy HS8.9:** Grading activity and land disturbance shall be conducted such that the smallest practicable area of erodible land is exposed at any one time.

- **Policy HS8.10:** Grading activities shall preserve natural features, including vegetation, terrain, watercourses and similar resources, wherever feasible.

- **Policy HS8.14:** New developments that would involve earth disturbance of areas with slopes exceeding 5 percent shall prepare and implement an erosion control plan, subject to County approval.

- **Action HS8.1: Grading Permits, Erosion Control Plans, Drainage Studies, and Geotechnical Evaluations.** The County will update and maintain standards designed to avoid geologic hazards, mitigate for soils related constraints, reduce impacts to hydrological and drainage conditions, and minimize erosion resulting from site grading and preparation, construction, and ongoing operations. Projects will be conditioned to include measures to avoid geologic and soils related impacts, as necessary. The County will require a geotechnical evaluation prior to construction of buildings meant for public occupancy in areas with potential risk related to geologic condition or soil limitations, as identified on maps maintained by the County. The geotechnical evaluation shall evaluate all relevant risks, which may include but are not limited to liquefaction, erosion, landslide, expansive soils, subsidence, and seismic activity. Recommendations from the geotechnical evaluation shall be incorporated into the subject project or plan in order to reduce risk to levels acceptable to the County. The County will also incorporate geotechnical evaluations and recommendations into its own public investments, as appropriate.

    - Related Goals: Goal HS8, Goal HS3
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Project applicant funding
    - Time Frame: Ongoing, as projects are proposed

Conclusion

Implementation of policies and actions in the 2030 General Plan and compliance with existing regulations (including the CBC regulations described in the regulatory setting of this chapter), would reduce the potential for erosion caused by buildout of the 2030 General Plan. The General Plan restricts development in areas with steep slopes with both narrative policy and through the design of the Exhibit Community Development – 2 – Land Use Diagram and Exhibit Natural Resources – 1 – Open Space Diagram. When development is proposed in areas with potential erosion potential, the General Plan requires erosion control measures. Erosion control measures are also required by existing regulations. With the incorporation of General Plan policy and compliance with existing regulations, the impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.6-4 Construction in Areas with Expansive Soils. *Buildout of the 2030 General Plan would result in construction of occupied structures in areas with expansive soils. General Plan policies and existing regulations will require measures to reduce impacts related to expansive soils. This impact is considered* ***less than significant****.*

Expansive or shrink-swell soils contain significant amounts of clay minerals that swell when wet and shrink when dry. These clays tend to swell despite the heavy loads imposed by large structures. Damage (such as cracking of foundations) results from differential movement and from the repetition of the shrink-swell cycle. Soils having high shrink-swell potential in at least the top 12 inches are found throughout the unincorporated County.

In general, most of the areas in Yuba County with the greatest limitations related to shrink-swell potential are located in the floodplains of the Feather River along the western edge of the county. Awareness of the presence of expansive soils before construction often means that the problem can be eliminated through foundation design.

Relevant Policies and Actions of the 2030 General Plan

- **Policy HS8.1:** Development projects shall implement applicable state and local building code requirements, including structural and seismic safety measures, in order to reduce risks associated with seismic events and unstable or expansive soils.

- **Policy HS8.2:** New developments that could be adversely affected by geological and/or soil conditions shall include project features that minimize these risks.

- **Action HS8.1: Grading Permits, Erosion Control Plans, Drainage Studies, and Geotechnical Evaluations.** The County will update and maintain standards designed to avoid geologic hazards, mitigate for soils related constraints, reduce impacts to hydrological and drainage conditions, and minimize erosion resulting from site grading and preparation, construction, and ongoing operations. Projects will be conditioned to include measures to avoid geologic and soils related impacts, as necessary. The County will require a geotechnical evaluation prior to construction of buildings meant for public occupancy in areas with potential risk related to geologic condition or soil limitations, as identified on maps maintained by the County. The geotechnical evaluation shall evaluate all relevant risks, which may include but are not limited to liquefaction, erosion, landslide, expansive soils, subsidence, and seismic activity. Recommendations from the geotechnical evaluation shall be incorporated into the subject project or plan in order to reduce risk to levels acceptable to the County. The County will also incorporate geotechnical evaluations and recommendations into its own public investments, as appropriate.

    - Related Goals: Goal HS8, Goal HS3
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Project applicant funding
    - Time Frame: Ongoing, as projects are proposed

Conclusion

Implementation of existing regulations (including the CBC regulations described in the regulatory setting of this chapter), as well as the proposed policies and actions of the 2030 General Plan, would reduce the impacts of expansive soils on buildout of the 2030 General Plan through application of best management practices and engineering controls. This impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.6-5 Construction in Areas with Soils with Poor Septic Suitability. *Buildout of the 2030 General Plan would result in construction of occupied structures in areas with soils poorly suited to septic systems. Should septic systems be used, implementation of policies and programs in the 2030 General Plan and existing regulations would require use of best practices for septic systems. This impact is considered* ***less than significant.***

Soil limitations with respect to septic systems are described as either low, moderate, or severe. These ratings are based on slope, soil depth, permeability, depth to the water table, and whether or not the soil is subject to ponding. Adverse effects associated with septic suitability of soils can be avoided through proper soil percolation testing and septic system design, construction monitoring, and post-construction monitoring and maintenance.

Most of the development anticipated under the 2030 General Plan would be expected to use municipal sanitary sewer service. However, for potential development in rural portions of the County that may use septic systems, implementation of existing regulations would require that septic systems be designed to meet site drainage conditions. The General Plan enforces compliance with measures to avoid issues related to septic systems.

Relevant Policies and Actions of the 2030 General Plan

- **Policy HS3.2:** County and regional water supply providers should monitor and proactively address water quality problems, with a focus on achieving and maintaining adequate water quality for "beneficial uses" of area waterways identified in the Yuba County Integrated Regional Water Management Plan. "Beneficial uses" in Yuba County include municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

- **Policy HS3.5:** The County will cooperate with local, state, and federal agencies to remediate issues related to groundwater contamination and increases in total dissolved solids.

- **Policy HS3.9:** The County will evaluate available septic system technologies and shared leach field systems to serve planned Rural Centers and allow their use if proven to be protective of water quality.

- **Policy HS3.10:** New developments proposing private well and septic systems shall demonstrate compliance with the County's standards for water wells and sewage disposal systems, which are designed to protect the public and environmental health.

- **Policy HS3.11:** New community wastewater disposal systems are discouraged, but if considered, projects proposing a new system shall provide bonding or other financial mechanisms that are adequate for ongoing maintenance and periodic replacement, subject to County approval.

- **Policy HS3.12:** New developments shall comply with applicable state siting, design, and monitoring standards for on-site wastewater treatment (septic) systems, including standards intended to protect the beneficial use of potentially affected waterbodies.

- **Policy HS3.13:** Proposed residential property subdivisions that would create lots of 1 acre or less shall be served by a public water and sewer system designed in compliance with County standards. Projects that propose parcels of between 1 and 2.5 acres shall provide either a public sewer system or public water supply, as determined by the County Environmental Health Director.

- **Action HS3.1: Ongoing Monitoring and Corrective Actions.** During General Plan buildout, the County may conduct water quality monitoring along key waterways and watersheds. The County may require more stringent water quality standards for developments that may affect waterways or watersheds with identified water quality problems. The County, in collaboration with regional water supply providers, will conduct ongoing monitoring to ensure the application and effectiveness of construction and environmental policies and standards. Ongoing monitoring would be designed to identify problems that may require corrective

actions. The County will collaborate with regional and state agencies on the need for corrective actions for ongoing uses that pollute the County's water supply.

- Related Goals: Goal HS3, NR12
- Agency/Department: Community Development and Services Agency
- Funding Source: State and federal grants, other State or federal funding, and private funding for projects near the County's waterbodies
- Time Frame: Ongoing, with corrective actions, as needed

Conclusion

Policies and actions of the 2030 General Plan and implementation of existing Yuba County codes regulating sewage disposal, would reduce the impacts of soils with poor septic suitability on buildout of the 2030 General Plan through application of best management practices and engineering controls. The General Plan requires public sewer systems for developments proposing housing at greater than one unit per acre. The General Plan includes not only measures to avoid development of areas where soils would be unsuitable for septic systems and best management practices for septic system design, but also strategies for ongoing action related to water quality. In cases where water quality issues are discovered and are related to failed septic systems, the County will participate in programs to identify and resolve such issues. With implementation of General Plan policies and compliance with existing regulations, this impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.6-6 Loss of Availability of Known Mineral Resources. *Buildout of the 2030 General Plan could result in construction in areas near existing or potential future mineral resource development. While regionally significant mineral deposits located within Yuba County, including MRZ-2 zones located along the Yuba River between Marysville and Smartsville, will be preserved, it is possible that development under the 2030 General Plan would encroach on mining operations. This impact would be* ***potentially significant****.*

Mineral resources mined or produced within Yuba County include sand and gravel, clay, stone products, silica, silver, and gold. A portion of Yuba County falls within the Mineral Resources Zone described in SMARA Mineral Land Classification Special Report 132 (Habel 1988). These mineral designations are intended to prevent incompatible land use development on areas determined to have significant mineral resource deposits.

Known mineral resource zones in Yuba County consist primarily of an area along the Yuba River, extending from Marysville on the west to Smartsville on the east. While for the most part, the 2030 General Plan Land Use Diagram and Open Space Diagram are designed to avoid areas of substantial natural resources (including mineral resources), development of Rural Community Boundary areas under the General Plan could potentially preclude extraction of mineral resources.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR8.1:** The County will strongly discourage residential developments outside Rural Community Boundary areas in areas adjacent to ongoing mining operations.

- **Policy NR8.2:** New developments adjacent to ongoing mining operations shall provide written notice to landowners and residents that the County will not consider ongoing adjacent lawful mining operations to be a nuisance in the instance of encroaching development.

- **Policy NR8.3:** The County's zoning and development standards will be designed to protect Mineral Resource Zones and prevent introduction of incompatible land uses in areas with ongoing, viable mining operations.

- **Policy NR8.4:** The County will support alternative methods for transporting aggregate, consistent with this General Plan.

- **Policy NR8.5:** Mining operations shall be reviewed and conditioned to mitigate impacts to water quality and flood protection facilities.

- **Policy NR8.6:** In addition to mitigating impacts, projects that extract non-renewable mineral resources within the County may require, at the discretion of the Board of Supervisors, public benefits or a fee for public benefits at a level commensurate with the resources that are extracted.

- **Action NR8.1: Planning and Regulating Land Use in Mineral Resource Areas.** The County will periodically review its regulations to ensure they remain consistent with the General Plan, account for changes in the environmental setting, promote a healthy local mineral extraction industry, and remain consistent with relevant state law. The County will review updates to Mineral Resource classifications and incorporate any needed revisions to the County's zoning and Open Space Diagram. The County will consider changes in designation/zoning of property when it can be demonstrated that mineral resources are not present or are not economically feasible. The County will consider modifications to its codes to allow mining operations on agricultural land if this is part of an ongoing agricultural operation and provided the land is returned to equivalent agricultural value.

    - Related Goals: Goal NR8
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund
    - Time Frame: Ongoing

Conclusion

Implementation of the proposed policies and actions of the 2030 General Plan and implementation of existing regulations for SMARA Mineral Resource Zones, would reduce the impacts of buildout of the 2030 General Plan on mineral resources. Nonetheless, it is possible that development of the County's Rural Community Boundary areas could preclude extraction of important County mineral resources along the Yuba River. The impact is considered **significant**. One of the key objectives of the 2030 General Plan is to proactively guide development of rural areas of the County, including those that could be within areas of important mineral resources.

Mitigation Measure

The County has included all feasible mitigation as a part of the 2030 General Plan. No mitigation beyond compliance with existing regulations and the 2030 General Plan policies and actions is feasible. The impact is considered **significant and unavoidable**.

IMPACT 4.6-7 Possible Damage to Unknown, Potentially Unique Paleontological Resources. *Construction activities could disturb previously unknown paleontological resources in areas addressed by the 2030 General Plan. This impact would be potentially significant.*

While no vertebrate fossil sites were reported in the UCMP database or were listed in the Jefferson (1991a, 1991b) database, vertebrate fossil sites may occur in Yuba County where surveys have not taken place. Pleistocene alluvial deposits in the valley portion of the county could harbor previously unknown paleontological resources. Development in these areas could result in the loss or disturbance of fossils or other paleontological resources.

Relevant Policies and Actions of the 2030 General Plan

- **Policy NR6.2:** If potential paleontological or prehistoric resources are detected during construction, work shall stop and consultation is required to avoid further impacts.

- **Action NR6.2: Paleontological Resources.** If potential paleontological resources are detected during construction, work shall stop and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include construction worker education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures, as appropriate.

  - Related Goals: Goal NR6
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Project applicant funds
  - Time Frame: Ongoing, as construction occurs under the General Plan

Conclusion

Implementation of the policies and actions of the 2030 General Plan would reduce the impacts of buildout of the 2030 General Plan on paleontological resources. Work stoppage is required where resources are discovered. Consultation with a paleontologist and measures to avoid further impact would be required. However, the County cannot guarantee that construction and development activities would avoid impacts to paleontological resources. Therefore, the impact is considered **significant**.

Mitigation Measure

All available feasible mitigation is included as General Plan policy and Action NR6.2. The impact is considered **significant and unavoidable**.

IMPACT 4.6-8 Potential damage from a seiche. *The 2030 General Plan Land Use Diagram and Open Space Diagram indicate that new development would be limited around Collins Reservoir and substantial new development would not be consistent with the General Plan around New Bullards Bar Reservoir. However, it is possible that buildout of the 2030 General Plan could accommodate a very limited amount of development in areas located at risk of damage from a seiche. Enclosed water bodies within the County are potential locations for a seiche to occur as a result of an earthquake and lake users, lake shorelines, and areas downstream of dams are at risk of potential damage from a seiche. This impact is considered* ***potentially significant****.*

The 2030 General Plan Land Use Diagram and Open Space Diagram indicate that new development would be limited around Collins Reservoir and substantial new development would not be consistent with the General Plan around New Bullards Bar Reservoir. However, it is possible that buildout of the 2030 General Plan could accommodate a very limited amount development in areas located at risk of damage from a seiche.

Most of the water bodies in Yuba County are not of a sufficient size that a large damaging seiche could occur as a result of an earthquake, however the potential does exist. While highly unlikely, a large seiche could lead to dam failure. A dam evacuation plan incorporating OES dam evacuation requirements is part of the Yuba County Multi-Hazard Mitigation Plan (YCWA 2005). The Federal Energy Regulatory Commission (FERC), as required

by federal law, has reviewed and approved comprehensive Emergency Action Plans (EAP) for each of the dams with potential to cause massive damage. The EAP is intended to minimize the threat to public safety and to minimize the response time to an impending or actual sudden release of water from project dams. The EAP Plan is used to provide emergency notification when flood water releases may present a potential for major flooding (YCWA 2005). Yuba County coordinates with the cities, special districts, community service districts, cemetery districts, fire department and fire protection districts, school districts, reclamation districts, water and irrigation districts, and private and public organizations to update the Multi-Hazard Mitigation Plan (Yuba County 2010). Additional policies and actions related to this potential risk are incorporated into the 2030 General Plan, as summarized below.

Relevant Policies and Actions of the 2030 General Plan

- **Policy HS9.1:** The County will review development projects, plans, and public investment decisions to ensure consistency with the Multi-Jurisdictional Multi-Hazard Mitigation Plan.

- **Policy HS9.2:** The County will provide public access to emergency response procedures in such locations as the Government Center, the County library, and public schools and will otherwise promote awareness of emergency response and evacuation plans.

- **Policy HS9.3:** The County will coordinate with Caltrans to maintain Highways 20, 70, 49, and 65 in the lower half of the County and the County will maintain Marysville Road, Frenchtown Road, and La Porte–Quincy Road in the upper half of the County as primary emergency access and evacuation routes and improve other roads, as necessary, such as Plumas Arboga Road, to create additional evacuation routes.

- **Policy HS9.4:** The County's development and improvement standards will require a circulation system with multiple access points, adequate provision for emergency equipment access, and evacuation egress.

- **Action HS9.1:** Emergency Access and Evacuation Routes. The County will seek funding to implement Action Items listed in the Multi-Hazard Mitigation Plan and future revisions to this Plan, including those actions intended to avoid flooding over emergency access routes. The County will consider, as a part of future revisions to the Multi-Hazard Mitigation Plan, whether new growth accommodated under the General Plan will require improvements to circulation or drainage in order to ensure adequate emergency access and evacuation egress, even in the event of a flood. As noted in Action HS1.2, the County will collaborate with Wheatland and Marysville on development of a flood emergency plan.

    - Related Goals: Goal HS9
    - Agency/Department: County Office of Emergency Services
    - Funding Source: Grant funding
    - Time Frame: Ongoing, as funding is available

Conclusion

The 2030 General Plan Land Use Diagram and Open Space Diagram indicate that new development would be limited around Collins Reservoir and substantial new development would not be consistent with the General Plan around New Bullards Bar Reservoir. Implementation of the policies and actions of the 2030 General Plan would reduce the risks associated with a potential seiche. According to the Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan, "failure of [County] dams during a catastrophic event such as a severe earthquake is considered a very unlikely event. Due to the method of construction, they have performed well and failure is not expected to occur" (YCWA 2005). The 2030 General Plan provides clear direction for emergency access, evacuation, and concurrence with the Multi-Hazard Mitigation Plan. With incorporation of 2030 General Plan policies and actions, along with existing regulations, the impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

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4.7 CLIMATE CHANGE

This section includes a discussion of existing climate conditions, the science of climate change, and greenhouse gas (GHG) emissions sources in California and Yuba County; a summary of applicable regulations; and a description of potential impacts of the 2030 General Plan (also called "the project") related to climate change.

GHG emissions have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Global climate change has the potential to result in sea level rise (resulting in flooding of low-lying areas), to affect rainfall and snowfall (leading to changes in water supply), to affect temperatures and habitats (affecting biological resources), and to result in many other adverse effects.

The proper context for addressing this issue in an EIR is within an assessment of cumulative impacts. Although it is unlikely that development projects that could occur under the 2030 Yuba County General Plan will, by themselves, contribute significantly to global climate change, cumulative emissions from many projects under many such plans could impact global GHG concentrations and the climate system. Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment.

In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first step is to determine whether the combined effects from both the proposed project and other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's incremental effects are cumulatively considerable" and thus significant in and of themselves.

Legislation and executive orders on the subject of climate change in California have established a statewide context for analyzing GHG emissions and climate change, despite the global nature of this issue. The statewide context was established by Assembly Bill (AB) 32 (2006), California Global Warming Solutions Act of 2006, which requires reduction of statewide GHG emissions to 1990 levels by 2020.[1]

In September 2006, Governor Schwarzenegger signed AB 32 (Chapter 488, Statutes of 2006), which enacted Sections 38500–38599 of the California Health and Safety Code. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. 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 the California Air Resources Board (ARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if vehicle emissions regulations cannot be implemented, then ARB should develop new regulations to control GHG emissions from vehicles under the authorization of AB 32.

Greenhouse gases are typically analyzed by "sector" or type of activity that results in GHG emissions. Land use development projects are not their own GHG emissions sectors because these projects involve multiple activities that directly result in GHG emissions (such as transportation, electricity use, and waste generation). These activities are the sectors analyzed for their contribution to GHG and are described in more detail below.

Land use decisions and development projects can affect the generation of GHG emissions from multiple sectors that result from their implementation. Development projects can result in direct or indirect GHG emissions that would occur on- or off-site. For example, people who reside in and visitors to a development project would drive

[1] This level of emissions is tied to concentrations needed to avoid dangerous climate change. "Avoiding Dangerous Climate Change" means: "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." In order to stabilize at a global equilibrium temperature of 2–2.4°C above pre-industrial levels, CO_2 concentrations must stabilize at 350–400 ppm. Ambient global CO_2 concentrations in 1990 were approximately 353 ppm (UNFCCC 2009).

vehicles that generate on- and off-site GHG emissions, which are associated with the transportation sector. Electricity consumed in structures within a project would indirectly cause GHGs to be emitted at a utility provider.

Some major GHG emission sectors can be affected by local government actions, while others cannot. The California Air Resources Board Climate Change Scoping Plan (see below for more information) identifies the main GHG emission sectors that account for the majority of GHG emissions generated within California. GHG emission sectors include:

- **Transportation:** This is the largest sector of GHG emissions in California. This sector represents the GHG emissions associated with on-road motor vehicles, recreational vehicles, aviation, ships, and rail.
- **Electricity:** This sector represents the GHG emissions associated with use and production of electrical energy. Approximately 25% of electricity consumed in California is imported, thus, GHG emissions associated with out-of-state electricity production are also included as part of this sector.
- **Industry:** This sector represents the GHG emissions associated with industrial land uses (e.g., manufacturing plants, refineries). Industrial sources are predominately comprised of stationary sources (e.g., boilers, engines) associated with process emissions.
- **Commercial and Residential:** Commercial and residential GHG emission sources include area sources such as landscape maintenance equipment, fireplaces, and natural gas consumption for space and water heating.
- **Agriculture:** This sector represents the GHG emissions associated with agricultural processes. Agricultural sources of GHG emissions include off-road farm equipment, irrigation pumps, residue burning, livestock, and fertilizer volatilization.
- **High Global Warming Potential:** This sector represents the generation of high global warming potential GHGs. Examples of high global warming potential GHG sources include refrigerants, and electrical insulation. Although these GHGs are typically generated in much smaller quantities than CO_2, their high global warming potential results in considerable CO_2e.
- **Recycling and Waste:** This sector represents the GHG emissions associated with waste management facilities and landfills.

The GHG emission sectors described above are subject to varying degrees of state regulation that will reduce GHG emissions on a statewide level (see description of state regulations below). For example, legislation already in effect will achieve statewide reductions of GHG emissions associated with electricity production, industry, vehicle miles traveled (VMT), and motor vehicles. It is anticipated that future legislation and regulations at the state and federal levels would further reduce GHG emissions, with different reduction potential available for each sector. In addition, GHG emission sectors such as transportation and electricity will be regulated by the implementation of statewide emission reduction programs (e.g., vehicle emissions standards, renewable energy portfolio standards). Depending on the type of state standard and the GHG emission sector targeted by a standard, the ability of local government actions to achieve further significant GHG reduction could be limited to varying degrees.

Land use and building patterns resulting from local government development policies can affect VMT, water use, wastewater generation, solid waste generation, and building energy use. However, local governments do not have control over vehicle emissions technology, fuel economy standards, or building code standards. Nonetheless, local governments, such as the County, will play a role in achieving statewide emission reduction goals (see "Regulatory Setting" below for more information). The ability to influence land use decisions and reduce VMT, provide services to its population (e.g., recycling service, waste management, and waste water treatment), and

provide public education and incentives (e.g., energy and water conservation) to its citizens are options for local governments to reduce GHG emissions generated in their jurisdictions.

4.7.1 REGULATORY SETTING

GREENHOUSE GAS EMISSIONS

Federal Plans, Policies, Regulations, and Laws

Supreme Court Ruling

The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for implementing the Federal Clean Air Act (CAA). The Supreme Court of the United States ruled on April 2, 2007 that CO_2 is an air pollutant as defined under the CAA, and that EPA has the authority to regulate GHG emissions (Massachusetts v. Environmental Protection Agency, 549 U.S. 497 [2007]). However, there are no federal regulations or policies related to GHG emissions or climate change adaptation that are applicable to the project as of the writing of this document. Please refer to the information under the heading, "AB 1493," for further information on the California Clean Air Act (CCAA) Waiver.

Energy and Independence Security Act of 2007 and Corporate Average Fuel Economy Standards

The Energy and Independence Security Act of 2007 (EISA) amended the Energy Policy and Conservation Act (EPCA) to further reduce fuel consumption and expand production of renewable fuels. The EISA's most significant amendment includes a statutory mandate for the National Highway Traffic Safety Administration (NHTSA) to set passenger car corporate average fuel economy (CAFE) standards for each model year (MY) at the maximum feasible level. This statutory mandate also eliminates the old default CAFE standard of 27.5 miles per gallon (mpg). The EISA requires that CAFE standards for MY 2011-2020 be set sufficiently high to achieve the goal of an industry-wide passenger car and light-duty truck average CAFE standard of 35 mpg. The rule making for this goal, has been divided into two separate parts. The first part, which was published in the Federal Register in March 2009, includes CAFE standards for MY 2011 in order to meet the statutory deadline (i.e., March 30, 2009). The second part of the rulemaking applies to MY 2012 and subsequent years. These would be the maximum CAFE standards feasible under the limits of the EPCA and EISA. The NHTSA and the EPA are currently working in coordination to develop a national program targeting MY 2012–2016 passenger cars and light trucks.

EPA Actions

In response to the mounting issue of climate change, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons (MT) or more of CO_2 per year. This publically available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost-effective emissions reduction strategies. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks

On September 15, 2009, EPA and NHTSA proposed a new national program that would reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the United States. EPA proposed the first-ever national GHG emissions standards under the CAA, and NHTSA proposed CAFÉ standards under the EPCA. This proposed national program would allow automobile manufacturers to build a single light-duty national fleet that satisfies all requirements under both federal programs and the standards of California and other states.

Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act

On April 23, 2009, EPA published their Proposed Endangerment and Cause or Contribute Findings for GHGs under the CCA (Endangerment Finding) in the Federal Register. The Endangerment Finding is based on Section 202(a) of the CAA, which states that the EPA Administrator should regulate and develop standards for "emission[s] of air pollution from any class of classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." The proposed rule addresses Section 202(a) in two distinct findings. The first addresses whether or not the concentrations of the six key GHGs (i.e., CO_2, methane [CH_4], nitrous oxide [N_2O], hydrofluorocarbons [HFCs], perflurorocarbons [PFCs], and sulfur hexafluoride [SF_6]) in the atmosphere threaten the public health and welfare of current and future generations. The second addresses whether or not the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and therefore the threat of climate change.

The EPA Administrator proposed the finding that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are very likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The EPA Administrator also proposed the finding that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. The proposed finding cites that in 2006, motor vehicles were the second largest contributor to domestic GHG emissions (24% of total) behind electricity generation (nationwide). Furthermore, in 2005, the U.S. was responsible for 18% of global GHG emissions. Therefore, GHG emissions from motor vehicles and motor vehicle engines were found to contribute to air pollution that endangers public health and welfare.

State Plans, Policies, Regulations, and Laws

Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is underway, and that there is a real potential for severe adverse environmental, social, and economic effects in the long term. Because every nation emits GHGs and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG emissions to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

Statutes

Assembly Bill 1493 (2002)

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 requires that the ARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by ARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, in 2004 ARB approved amendments to the California Code of Regulations (CCR) adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1) require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily for the transportation of persons), beginning with the 2009 model year.

In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against ARB to prevent enforcement of 13 CCR Sections 1900 and 1961 as amended by AB 1493 and 13 CCR 1961.1 (*Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in Her Official Capacity as Executive Director of the California Air Resources Board, et al.*). The auto-makers' suit in the U.S. District Court for the Eastern District of California, contended California's implementation of regulations that, in effect, regulate vehicle fuel economy violates various federal laws, regulations, and policies.

On December 12, 2007, the Court found that if California receives appropriate authorization from EPA (the last remaining factor in enforcing the standard), these regulations would be consistent with, and have the force of federal law, thus, rejecting the automakers' claim. This authorization to implement more stringent standards in California was requested in the form of a CAA Section 209, subsection (b) waiver in 2005. Since that time, EPA failed to act on granting California authorization to implement the standards. Governor Schwarzenegger and Attorney General Edmund G. Brown filed suit against EPA for the delay. In December 2007, EPA Administrator Stephen Johnson denied California's request for the waiver to implement AB 1493. Johnson cited the need for a national approach to reducing GHG emissions, the lack of a "need to meet compelling and extraordinary conditions", and the emissions reductions that would be achieved through the EISA as the reasoning for the denial (Office of the White House 2009).

The state of California filed suit against EPA for its decision to deny the CAA waiver. The recent change in presidential administration directed EPA to reexamine its position for denial of California's CAA waiver and for its past opposition to GHG emissions regulation. California received the waiver from EPA on June 30, 2009.

Renewable Energy Portfolio Standards (Senate Bills 1078 and 107 and Executive Orders S-14-08 and S-21-09)

Senate Bill (SB) 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

In November 2008 Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33% renewable power by 2020. On September 15, 2009, Governor Schwarzenegger signed Executive Order S-21-09 directing ARB to adopt regulations increasing California's Renewable Portfolio Standard to 33% by 2020.

Assembly Bill 32 (2006), California Global Warming Solutions Act

In September 2006, Governor Schwarzenegger signed AB 32 (Chapter 488, Statutes of 2006), which enacted Sections 38500–38599 of the California Health and Safety Code. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires reduction of statewide GHG emissions to 1990 levels by 2020 (an approximately 15% reduction from existing statewide GHG emissions). This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control GHG emissions from vehicles under the authorization of AB 32.

AB 32 requires ARB to 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 the 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.[2]

Climate Change Scoping Plan

In December 2008, ARB adopted its Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 169 million metric tons (MMT) of CO_2e, or approximately 30% from the state's projected 2020 emission level of 596 MMT of CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10%, from average emissions between 2002 and 2004). The Scoping Plan also includes ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e),
- the Low-Carbon Fuel Standard (15.0 MMT CO_2e),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e), and
- a renewable portfolio standard for electricity production (21.3 MMT CO_2e).

ARB has not yet determined what amount of GHG reductions it recommends from local government operations; however, the *Scoping Plan* does state that land use planning and urban growth decisions will play an important role in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions.

[2] According to Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC), "Avoiding Dangerous Climate Change" means: "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." Dangerous climate change was defined based on several key indicators including the potential for severe degradation of coral reef systems, disintegration of the West Antarctic Ice Sheet, and shut down of the large-scale, salinity- and thermally-driven circulation of the oceans. "Avoiding dangerous climate change" is expected to be achieved by stabilizing global average temperatures at a minimum of 2°C above pre-industrial levels. In order to stabilize at a global equilibrium temperature of 2–2.4°C above pre-industrial levels, CO_2 concentrations must stabilize at 350–400 ppm. Ambient global CO_2 concentrations in 1990 were approximately 353 ppm (UNFCCC 2009).

(Meanwhile, ARB is also developing an additional protocol for community emissions.) ARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined (ARB 2008).

Senate Bill 1368 (2006)

SB 1368 (Chapter 598, Statutes of 2006) is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission (CPUC) to establish a GHG emission performance standard for base-load generation from investor-owned utilities by February 1, 2007. Similarly, the California Energy Commission (CEC) was tasked with establishing a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emission rate from a base-load, combined-cycle natural-gas-fired plant. The legislation further requires that all electricity provided to California, including imported electricity, be generated from plants that meet the standards set by CPUC and CEC. In January 2007, CPUC adopted an interim GHG Emissions Performance Standard, which requires that all new long-term commitments for base-load generation entered into by investor-owned utilities have emissions no greater than a combined-cycle gas turbine plant (i.e., 1,100 pounds [lb] of CO_2 per megawatt-hour). A "new long-term commitment" refers to new plant investments (new construction), new or renewal contracts with a term of five years or more, or major investments by the utility in its existing base-load power plants.

In May 2007, CEC approved regulations that prohibit the state's publicly owned utilities from entering into long-term financial commitments with plants that exceed the standard adopted by CPUC of 1,100 lb of CO_2 per megawatt-hour.

Senate Bill 97 (2007)

SB 97, signed August 2007, acknowledges that climate change is a prominent environmental issue that requires analysis under the California Environmental Quality Act (CEQA). This bill directs the California Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA by July 1, 2009. The California Natural Resources Agency adopted those guidelines on December 30, 2009, and the guidelines became effective March 18, 2010.

This bill also removes inadequate CEQA analysis of effects of GHG emissions from projects (retroactive and future) funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1B or 1E) as a legitimate cause of action. This provision will be repealed on January 1, 2010, wherein inadequate CEQA analysis for those projects could then become a legitimate cause of action. This bill would only protect a handful of public agencies from CEQA challenges on certain types of projects for a few years.

Senate Bill 375 (2008)

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) to address GHG reduction targets in the context of that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for

consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

This bill also extends the minimum time period for the Regional Housing Needs Allocation (RNHA) cycle to create a closer match with the timelines for revising RTPs (for the Metropolitan Planning Organizations affected by the bill). The RHNA is used to guide the amount of housing to be accommodated for the full range of household incomes in mandatory local housing plans (Housing Elements).

City or County land use policies (including general plan updates) are not required to be revised to be consistent with the RTP (and associated SCS or APS). However, new provisions of CEQA would create streamlining for certain projects that are consistent with an approved SCS or APS. Residential or mixed-use projects that are consistent with the SCS/APS and incorporate mitigation measures from relevant prior CEQA document/s are not required to reference, describe, or discuss growth-inducing impacts or impacts of cars and light-duty truck trips on climate change or on the regional transportation network. "Transit priority projects," as defined in this legislation, and future RTPs would be exempt from CEQA review. Transit priority projects that do not qualify for a complete exemption could be subject to environmental review under a Sustainable Communities Environmental Assessment (SCEA), which is envisioned to be similar to the process under CEQA for a negative declaration.

The GHG reduction target for the Sacramento Area Council of Governments (SACOG) Area, of which Yuba County is a part, is 7% percent per capita by 2020 and 16 percent per capita by 2035. Both targets are expressed as percent per capita below 2005 levels. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets.

Executive Orders

Executive Order S-3-05 (2005)

Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada'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 targets for total GHG emissions. Specifically, emissions are to be reduced to the 2000 level by 2010, to 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 to coordinate a multiagency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and legislature describing progress made toward reaching the emission targets; impacts of global warming on California's resources; and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the Secretary of the California Environmental Protection Agency created the California Climate Action Team, made up of members of various state agencies and commissions. The California Climate Action Team released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses and actions by local governments and communities, as well as through state incentive and regulatory programs.

Executive Order S-1-07 (2007)

Executive Order S-1-07, signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at over 40% of statewide emissions. It establishes a goal that carbon intensity of transportation fuels sold in California should be reduced by a minimum of 10% by 2020. This order also directed ARB to determine if this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early action measure pursuant to meeting the mandates in AB 32.

Regional and Local Plans, Policies, Regulations, and Ordinances

There are currently no regional or local policies, regulations, or laws specifically pertaining to GHG emissions.

4.7.2 ENVIRONMENTAL SETTING

CLIMATE

Climate is the accumulation of daily and seasonal weather events over a long period of time, whereas weather is defined as the condition of the atmosphere at any particular time and place (Ahrens 2003). Yuba County is located in a climatic zone characterized as dry-summer subtropical or Mediterranean in the Köppen climate classification system. The Köppen system's classifications are based primarily on annual and monthly averages of temperature and precipitation.

The Northern Sacramento Valley Air Basin (NSVAB), which includes Yuba County, is relatively flat, bordered by mountains to the east, west, and north. The climate is characterized by hot, dry summers and cool, rainy winters. Periods of dense and persistent low-level fog that are most prevalent between storms are characteristic of winter weather in the NSVAB. The extreme summer aridity of the Mediterranean climate is caused by sinking air of subtropical high-pressure regions. The ocean has less influence in the NSVAB than in the coastal areas, giving the interior Mediterranean climate more seasonal temperature variation (Ahrens 2003).

Summer conditions in the NSVAB are typically characterized by high temperatures and low humidity, with prevailing winds from the south. Summer temperatures average approximately 90°F during the day and 50°F at night (FRAQMD 2010). Winter conditions in the NSVAB are characterized by occasional rainstorms interspersed with stagnant and foggy weather. Winter temperatures average in the low 50s (°F), and nighttime temperatures average in the upper 30s. Rainfall occurs mainly from late October to early May, averaging 17.2 inches per year, but this varies significantly from year to year. During winter, north winds are frequent, but winds from the south predominate (FRAQMD 2010). The predominant wind direction and speed is from the south at 8.0 miles per hour (mph) (ARB 1994).

ATTRIBUTING CLIMATE CHANGE—GREENHOUSE GASES

Greenhouse Gases

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. The absorbed radiation is then emitted from the earth, not as high-frequency solar radiation, but lower frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency (longer wavelength) radiation. Most solar radiation passes through GHGs; however, infrared radiation is selectively absorbed by GHGs. As a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth. Without the greenhouse effect, Earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and high global warming potential (high-GWP) GHGs. High-GWP GHGs include ozone depleting substances (ODSs), chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and halons, in addition to their replacements, hydrofluorocarbons (HFCs). Other high-GWP GHGs include perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). Anthropogenic emissions of these GHGs leading to atmospheric levels in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of

unnatural warming of the earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate (IPCC 2007:665). CO_2 emissions associated with fossil fuel combustion are the primary contributors to human-induced climate change (EPA 2010a). Following CO_2, CH_4 and N_2O emissions associated with human activities are the next largest contributors to climate change (IPCC 2007; EPA 2010b).

According to overwhelming scientific consensus, climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is currently emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 54% is sequestered through ocean uptake, uptake by northern hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46% of human-caused CO_2 emissions remains stored in the atmosphere (Seinfeld and Pandis 1998).

Similarly, impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and TACs. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known, although the quantity would be enormous, and no single project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climate.

Greenhouse Gas Emissions Sources and Inventory

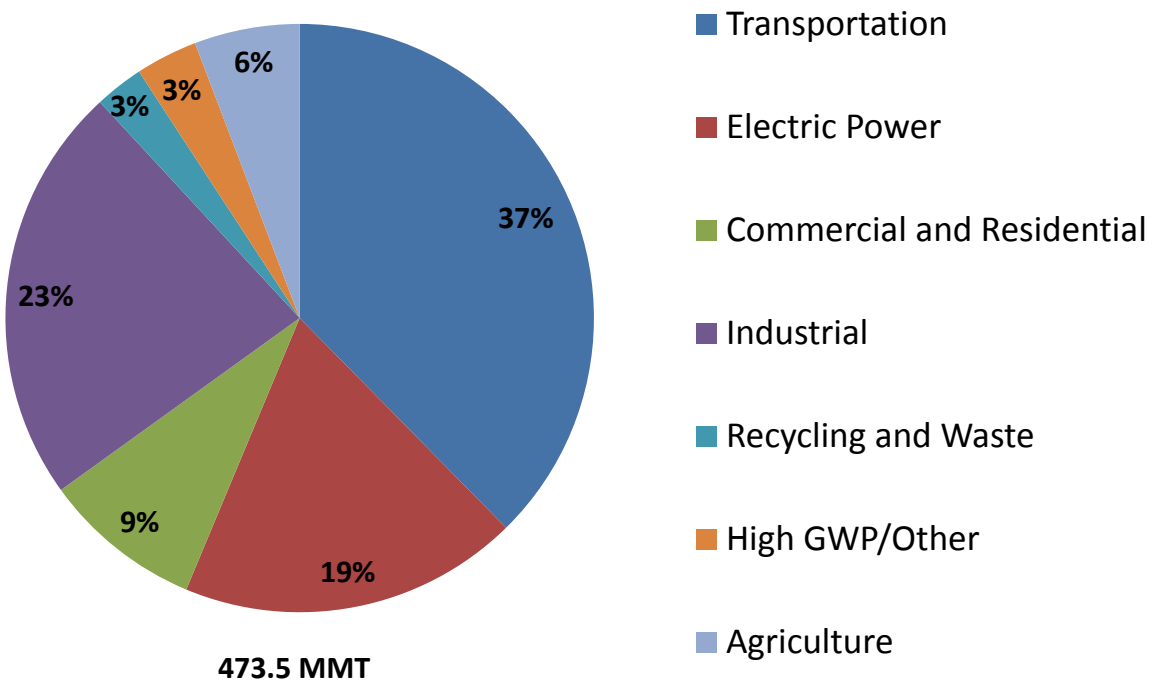
California

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial and agricultural sectors (ARB 2009f). In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (ARB 2009f). See Exhibit 4.7-1 for California's GHG emissions inventory sectors.

Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, respectively, two of the most common processes of CO_2 sequestration.

California is the 12th to 16th largest emitter of CO_2 in the world (CEC 2006a). California produced 484 million gross metric tons of CO_2e in 2004 (ARB 2009f). CO_2e 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 dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, as described in Appendix C, "Calculation References," of the General Reporting Protocol of the California Climate Action Registry (CCAR 2009), 1 ton of CH_4 has the same contribution to the greenhouse effect as approximately 23 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2. Expressing emissions in CO_2e takes the contributions of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2004, accounting for 38% of total GHG emissions in the state (ARB 2008). This sector was followed by the electric power sector (including both in-state and out-of-state sources) (22%) and the industrial sector (20%) (ARB 2008).



Notes: GWP = global warming potential; MMT = Million metric tons.

Source: ARB 2008

California's Greenhouse Gas Emissions by Economic Sector (2002–2004 Average) **Exhibit 4.7-1**

CLIMATE CHANGE VULNERABILITIES AND ADAPTATION

Global average ambient concentrations of CO_2 have increased dramatically since preindustrial times, from approximately 280 parts per million (ppm) to approximately 353 ppm in 1990 and approximately 380 ppm in 2000. Global average temperature has risen approximately 0.76°C since 1850; if global CO_2 emissions were to be curbed today, it would continue to rise an additional 0.5°C by the end of this century. This phenomenon is caused by the inertia of the climate system and time scale of the main sequestration mechanism in the carbon cycle—the ocean. In other words, global climate is committed to an additional 0.5°C of warming associated with human activities that have already occurred. Because GHG emissions associated with fossil fuel combustion, population growth, technological advances, and current standards of living will continue to occur, a more likely range of scenarios for global average temperature rise would be 1.8–4.0°C by the end of the century, depending on the global emissions scenario that ultimately occurs. (For example, the IPCC's B1 scenario—low population growth, clean technologies, and low emissions—is the best-case scenario; its A2 scenario—high population growth, fossil-fuel dependence, and high emissions—is the worst-case scenario; and its A1B scenario is a moderate scenario.)

Impacts associated with the incremental increase in global temperature have already begun to occur. Such impacts are projected to occur in numerous forms: sea level rise, reduction in the extent of polar and sea ice, changes to ecosystems, changes in precipitation patterns, reduced snowpack, agricultural disruption, increased intensity and frequency of storms and temperature extremes, increased risk of floods and wildfires, increased frequency and severity of drought, effects on human health from vector borne disease, species extinction, and acidification of the ocean.

It is accepted that some level of climate change impacts will occur as a result of human-caused climate change. However, international treaties on the subject of climate change attempt to avoid "dangerous" climate change—in other words, to manage the risk of foreseeable impacts to a "tolerable" level of climate change that would avoid most catastrophic impacts. For this to occur, CO_2 concentrations should be stabilized at 350–400 ppm, with an associated global average temperature increase of no more than 2°C–2.4°C above preindustrial times. Timing is also a key issue, because of the very long lifetimes of GHGs. To avoid "dangerous" climate change, global CO_2 emissions would be required to peak during the 2000–2015 period (IPCC 2007).

Climate change has the potential to affect environmental conditions in California through a variety of mechanisms. Resource areas other than air quality and atmospheric temperature could be indirectly affected by the accumulation of GHG emissions. For example, an increase in the global average temperature is expected to result in a decreased volume of precipitation falling as snow in California and an overall reduction in snowpack in the Sierra Nevada. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. According to the CEC (2006b), the snowpack portion of the water supply could potentially decline by 30–90% by the end of the 21st century.

A study cited in a report by the California Department of Water Resources (DWR) projects that approximately 50% of the statewide snowpack will be lost by the end of the century (Knowles and Cayan 2002). Although current forecasts are uncertain, it is evident that this phenomenon could lead to significant challenges in securing an adequate water supply for a growing population. An increase in precipitation falling as rain rather than snow could also lead to increased potential for floods because water that would normally be held in the Sierra Nevada snowpack until spring could flow into the Central Valley concurrently with winter storm events. This scenario would place more pressure on California's levee/flood control system (DWR 2006a).

Another mechanism for indirect impacts on the environment in California is sea level rise. Sea level rose worldwide approximately 7 inches during the last century (CEC 2006b), and it is predicted to rise an additional 7 to 22 inches by 2100, depending on the future levels of GHG emissions (IPCC 2007).

The Governor-appointed Delta Vision Blue Ribbon Task Force has recommended the State plan for a scenario of 16 inches of sea level rise by 2050, and 55 inches by 2100 (California Natural Resources Agency 2008). Resultant effects of sea level rise could include increased coastal flooding, saltwater intrusion (especially a concern in the low-lying Sacramento–San Joaquin River Delta, where pumps delivering potable water could be threatened), and disruption of wetlands (CEC 2006b). Some low-lying populated areas throughout the Central Valley and Sacramento-San Joaquin River Delta inundated by sea level rise could experience population displacement and economic disruption.

As the existing climate throughout California changes over time, the ranges of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the state if suitable conditions are no longer available. Additional concerns associated with climate change are a reduction in the snowpack, leading to less overall water storage in the mountains, the largest "reservoir" in the state, and increased risk of wildfire caused by changes in rainfall patterns and plant communities.

Impacts on California and Yuba County

Historical Trends and Future Predictions

Temperature

Climate change projections can be developed on a regional basis using techniques to downscale from the results of global models (although increased uncertainty results from the downscaling). Based on the results of a variety of regional climate models, it is reasonably foreseeable that some increase in annual average temperatures will occur in California during the next 100 years. Although a temperature increase is expected, the amount and timing

of the increase is uncertain. In general, predictions put an increase in the range of 2 to 5°C (3.6 to 9°F) over the next 50–100 years (IPCC 2007, Kim et al. 2002, Snyder et al. 2002, Dettinger 2005). Temperature increases are expected to be greater in the summer compared to the winter and more pronounced for inland areas compared to coastal areas (Cayan et al 2009). There are direct public-health related effects associated with increased temperatures and increased periods of temperature extremes, including heat stroke, heat exhaustion, and the exacerbation of existing medical conditions, with particular problems for the elderly, infants, those with pre-existing illnesses, and those that lack access to air conditioning or cooling spaces (California Natural Resources Agency 2009).

Indirect effects of increased temperature include changes in precipitation patterns, runoff, snowpack, sea level, water supply, agriculture, wildfire, extreme events (e.g., flooding and drought), biological resources, and public health in California. Effects on precipitation and snowpack would affect runoff and surface water, and would have potential to affect the physical conditions of the Delta. These topic areas are also discussed below.

An increase in annual average temperature is a reasonably foreseeable effect of future climate change, but this environmental change alone is independent of the proposed project. Indirect effects associated with warmer temperatures are evaluated further in the following sections.

Precipitation

The earths changing climate has far reaching consequences that as of now are still unknown. The changes to the climate are impacting weather systems and altering the distribution and intensity of precipitation events. Former State Climatologist James Goodridge compiled an extensive collection of longer-term precipitation records from throughout California. These data sets were used to evaluate whether there has been a changing trend in precipitation in the State over the past century (DWR 2006a). Long-term runoff records in selected watersheds in the State were also examined. Based on a linear regression of the data, the long-term historical trend for statewide average annual precipitation appears to be relatively flat (no increase or decrease) over the entire record. However, it appears that there might be an upward trend in precipitation toward the latter portion of the record.

When these same precipitation data are sorted into three regions—Northern, Central, and Southern California—trends show that precipitation in the northern portion of the State appears to have increased slightly from 1890 to 2002, and precipitation in the central and southern portions of the state show slightly decreasing trends. All changes were in the range of 1–3 inches annually (DWR 2006a).

Although existing data indicate some level of change in precipitation trends in California, more analysis is likely needed to determine whether changes in California's regional annual precipitation totals have occurred as the result of climate change or other factors (DWR 2006a).

The changes discussed above may not yet be fully understood, but any change to the states precipitation has direct effects on the states fire season. In addition drought stressed plants are more susceptible to disease and attack from parasites. It is currently anticipated that longer fire seasons with a greater probability of intense fires in western forests are inevitable. For years the practice of suppressing all fires has caused a buildup of vegetative materials (fuel) within forests throughout the state. With the drought type conditions and excess fuel the forests in California and the west present prime conditions for increased flammability over a longer period of the year, resulting in an active burning period that starts earlier and lasts longer than historical patterns.

Snowpack

California's annual snowpack, on average, has the greatest accumulations from November though the end of March. The snowpack typically melts from April through July. California's reservoir managers (including State Water Project [SWP] and Central Valley Project [CVP] facilities) use snowmelt to help fill reservoirs once the threat of large winter and early spring storms and related flooding risks have passed.

An analysis of the effect of rising temperatures on snowpack conducted by DWR (2006) shows that a 3°C (5.4°F) rise in average annual temperature would likely cause snowlines to rise approximately 1,500 feet. This would result in an annual loss of approximately 5 million acre-feet (af) of water storage in snowpack. Released and/or purchased waters stored in upstream reservoirs, will largely depend on regional annual average precipitation accumulations. Greater management of upstream reservoirs would be required to account for seasonal variations in precipitation type and intensity, and to maintain the same level of flood protection currently enjoyed.

Rainfall and winter snowpack in the Sierra Nevada provide Yuba County with significant surface water flows and associated groundwater recharge as surface water traverses the county (DWR 2006b). Reduced groundwater recharge from smaller snowpack has the potential to reduce the available water supply in aquifers, eventually affecting the County's water supply.

Runoff

Runoff is directly affected by changes in precipitation and snowpack. Changes in both the amount of runoff and the seasonality of the hydrologic cycle have the potential to greatly affect the heavily managed water systems of the western U.S. Hydrology in the Sacramento-San Joaquin Delta is highly dependent on the interaction between Sierra Nevada snowpack, runoff, and management of reservoirs. Runoff patterns in the Delta depend not just on how climatic conditions might change, but also on a wide range of human actions and management decisions.

Water Supply

Much uncertainty also exists with respect to how climate change will affect future demand on water supply (DWR 2006a). Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in reservoir inflows (Kiparsky and Gleick 2005, Cayan et al. 2006).

It is foreseeable that the SWP and CVP would experience delivery reliability issues as a result of effects on the hydrologic cycle associated with climate change and Delta pumping restrictions (Anderson 2008, DWR 2007). Most water scarcity would be felt by agricultural users in southern California, however, it is expected that southern California urban users will also experience some scarcity. As required by law, Delta water quality standards must be met prior to occurrence of any south-of-Delta water deliveries.

Yuba County water supplies are not dependent on the SWP or CVP. The 2030 General Plan would require an increase in water to serve a larger population, occurring steadily throughout the year, including both wet and dry seasons. As discussed above, climate change may change the precipitation patterns, frequency and severity of rain events and reduce the effectiveness of groundwater recharge. This is discussed also in Impact 4.7-2.

To the extent that available data and projections suggest that climate change will intensify existing wet and dry patterns, resulting in more precipitation during the wet season and less during the dry season, the 2030 General Plan, which will rely on groundwater for potable water supply, could be less affected by these changes than the current agricultural water use regime. However, there is a great deal of uncertainty in respect to impacts of climate change on future water availability in California, in terms of whether and what effects will occur as well as regarding the timing and severity of any such potential effect, making it impossible to draw a conclusion regarding significance without substantial speculation.

Sea Level Rise

One of the major areas of concern related to global climate change is sea level rise. Rising average sea level over the past century has been attributed primarily to warming of the world's oceans and the related thermal expansion of ocean waters, and the addition of water to the world's oceans from the melting of land-based polar ice (IPCC 2007). Worldwide average sea level appears to have risen about 0.4 to 0.7 foot over the past century based on data collected from tide gauges around the globe, coupled with satellite measurements taken over approximately the

last 15 years (IPCC 2007). Various gauge stations along the coast of California show an increase similar to the global trends. Data specific to the San Francisco tide gauge near the Golden Gate Bridge shows that the 19-year mean tide level (the mean tide level based on 19-year data sets) has increased by approximately 0.5 foot over the past 100 years.

Various global climate models have projected a rise in worldwide average sea level of 0.6–1.9 feet by 2099 (IPCC 2007). Although these projections are on a global scale, the rate of relative sea level rise experienced at many locations along California's coast is relatively consistent with the worldwide average rate of rise observed over the past century. Therefore, it is reasonable to expect that changes in worldwide average sea level through this century will also be experienced by California's coast (DWR 2006a). As noted, the Governor-appointed Delta Vision Blue Ribbon Task Force has recommended the State plan for a scenario of 16 inches of sea level rise by 2050, and 55 inches by 2100 (California Natural Resources Agency 2008).

A consistent rise in sea level has been recorded worldwide over the last 100 years. Recorded rises in sea level along the California coast correlate well with the worldwide data. Based on the results of various global climate change models, sea level rise is expected to continue. Based on the consistency in past trends, the consistency of future projections, and the correlation between data collected globally and data specific to California, it is reasonably foreseeable that some amount of sea level rise will occur along the California coast over the next 100 years. Although sea level rise is expected to occur, the amount and timing of the increase is uncertain.

However, it is not expected that any foreseeable sea level rise would directly impact unincorporated Yuba County, which is located approximately 30 feet above mean sea level at the lowest points along the Feather River.

Agriculture

Climate change may reduce the suitability of agricultural lands within Yuba County for traditional crop types. While effects may occur, adaptation could allow farmers and ranchers to minimize any potential negative effect on agricultural incomes. Because the potential effects of global climate change on agricultural production are highly speculative at this time, it is not possible to reach a conclusion regarding which crop types and agricultural operations would be substantially affected and whether there would be significant impacts.

Key Findings

Given the uncertainty associated with projecting the change in hydrology that would occur as a result of the variables described above, it would be too speculative to determine the reasonably foreseeable direct effects of climate change on physical hydrologic conditions in unincorporated Yuba County.

For California's water quality, the largest effect of sea level rise would likely be in the Delta (DWR 2005). Increased intrusion of salt water from the ocean to the Delta could degrade the quality of the fresh water that is pumped out for municipal, industrial, and agricultural purposes. This could lead to increased releases of water from upstream reservoirs or reduced pumping from the Delta to maintain compliance with water quality standards. Increased demand for stored surface water could affect other surface water supplies within the applicable watershed, until specific changes in demands occur; the effect on regional supplies remains speculative.

While climate change-induced sea level rise is reasonably certain, even the middle- to upper-range projections would not affect unincorporated Yuba County directly, because the area is well above sea level (i.e., elevation of approximately 30 feet above mean sea level at the lowest point). Projected sea-water rise associated with global climate change is in the range of 0.6–1.9 feet or up to 55 inches (4.6 feet) by the year 2099 (IPCC 2007, California Natural Resources Agency 2008).

In addition, current water quality conditions in regional surface waters depend in large part on human activities, and this would continue into the future. The effects of climate change on water quality could be alleviated by, exacerbated by, or overwhelmed by effects directly related to localized human actions.

Impacts that would occur on the proposed project that would result from climate change will be evaluated further in Impact 4.7-2, below.

4.7.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

There are several agencies in the State of California that have adopted methodologies for evaluating GHG emissions from new developments. CO_2 emissions associated with construction and operations were modeled using the Urban Emissions (URBEMIS) 2007 computer model, Version 9.2.4. Greenhouse gas emissions from increased load on public infrastructure (including electricity, water, waste etc.) were estimated using methodologies from CCAR and assumptions from the CEC. See Appendix C for detailed GHG calculations and inputs.

It is important to note that CO_2 emissions consistent with buildout of the 2030 General Plan are not necessarily "new" emissions, given that the General Plan itself does not create "new" emitters (e.g., people) of GHGs. In other words, the 2030 General Plan would not create new people, and would not necessarily accommodate new activities. Rather, the 2030 General Plan would accommodate movement in people, jobs, and activities from one location to another. Therefore, instead of reducing the total mass of community-generated GHG emissions, it is important to increase the *GHG efficiency* of the community, or the *rate* of GHG emissions per capita and per employee. The 2030 General Plan would need to accommodate population in a way that allows for a lower *rate* of GHG generation to achieve the state's goals for GHG emissions, as described in the text of AB 32 and directed by S-3-05. An example of such required rates are described below.

THRESHOLDS OF SIGNIFICANCE

An impact related to global climate change is considered significant if the proposed project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

With regard to emissions of GHGs, the Feather River Air Quality Management District (FRAQMD) has not adopted a significance threshold for analyzing project-generated emissions from plans or development projects or a methodology for analyzing impacts related to global warming, as of the writing of this document.

However, by adopting AB 32, the California Legislature has indicated that global climate change is a serious environmental issue and has identified a statewide GHG emissions target. To meet the goals of AB 32, California would need to generate fewer GHGs than current levels. It is recognized, however, that for most development projects, there is no simple metric available to determine whether the individual project would substantially increase or decrease overall emission levels of GHGs.

The legislation dealing with climate change in California (as well as international treaties and agreements on the subject) identifies goals for the rate of emissions of GHGs, relative to specific benchmark years. In the case of California, AB 32 requires 1990 GHG emission levels to be achieved by the year 2020, or about a 28% reduction from current emissions levels (ARB 2008). Neither state legislation nor executive order suggests that California intends to limit population growth to reduce the state's GHG emission levels. Therefore, the intent is to

accommodate population growth in California, but achieve a lower *rate* of GHGs despite this larger population. In other words, California jurisdictions must become more *GHG efficient*.

With a statewide context for GHG emissions reductions established, GHG efficiency can be viewed independently from the jurisdiction in which the project or plan is located. In order to provide a meaningful basis to assess the GHG-related effects of a project or plan, the mass emission from land use-related sectors can be normalized. Dividing mass emissions by the population and or amount of employment allows an assessment of GHG efficiency of a plan or project. Normalizing this projected mass of emissions from land use-related emissions sectors (i.e., transportation, electricity, natural gas, wastewater) by unit related to what the plan itself is accommodating (e.g., population and employment) allows decision makers to consider the GHG efficiency of a project, and evaluate the project's consistency with AB 32 (and other relevant targets). Limiting the analysis to the land use-related sectors helps to maintain focus on what the lead agency is approving – in this case, long-range physical development of the County, with an emphasis on management of land use change.

For the purposes of this analysis, the sum of the number of jobs and the number of residents at a point in time is termed the "service population" (SP). GHG efficiency metrics were developed for the emissions rates at the state level that would accommodate estimated population and employment growth, and the emission rates needed to accommodate growth while allowing for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020). These emission rates show how GHG-efficient new development and existing development must be in order to achieve AB 32 targets for land use-related sectors.

When analyzing long-range plans, such as general plan updates, it is important to note that the planning horizon will often surpass the 2020 timeframe for implementation of AB 32. Executive Order S-3-05 establishes a more aggressive emissions reduction goal for the year 2050 of 80% below 1990 emissions levels. The year 2020 can be viewed as a milestone, and is the only year discussed in AB 32 with respect to an emissions target. However, communities may need also to consider planning in a way that does not preclude a trajectory toward the 2050 goal established in Executive Order S-3-05.

A 2030 interim benchmark was developed for the purposes of this analysis since this would better coincide with the planning horizon of Yuba County's 2030 General Plan. The 2030 GHG efficiency benchmarks were estimated based on future expected growth in the state's population and economy, the mass emissions target mandated at the statewide level by AB 32 for the year 2020, and a linear interpolation for a 2030 mass emissions reduction target based on the GHG target for the year 2050 that is derived from the goal of Executive Order S-3-05 (i.e., 80% below the 1990 GHG emissions level by 2050). Assumptions were also made about which emissions sectors of the statewide GHG emissions inventory are affected by land use planning and development design decisions (Table 4.7-1). For instance, GHG emissions produced by the manufacturing industry sector and agriculture are not accounted for in the metrics presented in Table 4.7-2 since the policy framework of the County's 2030 General Plan does not propose substantial changes to the agricultural sector and since the County cannot predict the specific industries that may locate in the County between present and buildout of the General Plan. In addition, large stationary sources of GHG emissions, such as industrial sources, will be separately regulated. This is consistent with the recommendations of OPR in its Technical Advisory *CEQA and Climate Change* (OPR 2008). These and other detailed assumptions and calculations used to estimate this benchmark are presented in Appendix C.

Table 4.7-1
California's Greenhouse Gas Emissions Inventory, 1990 Emissions Limit, Base Year, and 2020 Projections from Land Use-Related Sectors

Sector	1990 Emissions (MMT CO_2e/yr)	2002-2004 Average (MMT CO_2e /yr)	2020 Emissions Projections (MMT CO_2e/yr)
Transportation	**137.992**	**168.657**	**209.101**
On-Road Passenger Vehicles	108.945	133.947	160.783
On-Road Heavy Duty	29.047	34.710	48.318
Electric Power	**95.385**	**88.970**	**107.401**
In-State Generation	33.808	32.152	55.039
Imported Electricity	61.577	56.818	52.362
Commercial and Residential	**44.220**	**41.579**	**47.970**
Residential Fuel Use	29.657	28.515	32.100
Commercial Fuel Use	13.462	11.704	13.755
Commercial Combined Heat and Power	1.101	1.360	2.115
Recycling and Waste[1]	**2.833**	**3.390**	**4.190**
Domestic Waste Water Treatment	2.833	3.390	4.190
Total Gross Emissions	**280.430**	**302.596**	**368.662**

Notes: MMT CO_2e /yr = million metric tons of carbon dioxide equivalent emissions per year.
[1] Landfills not included.
Please refer to Appendix C for detailed calculations.
Sources: Data compiled AECOM 2010, ARB 2008, ARB 2009f, ARB 2009g.

Table 4.7-2
California Greenhouse Gas Emissions for Land Use-Related Sectors, Population Projections, and Greenhouse Gas Efficiency Thresholds

	1990	2002–2004 Average	2020	2030 (Interpolated)[2]
Population	29,758,213	36,199,342	44,135,923	49,240,891
Employment	14,294,100	16,413,400	20,194,661	22,592,387
California Service Population (Population + Employment)	44,052,313	52,612,742	64,330,584	71,833,278
Projected GHG emissions(metric tons CO_2e)/capita[1]	9.42	8.36	8.35	-
Projected GHG emissions (metric tons CO_2e)/SP[1]	6.37	5.75	5.73	-
AB 32, S-3-05 Goal GHG emissions (metric tons CO_2e)/ capita[1]	9.42	7.75	6.35	**5.37**
AB 32, S-3-05 Goal GHG emissions (metric tons CO_2e)/ SP[1]	6.37	5.33	4.36	**3.68**

Notes: AB = Assembly Bill; CO_2e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population; "-" = no data.
[1] Greenhouse gas efficiency levels were calculated using only the "land use-related" sectors of ARB's emissions inventory. See Table 4.7-1.
[2] 2030 GHG/capita and GHG/SP goals were calculated based on a linear interpolation between the AB 32 GHG goal (i.e., 1990 mass emissions level achieved by year 2020) and the S-3-05 target (i.e., 80% below 1990 mass emission levels by year 2050).
Please refer to Appendix C for detailed calculations.
Sources: Data compiled by AECOM 2010, ARB 2008, ARB 2009f, DOF 2009, EDD 2009.

To meet the requirements of AB 32 in the emissions sectors that are related to land use (e.g., on-road passenger and heavy-duty motor vehicles, commercial and residential area sources [i.e., natural gas], electricity generation/consumption, waste water treatment, and water consumption), 2020 projected population and employment would need to fit within the 1990 mass emissions limits. Table 4.7-1 summarizes 1990, present (2002–2004 average baseline), and projected 2020 GHG emissions from relevant emissions sectors from land use development projects. AB 32 has established the 1990 emissions limit as the legislative context for assessing future emissions. The 1990 emissions limit from these sectors is treated as 280 MMT CO_2e. As noted, ARB developed 2020 GHG emissions estimates based on population increase, demographic changes, economic development, and a wide variety of other factors, classified as the "business as usual" scenario. The business as usual estimate for land use-related GHG emissions sectors (i.e., transportation, electricity, natural gas, and wastewater) in California is approximately 370 MMT CO_2e in 2020.

Table 4.7-2 summarizes projected population and employment estimates for the state, and allocates the GHG emissions limit (i.e., 280 MMT CO_2e) from Table 4.7-1 to the projected population and projected SP in the year 2020. The per-capita target is 6.35 metric tons (MT) CO_2e and the target per SP (persons + jobs) is between 4.36 MT CO_2e and 4.6 MT CO_2e per SP. If "co-generation" is included as a type of electricity generation, the per-service-population target would be approximately 4.6 MT CO_2e per service population. This is the GHG efficiency target used by the Bay Area Air Quality Management District in their June 2010 California Environmental Quality Act Air Quality Guidelines for projects (BAAQMD 2010). Other GHG efficiency metrics can be designed to examine the efficiency of plans and projects that address other combinations of GHG emissions sectors. One could attempt to remove future employment in agriculture and industry from the forecast 2020 service population, which would create a somewhat less rigorous standard. Electricity used in industrial processing could be removed from the 1990 emissions inventory, which would lead to a more aggressive GHG efficiency target.

By meeting these AB 32-derived GHG efficiency targets, the County would be able to demonstrate that the 2030 General Plan would accommodate growth in a manner that would not hinder the state's ability to achieve its fair share of GHG reduction targets adopted for the purpose of preventing dangerous climate change.

Since the 2030 General Plan planning horizon extends beyond 2020, GHG efficiency metrics were also calculated for year 2030 based on a linear interpolation between the AB 32 and S-3-05 GHG reduction targets and benchmark years. In addition to the GHG efficiency (per capita + employment) needed to achieve AB 32 targets by 2030, the County is also considering GHG efficiency needed in the year 2030 (either 5.4 MT CO_2e/capita or 3.7 MT CO_2e/SP), to achieve the reduction targets identified by Executive Order S-3-05.

IMPACT ANALYSIS

IMPACT 4.7-1 Increase in Greenhouse Gas Emissions. *The 2030 General Plan would accommodate land use change that would increase GHG emissions. Buildout of the 2030 General Plan Update would result in substantially higher GHG emissions compared with existing levels. Climate change attributable to human-caused GHG emissions is a significant cumulative impact. 2030 General Plan GHG mass emissions could be cumulatively considerable when compared to existing mass emissions. For this reason, this impact is considered potentially significant.*

Long-term growth anticipated under the 2030 General Plan would generate emissions of GHGs from area and mobile sources, and indirect stationary-source GHG emissions associated with off-site electricity production and natural gas production and use.

Mobile-source emissions of GHGs would include vehicle trips associated with employee commutes, errands, recreation, and other trips in passenger vehicles of future residents of and visitors to the County. Such emissions

would also include commercial trucking activity associated with moving goods to and from proposed commercial and industrial uses.

Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, and distribution of natural gas to heat spaces and water and provide cooking fuel. Increases in stationary-source emissions could occur at off-site utility providers that would supply electricity to the proposed uses within the County.

GHG emissions would be predominantly in the form of CO_2. CO_2 emissions persist in the atmosphere for a much longer period of time than emissions of criteria air pollutants such as ozone and particulate matter. Although emissions of other GHGs, such as CH_4 and N_2O, are important with respect to global climate change, emissions levels of other GHGs are less dependent on the land use and circulation patterns associated with the 2030 General Plan than are levels of CO_2.

A primary focus of any general plan is on long-term physical development and conservation within the community. Although a general plan can also influence energy efficiency to some extent (e.g., site planning for proper solar orientation), the County does not have control over the sources of electricity used in buildings. General plan are by their nature less focused on the details of building construction and architecture and are more focused on overall physical development patterns and land uses.

GHG emissions attributable to the 2030 General Plan were analyzed and are presented in this section at a programmatic level of detail. The County cannot estimate the GHG reduction benefit of its various land use, transportation, and design policies. Various land use, community design, conservation, and circulation policies noted below, "Relevant Policies and Actions of the 2030 General Plan," would promote increased GHG efficiency during buildout of the 2030 General Plan. Due to the nature of general plan policy, the fact that the County's policies and actions would be incorporated in a variety of land use changes and County actions over a long period of time, and because the County cannot predict the degree to which policies and programs would be incorporated into projects during buildout of the General Plan, the precise effect of these policies and actions is not knowable as of the writing of this document.

The main influences available to the County on community-generated GHG emissions relate to land use planning, transportation planning, and community design approaches that reduce local VMT. The County, through the 2030 General Plan, can influence density, land use mix, community design, the balance between jobs and housing, and other important factors that affect travel behavior. Mobile-source GHG emissions (vehicle trips) would be the primary source of GHG emissions attributable to implementation of the 2030 General Plan. Transportation is also the largest source of GHG emissions in California, representing approximately 36.5% of annual CO_2 emissions generated in the state (ARB 2008). VMT is the most direct indicator of CO_2 emissions for most land use plans and development projects, and the 2030 General Plan is no exception. CO_2 emissions are the best indicator of total GHG emissions for most types of development projects and plans. Buildout of the 2030 General Plan is estimated to add approximately 6,726,862 new VMT per day to the region. These trips would be the primary source of GHG emissions attributable to General Plan implementation.

However, the estimated VMT associated with General Plan implementation is likely overestimated. This is because the VMT calculations were derived from a traditional travel demand model, which does not consider a number of factors incorporated into this General Plan that tend to reduce VMT including: shifts in travel to transit; bike, and walk modes; improved local street connectivity; and mixed-use projects with "balanced land uses." Policies and actions in the 2030 General Plan related to travel demand management, increased density, shared parking, and workforce housing would also reduce VMT. Extensive research has shown that the above planning techniques can reduce vehicle trips, increase non-automobile mode share, reduce trip lengths, and reduce VMT. Increases in density and development intensity are correlated with reduced vehicle travel (on a per unit or square foot basis). Mixing complementary land uses in a neighborhood setting increases internal trip "capture." Many different urban design approaches are used to increase transportation connectivity and provide high-quality

bicycle, pedestrian, and transit facilities, increasing the attractiveness of non-automobile modes of travel. Access to regional destinations involves the strategic placement of land uses near regional attractions. A wide array of 2030 General Plan policies and actions incorporate these concepts. The 2030 General Plan includes extensive policies and actions that will reduce VMT, but they are difficult to quantify with the travel demand model that was developed to support this General Plan and EIR. As such, the VMT analysis in this section is conservative because it does not account for local, neighborhood, and communitywide VMT reduction benefits. VMT attributable to the 2030 General Plan is also overestimated since some of the trips included in VMT estimates would originate or end in Marysville or Wheatland. Half of the VMT for trips originating or ending outside the County were deducted from the VMT estimates for this General Plan and EIR, but the same approach was not applied to trips that originate or end in the cities but pass through unincorporated County areas.

Construction-related activities are anticipated to result in a maximum of 172,698 tons of CO_2 per year if the 2030 General Plan were to fully buildout by 2030. Because operational emissions would occur for the lifetime of the built out community, these sources (rather than those attributable to construction) are much more important to understanding the General Plan's overall GHG emissions profile. Full buildout of the 2030 General Plan is estimated to generate an additional 1,518,426 of CO_2e operational emissions annually, including agricultural operations, considering GHG emissions associated both with existing development plus new development (see Table 4.7-3).

Table 4.7-3
Summary of Modeled Emissions of Greenhouse Gases

Source	Emissions (MT/yr CO_2e)
Existing, On-the-Ground Development	
Electricity	85,182
Natural Gas	43,634
Wastewater	2,687
Waste	18,579
Transportation	343,868
Agriculture	103,235
Total Unmitigated Operational Emissions	**597,185**
Total Unmitigated Operational Emissions without Agriculture	**493,950**
GHG Emissions Efficiency of Existing Development	**7.14 MT/capita/yr, 5.62 MT/SP/yr**
Full Buildout of the 2030 General Plan	
Electricity	116,916
Natural Gas	52,087
Wastewater	7,719
Waste	53,365
Transportation	1,199,820
Agriculture	88,520
Total Unmitigated Operational Emissions	**1,518,426**
Total Unmitigated Operational Emissions without Agriculture	**1,429,906**
Total Operational GHG Emissions Efficiency at buildout of 2030 General Plan	**8.47 MT/capita/yr, 5.67 MT/SP/yr**
GHG Emissions Efficiency of New Land Use under 2030 General Plan (2030 GP Buildout Minus Existing)	**9.40 MT/capita/yr, 5.69 MT/SP/yr**

Notes: CO_2e = carbon dioxide equivalent; GP = 2030 General Plan; MT/yr = metric tons per year; SP = service population; "-" = no data. Emissions modeled using the URBEMIS 2007 (Version 9.2.4) computer model, based on trip generation rates obtained from the analysis prepared for the General Plan. Trip generation rates and VMT estimates provided by Fehr & Peers 2010. Refer to Appendix C for detailed assumptions and modeling output files.
*Totals may not add exactly due to rounding.
Source: Modeled by AECOM in 2010

According to the AB 32 Scoping Plan, to achieve the goal stated in AB 32 of 1990 emission levels by the year 2020, while accounting for population growth between now and 2020, California would need to reduce projected emissions by approximately 28%. To achieve 1990 emissions levels by 2020 from the emissions sectors related to land use (e.g., transportation, electricity, natural gas, waste, and wastewater) would need to be reduced by approximately 24% compared to ARB estimates for 2020 under "business-as-usual" assumptions. As noted previously, in order to achieve 1990 emissions levels, both new and existing development in California will need to be more GHG efficient.

The 2030 General Plan could accommodate as many as 100,000 new residents and up to 65,000 new local jobs in unincorporated areas of the County at full buildout. If the *new* operational CO_2e emissions were distributed evenly on a per-unit basis, the 2030 General Plan would generate GHG emissions at an average rate of approximately 9.40 MT of CO_2e per person per year. New development under the 2030 General Plan is estimated to generate 5.69 MT of CO_2e per SP per year. As noted earlier, since the transportation analysis for the General Plan did not account for the many VMT-reducing elements of 2030 General Plan policies and actions, and since the transportation analysis did not subtract out any VMT for trips originating or ending in Wheatland or Marysville, the GHG emissions estimates presented here are conservative (erring on the high side).

Considering GHG emissions from both existing and new development, the annual operational CO2e emissions per capita at full buildout of the General Plan is estimated to be 8.47 MT of CO_2e per year per capita and 5.67 MT of CO_2e per year per SP.

Based on these estimate, land use change accommodated under the 2030 General Plan would not meet the GHG-per-SP benchmarks derived for the year 2020 (between 4.36 and 4.6 MT of CO_2e per SP). Therefore, new development accommodated under the 2030 General Plan would not accomplish Yuba County's "fair share" of GHG emissions reductions needed statewide to achieve California's 2020 GHG target established under AB 32. As noted previously, achieving 1990 emissions by 2020, as mandated under AB 32, is a goal tied to global GHG concentrations needed to stabilize GHG concentrations in the atmosphere at a level that would prevent dangerous human interference with the global climate. It is not yet clear what the net GHG emissions would actually be under the buildout of the 2030 General Plan, given the uncertainty of future legislative and regulatory actions. Market, demographic, and economic factors could affect the density and mix of land uses actually constructed. Therefore, actual CO_2 emission rates, as computed on a project-by-project basis, could vary. Many factors that would be used to calculate the net change in GHG emissions attributable to individual projects under the 2030 General Plan are either unknown at this time or outside the control of the County.

The impact is considered **significant**. In addition, the County cannot demonstrate at this time that the 2030 General Plan would meet the more aggressive GHG reduction goals described in the Governor's Executive Order S-3-05 for 2050.

Relevant Policies and Actions of the 2030 General Plan

As noted, the 2030 General Plan includes a variety of narrative and diagrammatic policies, as well as actions aimed at addressing GHG emissions. The proposed Land Use Diagram supports and enables the implementation of these proposed policies and actions. Specifically, the 2030 General Plan balances residential land uses with destination land uses and provides the opportunity for local employment (although the County cannot guarantee that a majority of residents will work locally). The General Plan calls for development of complete neighborhoods and diversity of land uses, including destination land uses within close proximity to residents. This type of development would enable residents to have easy access to daily amenities by walking, bicycle, or public transit instead of the need for a car. Table 4.7-4 summarizes the climate change-related policies and actions contained in the 2030 General Plan.

Table 4.7-4 2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County		
Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Community Development		
Policy CD1.1	Urban and suburban development in the unincorporated County not related to agriculture, mining, or some natural or cultural resource-oriented purpose is prohibited in valley areas outside the Valley Growth Boundary.	Transportation
Policy CD1.3	Urban land use designation/s will not be assigned within the Planning Reserve area unless the County determines that these lands are needed to fulfill either the County's regional housing needs allocation or accommodate job-generating developments needed to achieve the County's jobs-housing goals.	Transportation
Policy CD1.4	New developments proposing urban land uses will not be approved within the Planning Reserve area until the County assigns the appropriate General Plan land use designation/s and approves zoning and development standards consistent with the Community Development Element.	Transportation
Policy CD2.1	The County will encourage infill development and redevelopment of vacant and underutilized properties within existing unincorporated communities.	Transportation
Policy CD2.2	The County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment.	Transportation
Policy CD2.3	The County will support reinvestment in Linda and Olivehurst that increases local shopping, job, and housing opportunities.	Transportation
Policy CD2.4	The County will maintain flexible development standards, infrastructure standards, and impact fees that promote infill development and promote lot consolidation for redevelopment, where necessary.	Transportation
Policy CD2.5	The County will prioritize public spending on infrastructure within infill areas in order to induce reinvestment, remove blight, and reduce poverty.	Transportation
Policy CD2.6	The County will support public/private partnerships that encourage infill development consistent with the General Plan.	Transportation
Policy CD2.7	The County will actively promote vacant industrial sites in the Linda and Olivehurst areas for employment development.	Transportation
Policy CD4.1	Employment and Commercial Centers shall be developed in coordination with local transit provider/s to ensure proper placement and design of transit stops and accommodate public transit for both employees and patrons.	Transportation
Policy CD4.2	Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.	Transportation
Policy CD4.6	The County will encourage development of workforce housing around Employment Centers that is ancillary to, and supportive of employment-generating land uses.	Transportation
Policy CD5.1	Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks, and other civic uses.	Transportation
Policy CD5.2	Valley Neighborhoods should provide compact development patterns that conserve land and place homes in close proximity to destinations.	Transportation
Policy CD5.3	Valley residential development in existing and planned Valley Neighborhoods should provide for the full range of housing types and densities.	Transportation
Policy CD5.4	New developments within the Valley Growth Boundary shall provide a highly connected travel network that supports all local travel modes.	Transportation
Policy CD5.5	The County's development standards will allow narrow lots, narrow driveways, alleyway access, zero lot line housing, and other compact housing configurations in Valley Neighborhoods.	Transportation

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Action CD5.1	Update Zoning Ordinance. Following the General Plan adoption, the County will review and revise the Zoning Ordinance, consistent with the updated General Plan. As a part of the revisions, the County will ensure the updated Zoning Ordinance accommodates compact growth patterns, consistent with the General Plan, while continuing to provide for the public health and safety. The County will consider provisions in the Zoning Ordinance that focus more on building form, function, and placement and the relationship of buildings to the public realm (streets, plazas, public parks, etc.) and less on regulating specific land uses. To ensure land use compatibility while also encouraging a mix of land uses, the County will base performance standards in the Zoning Ordinance on General Plan policies for such topics as noise, vibration, light, glare, air pollution, and traffic. Such performance standards could be used to ensure compatibility in situations where nonresidential uses are located close to residential uses.	Transportation
Policy CD6.1	Valley Neighborhoods shall contain one or more Neighborhood Center, where medium- and higher-density residences, neighborhood commercial, and public services are focused.	Transportation
Policy CD6.2	Neighborhood Center activities, retail, and services should serve roughly 3,000 to 5,000 existing or planned residents in the surrounding neighborhood.	Transportation
Policy CD6.3	Neighborhood Centers should be developed on approximately 4 to 15 acres of land and sized according to the needs of the surrounding neighborhood.	Transportation
Policy CD6.5	Neighborhood Centers should provide for a pedestrian-friendly mix of uses and a range of housing types to meet the needs of the County's diverse households.	Transportation
Policy CD6.6	Neighborhood Centers shall be located and designed to provide convenient and safe bicycle, pedestrian, and transit access to and from surrounding neighborhoods.	Transportation
Policy CD7.3	The County will encourage – through entitlement, streamlining, flexibility in development standards, fee structures, and other incentives – infill development in vacant or underutilized sections of Mixed-Use Corridors.	Transportation
Policy CD7.4	Developments in Mixed-Use Corridors should have pedestrian-friendly property frontages with buildings built close to the street frontage.	Transportation
Policy CD7.6	The County will promote public plazas, outdoor dining, awnings, large windows, and other elements along property frontages that enhance pedestrian attractiveness and activity in Mixed-Use Corridors.	Transportation
Policy CD7.7	The County will seek funding to add drainage, bicycle, pedestrian, and transit facilities along Mixed-Use Corridors.	Transportation
Policy CD7.8	The County will seek funding to add street trees along Mixed-Use Corridors, particularly in areas that would shade sidewalks, parking areas, transit stops, and any public gathering places.	Transportation
Action CD7.1	Corridor Planning. The County will seek funding to support corridor planning efforts for McGowan Parkway, Olivehurst Avenue, Lindhurst Avenue, North Beale Road, the northern section of Feather River Boulevard, and surrounding areas. The County may also identify other Mixed-Use Corridors to address during buildout of the General Plan. Mixed-Use Corridor Plans would be designed to (Exhibit Community Development-10): Guide mixed-use, infill development consistent with the applicable land use designation/s and zoning district/s; Identify multimodal transportation improvements to support development; Describe public infrastructure and facilities needed to encourage private investment; and Identify incentives and streamlining that would induce private investment in these areas. The Plans would be structured to provide a mix and density of development with adequate transportation facilities such that walking, bicycling, or taking transit is viable for daily needs of the residents of surrounding neighborhoods. The County will pursue grant funding and regional partnerships to revitalize its Mixed-Use Corridors. The County will plan and fund infrastructure designed to support increased density and intensity around future transit stops, near planned bicycle/pedestrian facilities, and in other targeted reinvestment areas.	Transportation

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Policy CD8.1	New developments should be designed to provide direct and convenient access to nearby parks, trails, commercial and public services, and transit stops.	Transportation
Policy CD8.2	Valley Neighborhood developments and residential portions of Employment Village areas shall provide relatively short block lengths and continuity of streets in order to facilitate convenient pedestrian, bicycle, and vehicle movement (Exhibit Community Development-11).[3]	Transportation
Policy CD8.3	New cul-de-sacs are allowed within the Valley Neighborhoods and residential portions of Employment Village areas where they would not create a barrier for pedestrian and bicycle access or circulation between homes and destinations.	Transportation
Policy CD8.11	Multi-family housing developments should be well connected to the surrounding neighborhood. Parking areas should be sized and broken up to avoid creating barriers to pedestrian and bicycle circulation.	Transportation
Policy CD9.6	The County will support planning for Rural Centers in foothill and mountain portions of the County that would provide a variety of activities and services needed or anticipated to be needed by the local population, including, but not limited to medical and educational services (Exhibit Community Development-12).	Transportation
Policy CD9.9	Rural Communities can provide clusters of housing constructed at the upper end of allowable density ranges in approved Rural Center plans, but in general should provide larger lots at the edges of the community that transition to the surrounding open space areas.	Transportation
Policy CD9.11	Rural Centers should be focused on County collector and arterial roads and highways, and particularly at "crossroads" locations central to the surrounding rural communities.	Transportation
Policy CD10.1	The County will encourage development that improves the balance between local jobs and housing, including new commercial, industrial, home-based businesses, business incubators, and other development that generates net revenues for the County and produces local jobs.	Transportation
Policy CD10.3	The County will phase growth with efficient infrastructure planning in order to keep fees as low as possible and coordinate with service providers to ensure the savings of this efficient infrastructure planning is passed on to occupants of employment-generating developments.	Energy
Policy CD10.5	The County will support community and specific planning efforts following General Plan adoption that identify employment-generating uses and the housing and infrastructure that is needed to support the local workforce.	Transportation
Policy CD10.6	The County will encourage residential development that is priced, sized, and located to serve the needs of local employers and workers.	Transportation
Policy CD10.7	Large residential development projects should be phased or timed to occur concurrently with development projects that will provide employment in the County.	Transportation
Action CD10.2	Land Use Monitoring. The County will monitor progress toward the jobs-housing goal and, as necessary, amend the General Plan, Zoning Ordinance, Specific Plans, Community Plans, and other relevant plans and codes, as appropriate. Any amendments shall address imbalances between job and population growth, and may include revisions to allowable land uses or development standards, financial/regulatory incentives to accelerate the development of job-generating uses, and other actions.	Transportation
Policy CD11.6	The County will encourage rail spur development and increased use of local railroad routes for freight and passenger service, especially along the Highway 65 corridor and areas designated Employment Village.	Transportation
Policy CD13.1	Growth should be phased from developed areas and existing infrastructure outward in a logical, efficient manner, and in a way that avoids premature conversion of agricultural lands, changes in rural character, and unnecessary loss of other land-based natural resources.	Transportation
Policy CD13.2	The County will not induce growth by supporting the provision of services or infrastructure in areas that are not planned for development.	Transportation

[3] "Block length," for the purpose of this policy, is the distance between four-way intersection centerlines. Block length can also be measured along the one leg of a three-way intersection that terminates into a cross street.

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Policy CD13.3	Unincorporated County development between present and 2030 will be focused within the Valley Growth Boundary and Rural Communities.	
Policy CD13.4	For areas designated Planning Reserve, allowable land use will be regulated according to the underlying land use designation unless the Board of Supervisors approves the following findings: • The subject project or plan proposed within the Planning Reserve Area promotes the goals and is consistent with the polices of the Community Development Element, Natural Resources Element, Housing Element, and Public Health & Safety Element of the General Plan; and • A Specific Plan or master plan meeting the County's requirements has been prepared; and • The subject project or plan is planned and designed to improve the match between local jobs and the local labor force, consistent with the goal of accommodating 0.8 total local jobs for every member of the labor force; and • The subject project or plan proposed within the Planning Reserve Area will directly provide substantial basic (exporting) employment development potential; or • The subject project or plan proposed within the Planning Reserve Area will construct water, wastewater, and drainage infrastructure that will serve future employment development, with the understanding that project applicants are repaid on a fair-share basis.	Transportation
Policy CD14.6	The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.	Transportation
Policy CD14.7	The County will support joint-use facilities, shared maintenance, and projects with other local service agencies and districts that are coordinated to provide enhanced public levels of service and/or long-term cost savings.	Transportation
Policy CD14.8	The County will support and encourage joint-use parks for school and community use, joint-use parks for recreational and drainage conveyance and detention, joint-use libraries for school and community use, and other appropriate joint-use facilities.	Transportation
Policy CD15.4	The County's impact fees will be revised to consider cost efficiencies associated with compact, mixed-use, age- or income-restricted, and infill development.	Transportation
Policy CD15.5	New developments should incorporate water conservation techniques to reduce water demand, including the use of reclaimed water for landscaping and irrigation.	Water Conservation
Policy CD15.9	The County will require that new developments include safe and convenient access to nearby schools and work with the local school districts to ensure safe access.	Transportation
Policy CD15.10	The County will locate its own administrative facilities in downtown areas, along Mixed-Use corridors, or in Neighborhood Centers, whenever possible.	Transportation
Action CD15.1	Revise Impact Fees. The County will have prepared a Nexus Fee Study following the 2030 General Plan update to support revised development impact fees. One focus of this updated effort would be to ensure that compact development that makes efficient use of land has lower fees, where this approach to development is shown to have lower costs. The County will consider basing fees on an equivalent dwelling unit (EDU) basis, a per-capita basis, or per-acre basis, depending on the type of fee. The per-EDU, per-capita, or per-acre approach would be considered rather than presenting fees on a flat-rate, per unit basis. Different types of dwelling units have different demands for services and different associated costs. The County will also consider reduced fees for infill development that has access to existing infrastructure with adequate capacity to serve that development.	Transportation
Policy CD16.1	The County will maintain roadway levels of service that recognize differences between urban and rural environments and consideration of other community character, economic, and environmental policies of the County.	Transportation
Policy CD16.5	Where a new development would exceed the County's Level of Service policies, applicants shall first consider feasible revisions to the proposed development that would increase connectivity, enhance bicycle/pedestrian/transit access, provide additional travel demand management measures, and/or provide other revisions that would help to meet LOS standards by reducing vehicle miles traveled on roads exceeding the target LOS, prior to consideration of adding capacity to roadways and intersections.	Transportation

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Policy CD16.10	The County will not use traffic level of service policies to analyze and mitigate CEQA impacts of new developments, but instead will use its level of service policies to assess fair-share funding of transportation facilities necessary to serve new projects.	Transportation
Policy CD16.11	The County will analyze and mitigate transportation impacts in CEQA documents according to their relative increase in vehicular travel demand.	Transportation
Action CD16.2	Traffic Impact Fees. Following adoption of the General Plan, the County will revise its Countywide Traffic Mitigation Fee Program based on a nexus study meeting state law requirements. The County will continue to require specific plans to identify funding for transportation facilities needed to serve development within each subject specific plan. The countywide program would focus on improvements needed to serve development within the unincorporated County not within a specific plan. The County's impact fee programs will be sensitive to elements of proposed projects that reduce their per-unit and per-employee trip generation rates. Centrally located projects, projects with high densities and employment intensities, located in areas with good transit service, located in mixed-use environments, for example, would be expected to have lower per-unit fees. Commercial traffic impact fees should take into account whether the commercial project is designed to attract drivers or oriented toward providing services to neighborhoods.	Transportation
Policy CD17.1	New developments shall be designed to facilitate safe and convenient travel by pedestrians, bicyclists, transit users, and drivers.	Transportation
Policy CD17.2	The County will coordinate approval of projects and plans with local transit providers to ensure that transit service is provided for work, shopping, school, and other types of trips within the Valley Growth Boundary.	Transportation
Policy CD17.3	The County will coordinate with Yuba College to provide housing and commercial services within walking and bicycling distance of the Linda campus and plan for convenient and safe pedestrian, bicycle, and transit options for students attending Yuba College.	Transportation
Policy CD17.4	The County will provide incentives to businesses that sponsor transit routes or create their own travel demand management programs, which may include, but are not limited, to streamlined permitting, and reduction of parking requirements.	Transportation
Policy CD17.5	The County will review and condition large employment generating projects, defined as new projects that could accommodate more than 50 full-time equivalent employees, according to the provisions of a County Travel Demand Management Ordinance.	Transportation
Policy CD17.6	New developments and specific plans shall analyze and mitigate related to increased travel demand, as feasible and consistent with County General Plan policy.	Transportation
Action CD17.1	Travel Demand Management Ordinance. The County will develop a Travel Demand Management ordinance that provides options for large employers in mitigating the traffic related impacts of proposed projects. Reducing travel demand could be used in-lieu of providing traffic impact fees, where demonstrated to reduce trips, particularly during peak demand periods. Options for reducing travel demand in this ordinance could include, but are not limited to providing incentives for employees to commute via transit, bicycle, on foot, or by carpool, rather than the single-occupant vehicular commute. The County will periodically review the approaches provided under this ordinance to ensure their effectiveness and make revisions, as appropriate. The County may promote, as a part of this Ordinance, membership in the Yuba-Sutter Transportation Management Association.	Transportation
Policy CD18.8	The County will coordinate with Caltrans to implement context-sensitive improvements to State facilities that are keyed to local multi-modal transportation needs.	Transportation
Policy CD19.1	The County will promote mixed-use, infill development and redevelopment in order to reduce dependence on the private automobile.	Transportation
Policy CD19.2	New developments and specific plans with a buildout population greater than 2,000 dwelling units shall designate Neighborhood Centers, consistent with the policies of the General Plan.	Transportation
Policy CD19.3	New developments in the Valley Growth Boundary should provide focused nodes of population and employment density around transit stops, planned in coordination with Yuba-Sutter Transit, with a target of 9 units per acre of residential development, 20 employees per acre for nonresidential development, or 20 or more persons plus employees per acre for mixed-use development within ¼ mile of existing and planned transit stops.	Transportation

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Policy CD19.4	The County will plan its investments and condition new developments to provide pedestrian, bicycle, and transit facilities designed to provide multi-modal connections within neighborhoods, within unincorporated communities, and between communities and cities in the County.	Transportation
Policy CD19.5	New developments shall include the construction or pro-rata funding of transportation infrastructure that may include a connected and integrated system of bicycle and pedestrian facilities, consistent with County standards.	Transportation
Policy CD19.6	New development shall accommodate safe and frequent crosswalks along roadways, with more frequent crossings in areas expected to have higher pedestrian traffic.	Transportation
Policy CD19.7	The County's improvement standards and street classification system will be designed to accommodate the full range of locally available travel modes. Intersection dimensions and turning radii should be minimized in areas where high pedestrian and bicycle activity is expected.	Transportation
Policy CD19.8	The County will seek funding for and, as feasible, install traffic-calming measures, such as planted medians, landscaped planter strips, landscaped traffic circles, and other designs in areas with excessive or high-speed traffic, as appropriate. The County will not support street closures, half closures, or other measures that limit connectivity as a way to calm traffic.	Transportation
Policy CD19.9	Secure bicycle parking shall be located at or near public buildings, business districts, parks, playgrounds, shopping centers, schools, transit terminals, bus stops, and other bicycle traffic generators.	Transportation
Policy CD19.10	The County will collaborate with Yuba-Sutter Transit, other regional transit providers, and local businesses to: • Ensure transit stops are accommodated in the context of new development and redevelopment; • Encourage local businesses to collaborate with transit providers to develop transit incentive programs for local employees; • Plan for and condition projects to provide for park-and-ride facilities; and • Support paratransit and other forms of transit service for those unable to use conventional transit service.	Transportation
Policy CD19.11	The County will support feasible opportunities to provide intra-county and inter-county passenger rail service for Yuba County residents and businesses, including support for expansion of AMTRAK passenger service and transit, along with bicycle, and pedestrian-friendly development around rail and transit stations.	Transportation
Policy CD19.12	The County will encourage programs that facilitate County employees' use of pedestrian, bicycle, and transit facilities to reach the workplace.	Transportation
Action CD19.1	Pedestrian and Bikeway Master Planning. The County will collaborate with other agencies during buildout of the General Plan to maintain pedestrian/bicycle master plans designed to meet growth needs. The master plan updates should be designed to improve bicycle and pedestrian connections between each city in the County, cities in adjacent counties, and each unincorporated community. Bicycle/pedestrian master planning efforts should be coordinated with local irrigation districts, special districts, and public agencies with easements and rights-of-way, the railroad, other property owners, and other agencies and interested parties to acquire and/or use existing easements and rights-of-way for development of off-street pedestrian and bicycle pathways. Master plans will focus on improving links between neighborhoods and important destinations, such as schools, shops, commercial services, public services, and recreational opportunities.	Transportation
Action CD19.2	Revise Development Code & Improvement Standards. Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards, where necessary, to encourage a high level of pedestrian, bicycle, and transit-friendliness in new development. In general, the County will consider revisions to its codes and standards to reduce road widths, reduce the amount of paved areas of roadways and parking lots, reduce pedestrian crossing distances, and reduce curb radii at intersections, in consideration of pedestrian and bicycle comfort and safety, while also considering turning templates needed for service and emergency vehicles. The County will consider revisions to its codes and standards that require wider sidewalks in areas where higher pedestrian and bicycle activity would be anticipated.	Transportation

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Action CD19.3	Transit Planning & Facilities Expansion. During buildout of the General Plan, the County will proactively pursue funding for transit designed to meet the needs of Yuba County children, seniors, persons with disabilities, low-income, and all transit-dependent persons. The County will pursue air quality mitigation efforts that fund transit in coordination with Feather River Air Quality Management District and other interested agencies and nonprofits. The County will plan for, and implement expansion of transit service, as funding is available. Transit projects will be included in the County's capital improvements planning, as appropriate. The County will examine the need for intermodal transit transfer facilities as the transportation system expands. The County will proactively coordinate with Yuba-Sutter Transit on grant funding opportunities to fund transit expansion, consistent with the General Plan, with a focus on transit in areas with at least 20 persons plus employees per acre.	Transportation
Policy CD20.1	New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided, wherever feasible.	Transportation
Policy CD20.2	New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.	Transportation
Policy CD20.3	New developments shall connect with adjacent roadways and stubbed roads and shall provide frequent stubbed roadways in coordination with future planned development areas. Plans and projects shall connect to adjacent planned development areas and adjacent roadways at a minimum of 600-foot intervals. This minimum interval does not apply to development areas that are adjacent to existing or planned future limited-access highways, freeways, or expressways, or other areas where physical constraints would make this level of connectivity infeasible.	Transportation
Policy CD20.5	Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.	Transportation
Policy CD20.7	The County will seek frequent street and trail connections between new residential developments and established Valley Neighborhoods.	Transportation
Policy CD21.1	New development projects should be designed to minimize the amount of on-site land required to meet parking, internal circulation, and delivery/loading needs.	Transportation
Policy CD21.2	New developments shall break up any proposed surface parking with landscaping and provide pedestrian routes from parking areas to building entrances.	Transportation
Policy CD21.3	Land uses with different parking needs that peak at different times of the day shall be encouraged to maximize opportunities to share parking.	Transportation
Policy CD21.6	The County's parking standards will be reduced or eliminated for infill and affordable housing projects in consideration of shared parking, on-street parking, and reduced travel demand attributable to these types of projects.	Transportation
Policy CD21.7	The County will consider adopting parking maximums in areas where high pedestrian and pedestrian activity is expected and in areas around transit stops.	Transportation
Action CD21.1	Revise Development Code & Improvement Standards. Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards. The County will consider reduced surface parking in areas where pedestrians and bicyclists are concentrated and where transit service is planned. The County will consider strategies to optimize parking supply through shared parking; use of on-street parking to meet demand of nearby properties; and other strategies. The County will consider establishing parking maximums, as well as minimums, as part of the development code and improvement standard revisions.	Transportation
Policy NR1.5	New developments shall provide for open space corridors consistent with the County's Parks Master Plan, and as needed to provide naturalized drainage and bike/pedestrian connections to nearby neighborhoods and destinations.	Transportation
Policy NR1.8	Local parks should be located central to the neighborhood they serve and designed to encourage pedestrian and bicycle access.	Transportation

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Policy NR1.12	The County will incorporate trails along canals, transmission lines, and other easements and rights-of-way, where feasible, including trail development atop levees, so long as flood protection facilities are not adversely affected.	Transportation
Policy NR1.13	The County will communicate with neighboring counties and cities to explore connections with Yuba County's planned regional trail system.	Transportation
Policy NR1.14	Recreational facilities and open space should be designed to use recycled materials and green building techniques, minimize surface runoff, reduce water demand, provide habitat for native species, reduce the need for ongoing maintenance, and incorporate universal access principles to facilitate use by people of all ages and abilities. Active portions of parks that may generate light and noise should be located and designed to promote compatibility with the surrounding neighborhood.	Energy and Material Efficiency
Policy NR2.1	The County will encourage urban greening projects that are designed to: Improve air and water quality; Protect natural resources; Increase the attractiveness of affordable housing and existing developed areas; Promote public health and the development of a healthy community; Increase access to safe areas for physical activity; Improve access to healthy, local food sources; Improve and use existing infrastructure systems and other community resources; Promote public health; Reduce greenhouse gas emissions; and Adapt to future climate conditions.	Carbon Sequestration
Policy NR2.2	The County will encourage for urban greening projects to be developed in underserved areas of Linda and Olivehurst, such as tree planting and maintenance, natural drainage systems improvements, ecological restoration, park development, renewable energy development and energy conservation projects, trail development, community gardens, and other appropriate project types.	Carbon Sequestration
Policy NR2.3	Urban greening projects shall be designed to improve access to recreational spaces for existing residents and improve existing developed areas of the County.	Carbon Sequestration
Policy NR2.4	Urban greening projects can also be designed to integrate open spaces in existing developed areas with open spaces designed to connect with planned development areas.	Carbon Sequestration
Policy NR2.5	The County will coordinate with local and regional agencies on the identification of potential urban greening projects.	Carbon Sequestration
Policy NR2.6	The County will invite local service agencies, residents, property owners, and other organizations and individuals to contribute ideas for local urban greening projects.	Carbon Sequestration
Action NR2.1	Urban Greening Projects. During this General Plan time horizon, the County will identify and seek funding for urban greening projects that provide for a range of benefits, such as: Reducing greenhouse gas emissions; Decreasing air and water pollution; Reducing the consumption of natural resources and energy; Increasing the reliability of local water supplies, and/or Increasing adaptability to climate change. The County's urban greening projects will be designed to promote infill development and social equity, protect environmental resources, including agricultural lands, and encourage efficient development patterns. The County will coordinate with local school districts, local utility providers, cities, and other local and regional agencies, where appropriate, for Urban Greening Projects of mutual benefit. Urban greening projects will be identified that improve air and water quality, increase the attractiveness and availability of affordable housing, improve infrastructure systems or their function, and promote public health.	Carbon Sequestration
Policy NR4.8	The County will support carbon offset programs within Yuba County's forests, according to established protocols, and will support local carbon sequestration programs as an important aspect of local and regional greenhouse gas reduction requirements.	Carbon Sequestration
Action NR4.1	Carbon Sequestration Programs. The County will proactively coordinate with local and regional agencies to investigate the feasibility of setting up a carbon offset program. The County will coordinate with the U.S. Forest Service, Bureau of Land Management, Yuba County Water Agency and water districts, and private timber companies and nonprofits to encourage local development of state-certified carbon sequestration projects. The County should encourage local application of regional greenhouse gas (GHG) offset fees, if feasible. If the County implements a GHG mitigation program tied to its GHG policies, local GHG fees collected for projects that do not achieve GHG efficiency policies on a per-capita, per-employee, or per-service population basis should be able to mitigate impacts using local, verified, GHG offset programs, if feasible.	Carbon Sequestration
Policy NR7.1	New developments shall address energy conservation in landscaping methods, materials, and design.	Energy

Table 4.7-4
2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County

Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Policy NR7.2	New buildings shall meet state standards for energy efficiency and should provide for renewable energy development and use, to the greatest extent feasible.	Energy
Policy NR7.3	New developments should be designed to take advantage of passive or natural summer cooling and winter solar access.	Energy
Policy NR7.4	New developments should provide street and lot orientation and lot dimensions that facilitate the use of solar energy.	Energy
Policy NR7.5	New developments within the Valley Growth Boundary should orient the majority of buildings so that the longer axis of the building, also known as the ridge line, is oriented east-to-west, in order to maximize the potential for passive solar heating in the winter and to minimize heat gain from the afternoon summer sun.	Energy
Policy NR7.6	New developments should consider energy conservation in building-site orientation and construction, with articulated windows, roof overhangs, appropriate insulation materials and techniques, and other architectural features that improve passive interior climate control.	Energy
Policy NR7.7	Shade trees or other appropriate plantings should be used in new developments to protect buildings from unwanted solar gain in summer months. Using deciduous trees on the southern side of structures is encouraged to allow cooling in the summer and solar gain in winter. Short front setbacks are encouraged to allow shade trees planted in the public right-of-way to provide summertime shading.	Energy
Policy NR7.8	New buildings should emphasize passive and natural lighting systems in architectural design to conserve electricity.	Energy
Policy NR7.9	New developments proposing parking lots shall incorporate shade trees or shade structures to provide a minimum of 50 percent shading (at maturity, where trees are used).	Energy
Policy NR7.10	The County will seek regional, state, and federal funding for making energy efficiency improvements to existing buildings on a voluntary basis with interested property owners and improvements to the public realm.	Energy
Policy NR7.11	The County and Yuba County Water Agency should explore opportunities related to future access to hydroelectric power, energy provision, strategic use of local energy resources for employment development, and other programs that have dual environmental-economic benefits.	Energy
Policy NR7.12	The County will encourage financing programs designed to facilitate the installation of renewable energy systems.	Energy
Action NR7.13	Energy Efficiency Retrofits in Buildings and the Public Realm. The County will proactively track and apply for regional, state, and federal funding to be used for energy efficiency improvements and renewable energy systems installation in existing buildings and the public realm (public rights-of-way, etc.). The County will seek regional, state, and federal funding for energy efficient systems, energy-efficient appliances, insulation, energy-efficient doors and windows, and other improvements. Any programs to assist property owners with making energy efficiency improvements to their buildings or other property shall be on a voluntary basis with interested property owners only. The County will update zoning and development standards, as well as permit processes to encourage the use of renewable energy systems that are sited and designed to ensure public safety and reduce aviation conflicts.	Energy
Policy NR12.4	The County will encourage the use of recycled water and water from irrigation districts that is not treated to urban standards for outdoor irrigation, toilet flushing, fire hydrants; commercial and industrial processes, carwashes, concrete batching, laundromats; dust control; parks, golf courses, and other landscaped areas, and other appropriate water-intensive uses.	Water Conservation
Policy NR12.5	New developments shall use climate appropriate landscaping in parks and open space, landscaping within new rights of way, yards, and other appropriate spaces, to the maximum extent feasible.	Water Conservation
Policy NR12.6	New developments shall include water conservation technologies such as low-flow toilets, efficient clothes washers, and efficient water-using industrial equipment, in accordance with state law.	Water Conservation
Policy HS3.17	New developments shall limit construction of new impervious surfaces, such as parking lots, travelways, vehicle waiting areas, and vehicle loading areas to the minimum amount needed to implement the subject project.	Water Conservation

Table 4.7-4 2030 General Plan Policies and Actions Designed to Reduce Greenhouse Gas Emissions in Yuba County		
Element and Goal, Policy, or Action		Affected GHG Emissions Sector
Policy HS5.1	The County will guide land use change, direct investments, and apply its fees and programs to encourage more GHG-efficient development patterns, as feasible.	General GHG Reduction
Policy HS5.2	The County's regulations, investments, and fee programs should be structured to reduce net greenhouse gas emissions for new development in the unincorporated County consistent with the level of emissions needed per-capita or per service population to achieve the County's fair share of the state's emissions mandate.	General GHG Reduction
Policy HS5.3	Since transportation is the largest sector contributing to GHG emissions both locally and at the statewide level, the County will prioritize land use/transportation projects that manage travel demand by increasing housing/employment density, placing homes in closer proximity with destinations, increasing accessibility to transit, or otherwise decreasing vehicle miles traveled (per household, per capita, and/ or per employee).	General GHG Reduction
Policy HS5.4	The County will use an efficiency-based threshold (net emissions per-capita + employee) to evaluate proposed urban land uses, such as homes, retail, office, and other uses where the location, density, and mix of uses in the project area is important to the level of greenhouse gas generation.	Energy
Policy HS5.8	The County will work collaboratively with state agencies and public/private utility providers charged with regulating building efficiency, mobile-source emissions controls, energy sources and uses, and other components of GHG emissions to create the opportunity for more GHG-efficient local development.	General GHG Reduction
Policy HS5.9	The County will actively pursue funding for GHG-efficient transportation systems and other needed infrastructure, building and public realm energy efficiency upgrades, renewable energy production, land use-transportation modeling, and other projects to reduce local greenhouse gas emissions.	Transportation, Energy
Policy HS5.12	Rural Community Plans should address strategies to diversify the local land use mix to meet more resident needs within each community, increase energy efficiency, shorten trips, and encourage non-vehicular travel, as feasible, to increase greenhouse gas efficiency.	Transportation, Energy
Action HS5.1	Greenhouse Gas Reduction Plan. The County will prepare and adopt a plan to reduce greenhouse gas (GHG) emissions. *[Please see the 2030 General Plan Public Health & Safety Element, under separate cover, for additional information on the County's Greenhouse Gas Reduction Plan.]*	General GHG Reduction
Action HS5.2	Assist Farmers to Reduce Greenhouse Gas Emissions. The County will meet with local agricultural groups, such as the Yuba-Sutter Farm Bureau, UC Davis Extension representatives, local organic farming groups, and other public and private groups representing farmers to discuss the best available programs to reduce agricultural greenhouse gas (GHG) emissions. Methods to be explored may include, but are not limited to reduction strategies from changes in crop management, animal wastes, energy use, crop residue burning, livestock management, soil management, solid waste management, fertilizers, and off-road equipment. The County will seek funding, through carbon offsets or other sources, to provide incentives that encourage farmers to participate in consensus GHG reduction programs for agriculture.	Area Source GHG Emissions

Conclusion

Implementation of the policies and actions summarized in Table 4.7-4 that are designed to reduce GHG emissions, would promote consistency with the mandates of AB 32 (i.e., reduce statewide GHG emissions to 1990 levels by 2020). Many of the County's policies will have significant and positive impacts on VMT reduction, which translates to large reductions in GHG emissions, while some will make a smaller contribution. For example, measures to promote carbon sequestration through development of forest area requires at least 10 years to start sequestering appreciable amounts of carbon and after 10 or so years each tree will at most sequester about the same amount of CO_2 emitted from a passenger car traveling 10 miles (USDA 2007).

The County recognizes in the 2030 General Plan that transportation is the largest source of GHGs in Yuba County and California, and that land use and transportation planning to reduce vehicular travel is needed to achieve GHG reduction goals, especially since, given the predominance of transportation as a source of GHG emissions, improvements in building energy efficiency and other GHG emissions sectors can be overwhelmed by increases in

VMT. The County also recognizes that effectiveness of a local GHG reduction program for a growing area like Yuba County is contingent on development patterns and transportation systems that reduce emissions from the transportation sector. The County also recognizes that it does not have control over vehicle emissions technology or fuel economy standards, which are factors in calculating greenhouse gas emissions from the transportation sector. The County does not regulate energy generation, renewable energy targets, or other components of electricity related emissions. However, the County can exercise substantial influence on VMT through its land use entitlement authority. Through land use entitlement authority, the County can have a great influence on development patterns, community design, transportation facilities planning, and other factors that closely related to VMT. Land use/transportation strategies to reduce VMT and GHGs are a primary focus of the 2030 General Plan.

Mitigation Measure

However, because of the large amount of development and potential for simultaneous construction of multiple sites, taken together with modeled emissions, implementation of the 2030 General Plan could result in, or substantially contribute to GHG emissions. Because the 2030 General Plan would generate higher GHG emissions per service population than is needed at the state level to achieve the AB 32 target, and since a substantial quantity of GHG emissions would be generated though buildout of the General Plan, this impact is considered a **cumulatively considerable** contribution to the **significant cumulative impact** of global climate change.

As noted, the framework of the 2030 General Plan is designed to achieve GHG reduction, among other related social, economic, and environmental objectives of the County. All feasible mitigation is included as policy or as an action in the 2030 General Plan. No additional feasible mitigation is available. The impact is considered **significant and unavoidable**.

IMPACT 4.7-2 Impacts of Climate Change on Yuba County. *Climate change is expected to result in a variety of effects that could potentially impact Yuba County: alterations to agricultural production; changes to terrestrial and aquatic ecosystems; increased energy demand; decreased water supply; increased risk of flooding; and increased frequency and intensity of wildfire. Substantial negative effects on residents, resources, structures, and the economy could result. This impact would be potentially significant.*

The 2030 General Plan would result in the release of GHGs into the atmosphere. As discussed previously in this chapter, human-induced increases in GHG concentrations in the atmosphere has led to increased global average temperatures (global warming) through the intensification of the greenhouse effect, and associated changes in local, regional, and global average climatic conditions.

Although there is a strong scientific consensus that global climate change is occurring and has been influenced by human activity, there is less certainty as to the timing, severity, and potential consequences of the climate phenomena. Scientists have identified several ways in which global climate change could alter the physical environment in California (IPCC, 2007, CEC, 2006b, and DWR, 2006a). As also discussed previously under the heading “Environmental Setting,” these include:

- increased average temperatures;
- modifications to the timing, amount, and form (rain vs. snow) of precipitation;
- changes in the timing and amount of runoff;
- reduced water supply;
- deterioration of water quality; and
- elevated sea level.

The changes listed above may translate into a variety of other issues and concerns that may affect Yuba County, such as, but not limited to:

- reduced agricultural production as a result of changing temperatures and precipitation patterns;

- changes in the composition, health, and distribution of terrestrial and aquatic ecosystems, particularly associated with increased saltwater intrusion into the Sacramento-San Joaquin River Delta;
- reduced hydroelectric energy production caused by changes in the timing and volume of runoff;
- increase in vector borne diseases;
- increased energy demand associated with increased temperatures;
- water supply conflict;
- increased risk of flooding and wildfire associated with changes to precipitation patterns; and,
- inundation of low lying areas associated with rising sea levels.

The types of impacts associated with climate change identified above are projected to occur to some degree with or without the project. However, the potential for increased development in Yuba County would result in the siting of more receptors in areas sensitive to certain impacts, such as flood and wildfire hazards, and water quality and availability issues. Policies identified throughout the various elements of the 2030 General Plan.

In addition, the General Plan Land Use and Open Space Diagrams supports aspects of impact avoidance and adaptation. For example, proposed development is minimized along watercourses and low-lying areas. The land use designations in the 2030 General Plan would minimize conflicts or incompatibilities associated with foreseeable climate change impacts of the next 90 years. However, land use conflicts may still occur. In addition, increased water supply conflicts in Yuba County would exist even without adoption of the 2030 General Plan as a result of climate change, but could be exacerbated further with increased water demand under the 2030 General Plan. Thus, the foreseeable impacts of climate change are **potentially significant**.

Due to the uncertainty in timing and extent of projected impacts to the physical environment as a result of climate change, it remains uncertain whether significant impacts have been substantially avoided or abated under a future condition, which is not fully knowable.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan Update contains many goals, policies, and programs which have the potential to aid the County's adaptation to climate change (reducing energy demand, reducing flood potential, decreasing wildfire risk, ensuring adequate water supply, increasing water conservation, preserving important habitat and open space areas). These policies and actions are shown in Table 4.7-4 and included throughout the 2030 General Plan.

Conclusion

Implementation of the policies and actions proposed in the 2030 General Plan would reduce the extent and severity of climate change–associated impacts by proactively planning for changes in climate and conditions, and providing methods for adapting to these changes. In addition, projections for the above discussed potential impacts of climate change on Yuba County occur over a time span far beyond the buildout of the 2030 General Plan. The 2030 General Plan proposes all feasible mitigation to respond and adapt to foreseeable impacts of climate change in the form of General Plan policies and actions, but the efficacy of the County's policy approach for dealing with the local effects of climate change is unknowable at this time. For the purposes of this EIR, the impact is considered **significant and unavoidable**.

4.8 HAZARDS AND HAZARDOUS MATERIALS

This section contains a discussion of human-caused hazards that may potentially have an effect on Yuba County during implementation of the 2030 General Plan, including hazardous and toxic materials (such as facilities regulated by the U.S. Environmental Protection Agency [EPA], hazardous waste and disposal, toxic releases, leaking underground storage tanks [USTs], and brownfields). This section also addresses potential hazards associated with airports and land use conflicts with areas around airports. This section describes the existing conditions of these hazards and analyzes impacts related to these hazards with respect to the 2030 General Plan.

Service levels by fire personnel and other emergency responders are addressed in Section 4.10, "Public Services and Recreation" of this DEIR. Potential hazards and associated impacts related to toxic air contaminant emissions are discussed in Section 4.3, "Air Quality"; potential impacts from geologic hazards are discussed in Section 4.6, "Geology, Soils, Mineral Resources, and Paleontological Resources"; and potential public health impacts and hazards related to groundwater and flooding are discussed in Section 4.9, "Hydrology and Water Quality."

4.8.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Hazardous Materials Handling

The principal federal agency charged with regulating the generation, transport, and disposal of hazardous substances is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by EPA. Under the RCRA, EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances.[1]

The Federal Emergency Planning and Community Right to Know Act of 1986 imposes hazardous-materials planning requirements to help protect local communities in the event of accidental release of hazardous substances.

Hazardous Materials Transport

The U.S. Department of Transportation (USDOT) regulates transportation of hazardous materials between states. The USDOT Federal Railroad Administration (FRA) enforces the Hazardous Materials Regulations, which are promulgated by the Pipeline and Hazardous Materials Safety Administration for rail transportation. These regulations include requirements that railroads and other transporters of hazardous materials, as well as shippers, have and adhere to security plans and also train their employees involved in offering, accepting, or transporting hazardous materials on both safety and security matters.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) created a trust fund to provide broad federal authority for releases or threatened release of hazardous substances that could endanger public health or the environment.

[1] The RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments of 1984, which specifically prohibits the use of certain techniques for the disposal of various hazardous substances. EPA has delegated much of the RCRA requirements to the California Department of Toxic Substances Control (DTSC).

Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 created the Superfund hazardous substance cleanup program (CERCLA, P.L. 96-510, enacted December 11, 1980). This program was expanded and reauthorized by the Superfund Amendments and Reauthorization Act of 1986 (SARA, P.L. 99-499). The EPA compiles a list of major known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. This list is known as the National Priorities List and the subject locations are commonly referred to as "Superfund sites." There are no Superfund sites located in Yuba County (EPA 2010).

Worker Safety Requirements

The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances and addressing other potential hazards. OSHA also establishes criteria by which each state can implement its own health and safety program.

Federal Aviation Regulations Part 77 (FAR)

Federal Aviation Regulations (FAR) Title 14, Part 77, establishes standards and notification requirements for objects affecting navigable airspace associated with construction on or near airports. Notification serves as the basis for:

- evaluating the effect of the construction or alteration on operating procedures,
- determining the potential hazardous effect of the proposed construction on air navigation,
- identifying mitigating measures to enhance safe air navigation, and
- charting of new objects.

Notification allows Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance, thus preventing or minimizing the adverse impacts on the safe and efficient use of navigable airspace. Any person or organization who intends to sponsor any of the following construction or alterations must notify FAA:

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
    - within 20,000 feet of a public-use or military airport that exceeds a 100:1 surface from any point on the runway of each airport, with at least one runway more than 3,200 feet;
    - within 10,000 feet of a public-use or military airport that exceeds a 50:1 surface from any point on the runway of each airport, with its longest runway no more than 3,200 feet; or
    - within 5,000 feet of a public-use heliport that exceeds a 25:1 surface.
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards.
- When requested by FAA.
- Any construction or alteration located on a public-use airport or heliport, regardless of height or location.

National Fire Plan

The National Fire Plan, finalized in August 2001 by the U.S. Department of the Interior and U.S. Department of Agriculture, outlines a comprehensive, coordinated, 10-year strategy for the management of wildland fire risk, hazardous fuels, and ecosystem restoration and rehabilitation on federal and adjacent state, tribal, and private forestlands and rangelands in the United States. This approach recognizes fire as part of the ecosystem; and focuses on long-term hazardous fuels reduction, integrated vegetation management, and firefighting strategies. An implementation plan of the National Fire Plan, completed in May 2002, designates general responsibilities for federal, state, and local agencies to reduce fire risk and to improve fire protection.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

State regulations that govern hazardous materials are equal to, or more stringent than federal regulations. California has been granted primary oversight responsibility by EPA to administer and enforce hazardous waste management programs. California Department of Toxic Control Substances (DTSC), the State Water Resources Control Board (SWRCB), and the Integrated Waste Management Act also regulate the generation of hazardous materials. State regulations have detailed planning and management requirements to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Key elements of state laws pertaining to hazardous wastes are highlighted below, with references to California Code sections for those interested in more detail.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act (Section 25500 et seq. of the California Health and Safety Code), also known as the Business Plan Act, defines hazardous materials as raw or unused materials that are part of a process or manufacturing step. Although hazardous materials are not strictly defined as hazardous wastes, the health concerns involved are similar. In order to avoid public and environmental health risk, facility descriptions, materials inventories, and emergency response plans are generally required for operations involving hazardous materials and wastes, as described below.

Hazardous Waste Control Act

The Hazardous Waste Control Act is implemented by regulations contained in Title 26 of the California Code of Regulations that describe requirements for the proper management of hazardous wastes. This legislation created the state hazardous waste management program, which is similar to, but more stringent than the federal RCRA program. The program includes hazardous waste criteria for:

- identification and classification;
- generation and transportation;
- design and permitting of recycling, treatment, storage, and disposal facilities;
- treatment standards;
- operation of facilities and staff training; and
- closure of facilities and liability requirements.

The Hazardous Waste Control Act and Title 26 regulations list more than 800 potentially hazardous materials and establish criteria for identifying, packaging, and disposal. Under these regulations, the generator of hazardous waste must complete a manifest that accompanies the material from the point of generation to transportation to the ultimate disposal location, with copies of the manifest filed with DTSC.

Hazardous Materials Transport

The California Highway Patrol (CHP), the California Department of Transportation (Caltrans), and DTSC have the responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies.

Regulations governing hazardous materials transport are included in the California Vehicle Code (Title 13 of the California Code of Regulations, the State Fire Marshal Regulations (Title 19 of the California Code of Regulations), and Title 22 of the California Code of Regulations.

Transport of hazardous materials can only be conducted under a registration issued by DTSC. ID numbers are issued by DTSC or USEPA for tracking hazardous waste transporters and treatment, storage, and disposal facilities for hazardous materials. The ID number is used to identify the hazardous waste handler and to track waste from point of origin to final disposal. All material transport takes place under manifest, and compliance with Title 22 requires that transporters take immediate action to protect human health and the environment in the event of spill, release, or mishap.

Emergency Services Act

Under the Emergency Services Act (California Government Code Section 8850 et seq.), the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Quick response to incidents involving hazardous materials or hazardous waste is a key part of the plan. The Governor's Office of Emergency Services administers the plan, coordinating the responses of other agencies, including EPA, the CHP, Regional Water Quality Control Boards (RWQCBs), air quality management districts, and county disaster response offices.

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

Proposition 65, a California ballot measure passed in November 1986, requires the governor to publish at least annually a list of chemicals known to the state to cause cancer or reproductive toxicity. Proposition 65 is administered under the California Office of Environmental Health Hazard Assessment.

Hazardous Waste and Substances Sites List

The Hazardous Waste and Substances Sites List (Cortese list) is a planning document required by California Government Code Section 65962.5. DTSC is required to compile the list, which consists of potentially contaminated sites in the state. It is used by state agencies, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites.

Underground Storage Tank Program

The California Department of Public Health (formerly the California Department of Health Services) and the State Water Resources Control Board (SWRCB) list hazardous sites of Underground Storage Tanks (USTs) listed for remedial action because of unauthorized release of toxic substances. Leak prevention, cleanup, enforcement, and tank testing certification are the elements of the UST Program, which is administered by the SWRCB.

California Integrated Waste Management Act

This act requires the development and implementation of household hazardous-waste disposal plans. The California Integrated Waste Management Board (CIWMB) oversees compliance with this act and enforces operational plans for solid waste facilities.

Unified Program

The California Environmental Protection Agency (Cal/EPA) grants to qualifying local agencies oversight and permitting responsibility for certain state programs pertaining to hazardous waste and hazardous materials. This is achieved through the Unified Program, created by state legislation in 1993 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following emergency and management programs:

- hazardous materials release response plans and inventories (business plans);
- California Accidental Release Prevention Program (CalARP);
- UST Program;
- Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control and Countermeasure plans;
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (tiered permitting) Programs; and
- California Uniform Fire Code: Hazardous material management plans and hazardous material inventory statements.

Cleanup of Contaminated Sites

The State of California has a number of different regulatory structures governing cleanup of contaminated sites. Many of these programs are regulated by DTSC, including RCRA corrective actions, State Superfund sites, brownfields programs, and voluntary cleanups. The State Water Resources Control Board (through RWQCBs and some local agencies) regulates releases with the potential to affect water resources under programs, such as the Leaking Underground Storage Tanks program and the Spills, Leaks, Investigations, and Cleanups program. Regulatory authority for these programs may be delegated by the federal government (as with RCRA corrective actions directed by DTSC) or may be found in the California Health and Safety Code. These regulations vary in their specifics, but in general require the reporting, investigation, and remediation of sites where releases of hazardous materials have occurred, followed by appropriate disposal of any hazardous materials. These programs govern a range of pollutants, such as solvents, petroleum fuels, heavy metals, and pesticides) in surface water, groundwater, soil, sediment, and air.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for protecting and maintaining privately owned wildlands, providing emergency services, and responding to wildland fires throughout California. Most of the foothills and mountainous areas of the County are within the State Responsibility Area (SRA) of CAL FIRE, with the exception of national forest lands and Beale Air Force Base (AFB), which are both within Federal Responsibility Areas. Lands within valley portions of the county are under the jurisdiction of local fire protection agencies.

As required by Senate Bill (SB) 81 (1981) and SB 1916 (1982), CAL FIRE established a fire hazard severity classification system, which assesses the fire potential for wildland based on: fuel load, climate, and topography. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Many homes in the High and Very High fire hazard areas within Yuba County, as identified by CAL FIRE, are considered to be without adequate protection from wildland or structural fires. Exhibit 4.8-1 shows the fire hazard areas for Yuba County.

California Fire Plan

The California Board of Forestry and CAL FIRE have developed the *California Fire Plan: A Framework for Minimizing Costs & Losses from Wildland Fires*. According to the California Fire Plan, the primary purpose of wildland fire protection in California is to protect the wide range of assets found on California wildlands. These assets include life and safety, timber, range, recreation, water and watershed, plants, air quality, cultural and historic resources, unique scenic areas, buildings, and wildlife, plants, and ecosystem.

The California Fire Plan defines a level-of-service measurement, considers assets at risk, incorporates the cooperative interdependent relationships of wildland fire protection providers, provides for involvement by public stakeholders, and creates a fiscal framework for policy analysis. A key product of the California Fire Plan is the development of wildfire safety zones that are designed to reduce risks to citizens and firefighters from future large wildfires. The California Fire Plan defines a process for measuring the level of service provided by the fire protection system for wildland fire. This measure can be used to assess the CAL FIRE's ability to provide an equal level of protection to sites with similar land types, as required by California Public Resources Code (PRC) Section 4130. This measure is the percentage of fires that are successfully controlled before unacceptable costs are incurred. Knowledge of levels of service will help define the risk to wildfire damage faced by public and private assets in the wildlands.

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency (Cal EMA), which coordinates the responses of other Yuba County Office of Emergency Services.

School Site Selection and Approval Guide

The California Department of Education has developed the *School Site Selection and Approval Guide* to help school districts select appropriate locations for educational institutions. The guide contains 12 screening and ranking criteria, including: safety, location, topography, cost, utilities, and public acceptance.

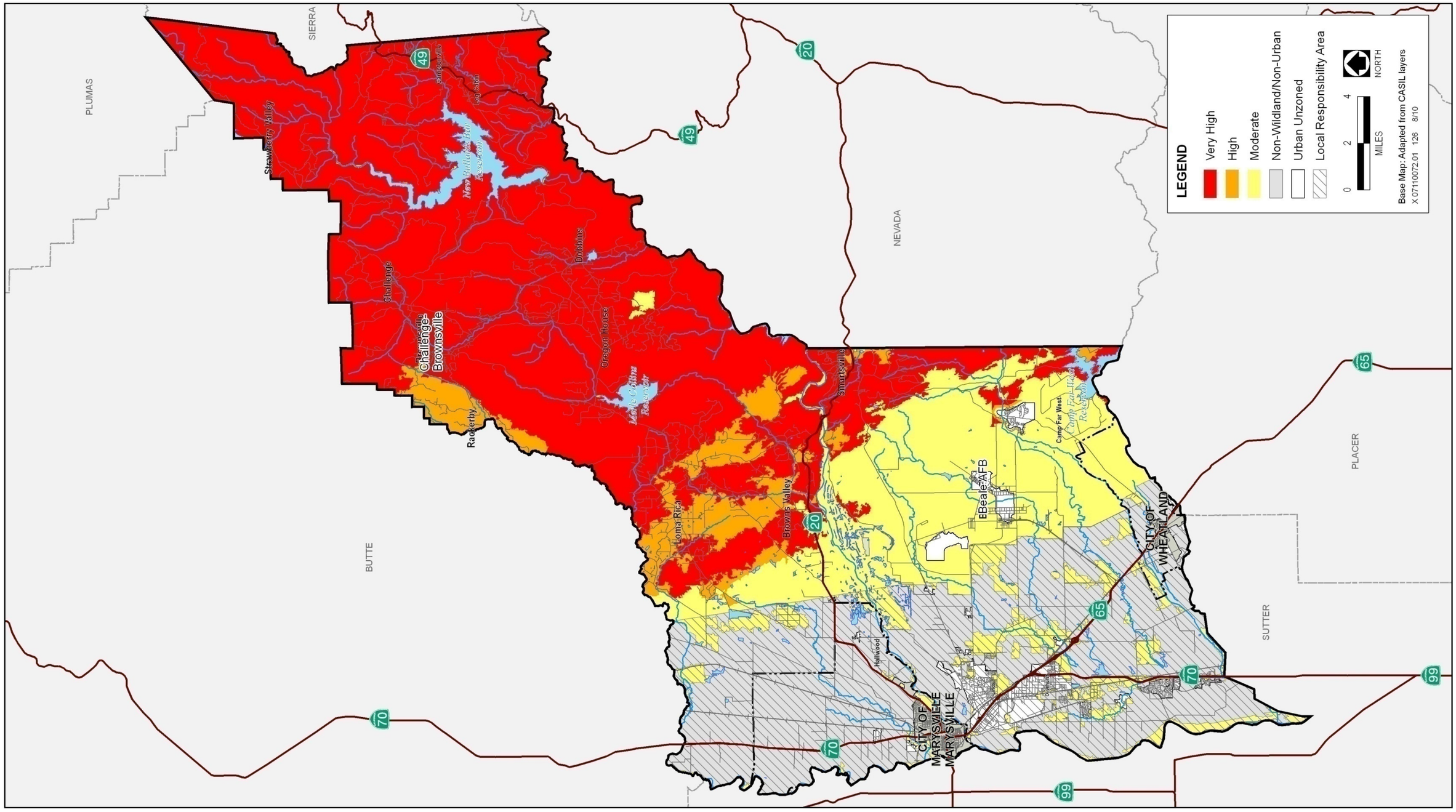
REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Nevada-Yuba-Placer 2005 Fire Management Plan

This fire management plan is a product of the implementation of the California Fire Plan (described above under "State Plans, Policies, Regulations, and Laws"). The California Fire Plan uses geographical information data validated by experienced fire managers to assess fire fuel hazards and risks and then design and implement mitigating activities to manage fire risk. The 2005 *Nevada-Yuba-Placer Unit Fire Management Plan* provides background information, fuels and fire data, proposed projects, and individual battalion reports outlining mitigating activities commonly carried out each year.

California Fire Code

The California Fire Code gives local fire chiefs broad powers to regulate uses in fire hazard areas, such as imposing bans on outdoor burning and requirements to clear brush and other fuels around structures. Fire chiefs may also close areas to the public during periods of extreme fire danger and prohibit smoking, bonfires, and the use of motorcycles and other vehicles. Persons violating these restrictions may be charged the costs of fighting fires they cause. These powers, held by the County, and delegated to the fire districts complement similar powers of CAL FIRE in its areas of responsibility.



Source: CAL FIRE 2008

Fire Hazard Severity Zones **Exhibit 4.8-1**

The 2007 California Code of Regulations, Title 24, Part 9, based on the 2006 edition of the International Fire Code, published by the International Code Council, has been adopted and incorporated by reference into Chapter 10.05.075 of the Yuba County Ordinance Code.

Firebreaks

Section 10.15.015 of the Yuba County Code requires that every person who owns, controls, rents, or operates any cabin, tent, residence, store, hotel, or other structure within unincorporated Yuba County maintain a 30-foot firebreak or clearing free of inflammable materials and keep the roof free from an accumulation of needles, leaves, or other debris . Where a natural firebreak has been declared to exist by a federal or state forestry officer, no further clearing of inflammable material is required. If the property line is closer to the buildings than 30 feet, the inflammable material need only be cleared to the property line. The Code also requires removing all the brush, flammable vegetation, or combustible growth that is located within 100 feet from the building or structure, or to the property line, or at a greater distance if required by State law, or local ordinance, rule, or regulation.

Fire Mitigation

Chapter 10.35 of the Yuba County Code establishes the Fire District Improvement Fee. Developers of projects within the county that would contribute to an increase in the potential fire danger are to pay this fee when building permits are issued, to mitigate fire risk. The fee is used to finance improvements and equipment for fire protection. Each developer pays a fair share of the total cost of the improvements and equipment.

Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan

Yuba County has had a number of devastating disasters. Fire-related disasters have cost taxpayers millions of dollars in recovery costs. The Yuba County Multi-Hazard Mitigation Plan is designed to mitigate against the hazards that affect Yuba County, protecting the lives and property of all of its citizens, as well as reducing the costs to the County. The plan is approved by all jurisdictions within the county, helping to ensure that all citizens will be protected in the case of a disaster. The planning process provides a forum for collaboration, establishing the groundwork for future interagency cooperation in pre-disaster planning and emergency response. The scope of work submitted for plan development is one of the most ambitious in the nation and resulted in the largest planning grant awarded during the 2003–2004 fiscal year.

Yuba County Emergency Operations Plan (EOP)

The County of Yuba Emergency Operations Plan describes the County's emergency management organization, the Standardized Emergency Management Systems (SEMS), the National Incident Management System (NIMS), roles, responsibilities, and administrative practices. Included in the plan are standard operating procedures (SOPs), memorandums of understanding (MOUs), resource manuals, and agreements that support the plan. The plan is used as a functional guide and strategic planning resource for both the County and its incorporated cities. It is meant to reflect the most recent advances in emergency operations at the local, state, and federal levels. The most significant change to date has been the adoption of the NIMS at all levels of government, and the plan has been updated accordingly.

Yuba County Division of Environmental Health

The Yuba County Division of Environmental Health, housed within the Community Development and Services Agency, is tasked with the permitting, inspection, and regulation of county food facilities, septic systems, wells, hotels, public water systems, solid waste facilities, swimming pools, spas, USTs, above ground storage tanks, and hazardous materials business plans, as well as the enforcement of federal, state, and local laws pertaining to hazardous materials and wastes. The Division also serves the County's Certified Unified Program Agency (CUPA) to ensure public and environmental safety.

Yuba County Subdivision Ordinance Section 11.15.681

Section 11.15.681, Water Systems, states that all water distribution systems within the limits of existing water district boundaries shall be constructed to the standards required by that district, and "all subdivisions requiring a final map which lie within the boundaries of a water serving entity shall provide adequate water supply for each lot in the subdivision and for fire protection to the area through mains and hydrants."

Beale Air Force Base Land Use Plans

To provide direction related to land use at and near to Beale AFB, a Joint Land Use Study (JLUS), a Comprehensive Land Use Plan (CLUP), Air Installation Compatible Use Zone (AICUZ), and Environmental Noise Management Program (ENMP) were prepared. The following provides information related to these documents.

- The Beale AFB JLUS for Beale AFB was completed in May 2008, and an Air Installation Compatible Use Zone (AICUZ) Study was completed in 2005. The AICUZ identifies constraints from flight operations, including noise zones and accident potential zones. These documents encourage collaborative planning efforts and consultation between local governments and the AFB when making land use decisions to ensure compatibility and safety.

- The Beale AFB CLUP was prepared by the Airport Land Use Commission (ALUC) under the authority of the Airport Land Use Commission Law, Chapter 4, Article 3.5, California Public Utilities Code. The Sacramento Area Council of Governments (SACOG) serves as the ALUC for the Yuba County Airport. SACOG has been designated the ALUC for Sutter, Yolo, Sacramento, and Yuba counties. The ALUC works closely with cities, counties, and airport operators (Yuba County 2007c).

  The ALUC has no jurisdiction over the operation of the airport. The purpose of the ALUC is to protect public health, safety, and welfare through the adoption of land use standards that minimize public exposure to safety hazards and excessive levels of noise. The ALUC is designed to prevent the encroachment of incompatible land uses around public-use airports, thereby preserving the utility of these airports into the future.

  The CLUP is the key to implementation of the ALUC plan. It provides the land use compatibility guidelines on which compatibility of land uses are determined. It also establishes the planning boundaries around the airport. Planning boundaries are established for height, noise, and safety. Following adoption of the CLUP by the ALUC, state law requires that the local jurisdiction take action to assure that its land use regulations are consistent with the provisions of the CLUP.

- The purpose of an AICUZ program is to promote compatible land development in areas subject to aircraft noise and accident potential in the vicinity of used to achieve compatible uses of public and private lands in the vicinity of military airfield by controlling incompatible development through local actions. Air Force AICUZ Land Use Guidelines reflect land use recommendations for clear zones, accident potential zones, and noise zones. The U.S. Department of Defense in responsible for preparing AICUZ documents.

  The 2005 Beale AFB AICUZ study was prepared as an update to the 1982 AICUZ to address changes in aircraft types and numbers of operations at the installation. The 2005 AICUZ analyzes noise contours, vertical obstructions, and accident potential zones.

4.8.2 ENVIRONMENTAL SETTING

Human-caused hazards that may potentially have an effect on Yuba County include hazardous and toxic materials (including EPA-regulated facilities, hazardous waste and disposal, toxic releases, leaking underground storage tanks, and brownfields, which are sites with known or potential environmental pollution), and hazards associated

with dam inundation, canal and levee conditions, military installations, airports, and highways. Hazards associated with flooding, dam inundation, and levee failure are addressed in Section 4.9, "Hydrology and Water Quality."

DEFINITIONS OF TERMS

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined by federal regulations as "a substance or material that … is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

> *Hazardous material means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.*

Hazardous wastes are defined in California Health and Safety Code Section 25141(b) as wastes that:

> *…because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [, or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.*

LAND USES AND CONDITIONS IN THE COUNTY

Known Hazardous Materials Sites

The County maintains a list of sites that are known to generate a store hazardous waste. There are approximately 425 such known sites. In addition, the Yuba County Final Hazard Mitigation Plan, completed in 2007, identified 361 permitted hazardous materials sites, which include sites that use hazardous waste products, such oils, solvents, petroleum products, fertilizers, pesticides, solvents, welding gases, manufacturing/processing chemicals, and products that are flammable, toxic, reactive, or corrosive in significant quantities.[2]

In 2007, when the General Plan Background Report was prepared, there were five active hazardous materials sites listed in the DTSC Envirostor database. This database is a compilation of Federal Superfund sites, State Response sites, Voluntary Cleanup sites, and School sites. Two of the listed DTSC sites were located within Beale AFB, one is located at the former Camp Beale base, another is for arsenic removal at a school site in Plumas Lake, and the final site is a property in Olivehurst used for automobile repair and dismantling. To ensure the most up-to-date information, another search of the DTSC Envirostor database was performed in July of 2010. This subsequent database search resulted in addition active sites that had been added to the database since 2007. Table 4.8-1 provides information related to existing DTSC-listed sites.

[2] "Significant quantity" of hazardous waste is defined by the Yuba County Final Hazard Mitigation Plan, 2007, as the use or storage of a minimum of 55 gallons, 500 pounds, or 200 cubic feet at any one time.

Table 4.8-1 DTSC-Listed Sites within Yuba County				
Site Name	Site Type[3]	Status	Address	City
Ames Road	State Response	Certified	7237Ames Road	Marysville
Beale AFB	Hazardous Waste – Non-Operating	None Listed	Beale AFB	Beale AFB
Beale AFB	Corrective Action	None Listed	Beale AFB	Beale AFB
Beale AFB IR/MMRP	State Response	Active	Beale AFB	Beale AFB
Camp Beale –MMRP	State Response	Active	Beale AFB	Beale AFB
Cecil's Radiator Shop	Voluntary Cleanup	Certified	5174 Lindhurst Avenue	Olivehurst
Cletus Rogers	State Response	Certified	Marysville Laporo Road/Blue Gravel Road	Browns Valley
Keystone Automotive	Voluntary Cleanup	Active – Land Use Restriction	5066 and 5079 Powerline Road	Olivehurst
Linda Elementary School	School Cleanup	Active	6180 Dunning Avenue	Linda
Loma Rica Elementary School	School Cleanup	Active	5150 Fruitland Road	Loma Rica
PG&E, Marysville	Voluntary Cleanup	Certified/Operation and Maintenance – Land Use Restriction	4th and A Streets	Marysville
Plumas Ranch Elementary School	School Cleanup	Inactive – Action Required	Feather River Boulevard/River Oaks Boulevard	Plumas Lake
Yuba Gardens Intermediate School	School Cleanup	Active	1964 11th Avenue	Olivehurst

Notes: AFB=Air Force Base; DTSC=Department of Toxic Substances Control; MMRP=Mitigation, Monitoring, and Reporting Program; SE=southeast.
Source: DTSC 2010.

Leaking Underground Storage Tanks

USTs often store hazardous materials, such as gasoline, diesel fuel, oils, and other chemicals. A leaking tank could result in the release of hazardous chemicals into soil and potentially into groundwater, risking exposure to

[3] State Response: confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. Non-Operating: A Treatment, Storage, Disposal or Transfer Facility with no operating hazardous waste management unit(s). Corrective Action: Investigation and cleanup activities at hazardous waste facilities that either were eligible for a permit or received a permit are called "corrective action." These facilities treated stored, disposed and/or transferred hazardous waste. Voluntary Cleanup: sites with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for DTSC's costs. School: Identifies proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. School sites are further defined as "Cleanup" (remedial actions occurred) or "Evaluation" (no remedial action occurred) based on completed activities.

the public if contaminated soil or groundwater is unearthed. The RWQCB Division of Water Quality manages an UST Program to protect the public and environment health from releases of petroleum and other hazardous substances from leaky tanks. The RWQCB provides assistance to local agencies enforcing UST requirements.

USTs are subject to monitoring for leakage. Most tanks are double walled and are equipped with electronic systems to detect leaks. USTs are permitted, inspected, and monitored by the County Division of Environmental Health. The RWQCB's GeoTracker website is an online database that tracks regulatory data on leaking USTs. The SRWCB's GeoTracker database listed 186 known UST sites in Yuba County, including 114 leaking UST (LUST) sites as of March 2010.

Military Facilities

As mentioned above, four of the known hazardous materials listed in the DTSC's Envirostor database are associated with past and current military operations associated with Beale AFB and Camp Beale, a former Army base located in the southeastern portion of the Yuba County and western Nevada County, adjacent to the existing Beale AFB. Prior to its abandonment, Camp Beale contained six bombing ranges, consisting of 1,200 acres each, where ammunition for artillery, bombs, or other large weapons were tested. Although the US Army swept the grounds following base abandonment to ensure that no unexploded ordnance remained, there may be unknown unexploded ordnance missed by recovery attempts by the Army. The properties are under investigation, as listed in the DTSC Envirostor database.

Significant hazardous materials contamination has been found within the Beale AFB grounds, and the base was placed on the EPA National Priorities List in 1989 as a Superfund project. Four Operable Units, including landfills, disposal areas or spill sites, firefighting training areas, tank storage areas, and groundwater contamination and potentially contaminated surface water bodies, have been identified on the base. The primary environmental contaminants found at Beale AFB include solvents, metals, and fuels. Cleanup and mitigation for contamination is ongoing, but public access to the base, particularly known contamination sites, is limited, in order to minimize risk of exposure to the public. Soil and groundwater are contaminated with volatile organic compounds from use of solvents (e.g., trichloroethene), hydrocarbons, polychlorinated biphenyls and dioxin have been detected on site. Groundwater flows generally toward the west from Beale AFB. There are at least 10 uncontrolled groundwater contamination plumes, two of which extend off-base (DTSC 2010).

TRANSPORTATION OF HAZARDOUS AND TOXIC MATERIALS

Hazards associated with transport of hazardous cargo exist in Yuba County because several major, transportation routes pass through the area, including both highways and railroads, and a wide range of hazardous cargo is transported along these routes. Transportation infrastructure in Yuba County consists of State Routes (SRs) 20, 49, 65, and 70, as well as two freight railroads operated by Union Pacific Railroad (UPRR). SR 70 branches off of SR 99 south of Yuba County. These corridors receive heavy truck and trailer traffic and are the major arteries for delivery of propane gas and other volatile materials to the area. The state highway transportation corridors provide timber–logging trucks access to the railways and logging mills, increasing the incidents for hazardous materials spills and transportation accidents. Hazardous cargo transported out of, into, and through Yuba County includes flammable liquids, corrosive materials, compressed and/or poisonous gases, explosives, flammable solids, and irritating materials, including underground pipelines adjacent to railroad lines in the County.

Some potential exists for spills of flammable liquids after a highway or railway mishap, subsequent ignition of the liberated contents, and possible human casualties and/or property damage in the path of the burning liquid. Burning spillage can also drain into nearby streams and drainage facilities (e.g., roadside storm drains), spreading fire and increasing the area of contamination. Such an event would pose a major threat to the safety of the public and the environment.

WILDFIRE RISK AREAS

The combination of weather, topography, and vegetation in the unincorporated rural portions of the county creates hazardous fire conditions. Because most fires are started by humans rather than natural causes, the areas at greatest risk of fire are generally those where people live, work, recreate, or travel. Fires have the potential to spread very rapidly with dry vegetation, rugged topography, and during fire season, the hot, dry winds. The climate in the county provides extensive dry vegetation susceptible to these risks during the dry season, generally summer and early fall. If not contained, these fires can potentially result in loss of life and property.

The fire hazard is greatest in the foothill and mountain areas and lowest in cultivated fields within valley portions of the county. Under CAL FIRE's Fire Hazard Severity Rating System, nearly all foothill and mountain areas are designated as having significant fire hazards. Fire hazard severity zones have been mapped for the entire state, and are shown for Yuba County Exhibit 4.8-1. Fire hazard severity zones are intended to show relatively homogeneous areas and are based on fuel loading, slope, fire weather, and other factors. The lower grassland areas adjacent to the valley floor have a rating of "moderate." Adjacent lands to the east, typically characterized by steeper slopes and chaparral, carry a "high" rating, while more heavily forested lands adjacent to and within the Plumas and Tahoe National Forests have a "very high" rating. In general, the areas in the county designated as high and very high fire hazard areas coincide with the regions under the jurisdiction of CAL FIRE and the U.S. Forest Service.

Urban Fire Risks

Although grasslands fires are a concern within urban areas, the greatest fire threat in these areas is associated with structural fires. Structural fires are a greater threat to life and property than wildland fires, since people spend much of their time in homes, offices, stores, and factories. Most structural fires are caused by negligence, although arson is also a cause.

Communities in the foothill areas of the County are at a relatively greater risk, because not only do they share the fire hazards of urban structures (i.e., human negligence, electrical fires, arson), but they are located in areas more subject to wildland fires. Many of Yuba County's residential communities—Smartville, Dobbins, Browns Valley, Loma Rica, Brownsville, and Challenge—are located in areas of high and very high fire hazard. Many recreational destinations in Yuba County are in high and very high fire hazard areas and are reached via roads that wind through dry foothill and mountain vegetation.

Fire Service Providers

In the Valley and Foothill areas, fire protection services are provided through established districts, as described in Table 4.8-2.

The Yuba County Sheriff's Department provides dispatching services to the Wheatland Fire Authority, Linda Fire Protection District, and Olivehurst Public Utilities District. The City of Marysville Fire Department occasionally responds to calls for service for incidents outside of city limits or District 10 – Hallwood CSD. Additional information about fire service providers can be found in section 4.12, "Public Services and Recreation."

CAL FIRE provides service to the rural portions of the County from four stations: the Nevada-Yuba-Placer Unit headquarters located in Auburn, the Dobbins Battalion in Marysville, a station in Smartville, and the Grass Valley Emergency Communications Center (ECC), which provides dispatching services and is collocated with the CAL FIRE air base that provides air support to fire fighting response. The County also contracts with CAL FIRE for dispatch services to Loma Rica/Browns Valley Community Services District (CSD), Camptonville CSD, Smartville Fire Protection District (FPD), Dobbins Battalion, Dobbins–Oregon House FPD, and Foothill FPD. Some of the districts have contract arrangements with CAL FIRE to provide fire protection and medical aid services during the nonwildland fire season. These areas are most susceptible to risk of wildland fires.

Table 4.8-2
Fire Service Providers

Responsible Agency	Service Provider		Stations
	Fire & EMS	Dispatch	
Staffed 24 Hours/Day			
City of Marysville	CALFIRE	Marysville PD	1
District 10 – Hallwood CSD	Marysville	Sheriff	1
Linda FPD	LFPD	Sheriff	3
Olivehurst PUD	OPUD	Sheriff	1
CALFIRE	CALFIRE	CALFIRE	1.5
Loma Riva-Browns Valley CSD	CALFIRE	CALFIRE	1.5
Staffed Only on Weekdays			
City of Wheatland	WFA	Sheriff	1
Plumas Brophy FPD	WFA	CALFIRE	1
Smartville FPD	SFPD	CALFIRE	1
All Volunteer			
Camptonville CSD	CCSD	CALFIRE	2
Dobbins-Oregon House FPD	DOHFPD	CALFIRE	3
Foothill FPD	FFPD	CALFIRE	2

Notes: CALFIRE=California Department of Forestry and Fire Protection; CCSD=Camptonville Community Services District; CSD=Community Services District; EMS= Emergency Medical Service; DOHFPD=Dobbins-Oregon House Fire Protection District; FFPD=Foothill Fire Protection District; FPD= Fire Protection District; LFPD=Linda Fire Protection District; OPUD=Olivehurst Public Utility District; PD=Police Department; PUD=Public Utility District; SFPD=Smartville Fire Protection District; WFA=Wheatland Fire Department;
[1] Paid staffing for those agencies that only provide daytime staffing on weekdays excludes weekend and evening staffing when there are no paid staff at the stations.
Source: Yuba LAFCo 2008

AIRPORTS

There are three airports located in Yuba County: Beale Air Force Base, Yuba County Airport, and Brownsville Aeropines Airport, which are depicted in Exhibit 4.8-2.

Beale Air Force Base

Beale AFB is located in southern Yuba County, 13 miles east of Marysville, situated on 22,944 acres of federally-owned land. The AFB has buildings for operational use, base housing, and one active concrete runway. Flight paths are integrated to minimize conflict with aircraft operations from neighboring airports. Scheduled missions, practice takeoffs, landings, instrument approaches and run-up activities generally occur during hours and in areas that minimize public annoyance with regard to noise. A buffer zone around immediately adjacent areas is established to restrict sensitive land uses such as schools, daycare centers, senior centers, and other facilities where occupants have reduced effective mobility and are unable to respond to emergency situations (SACOG 1987).

Beale AFB currently has one active north-south runway, which is 12,000 feet long and 300 feet wide. This runway is capable of handling any Air Force aircraft. The Air Force maintains Clear Zones at the each end of the runway of 3,000 feet by 3,000 feet (roughly 207 acres). These zones have the most restrictive regulations relative to land use because they are the areas with the highest potential for hazards such as accidents or crashes. Hazardous materials at Beale AFB include jet fuel, gasoline, and military-related items (e.g., munitions). In addition, historical land uses have resulted in listing of the site on the NPL and other agency's hazardous materials lists (see Military Facilities, above).

Yuba County Airport

The Yuba County Airport is located on 933 acres east of the Feather River and south of Marysville. This airport has a 6,006-foot active north-south runway and a 3,281-foot crosswind runway. The airport is a general aviation facility that is prepared to handle corporate jet traffic. Hazardous materials used on-site include jet fuel, gasoline, and other hydrocarbons. No hazardous materials have been reported to have migrated off-site at this time.

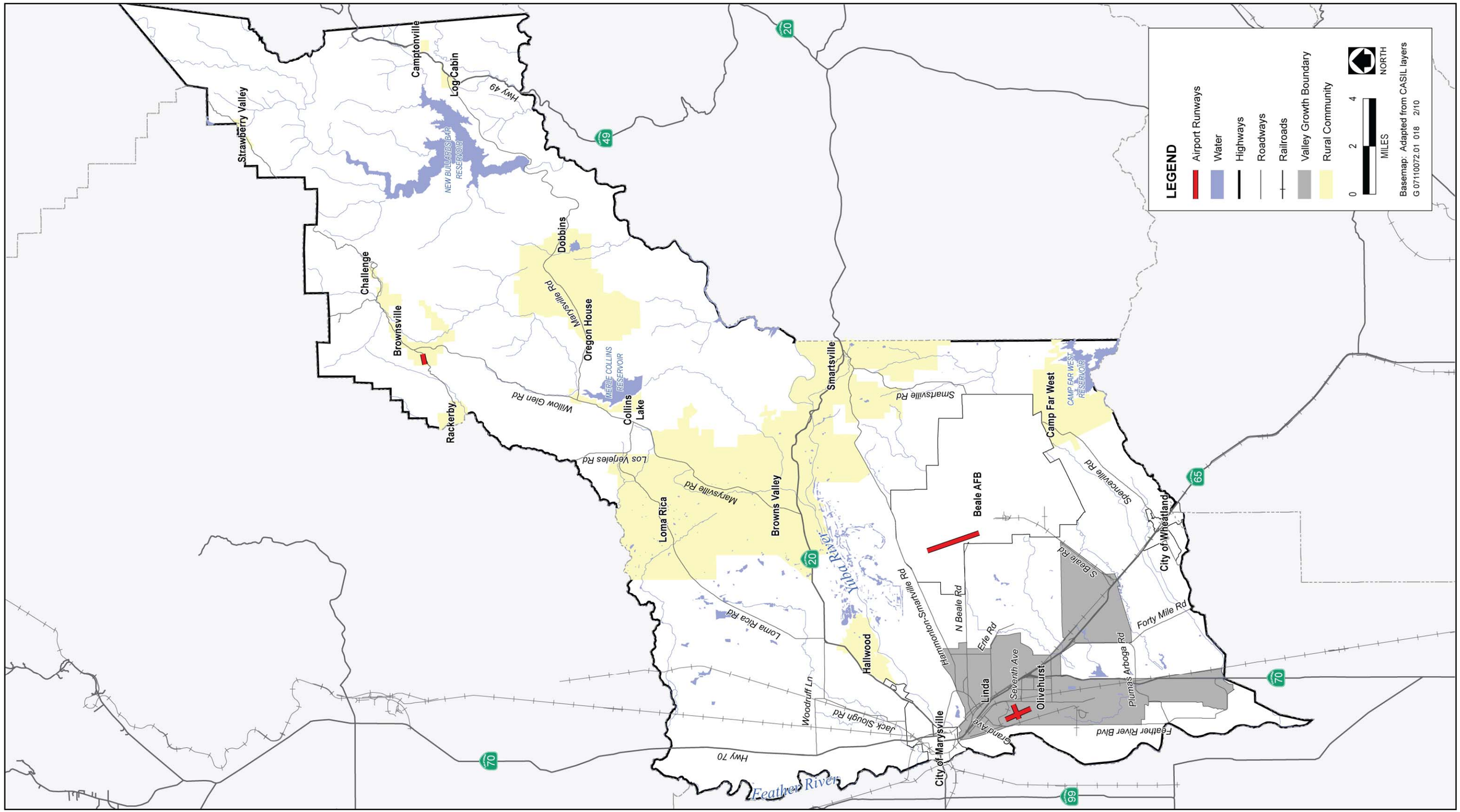
Fuel storage and hazardous materials are strictly regulated on-site and are stored only in appropriately designated areas. Land use designations immediately adjacent to the Yuba County Airport are limited to ensure that airport crash hazards are minimized (Yuba County 2007b, Yuba County Airport 2007).

Brownsville Aeropines Airport

The Brownsville Aeropines Airport is located in the northeastern portion of the County on 25 acres along La Porte Road, approximately 1.5 miles southwest of the unincorporated community of Brownsville. The airport has one single paved runway that handles approximately 8,000 take-offs and landings annually. The Clear Zone and the Approach/Departure Zone extend east and west. There are homes and other buildings within the Clear Zone and Departure Zone to the east, but not to the west. The Overflight Area (the area under the airport's normal traffic pattern) from this airport includes a variety of land uses in this rural community. Hazardous materials used at Brownsville Aeropines Airport are similar to those discussed above for Yuba County Airport (i.e., jet fuel, gasoline, and other hydrocarbons).

EVACUATION ROUTES

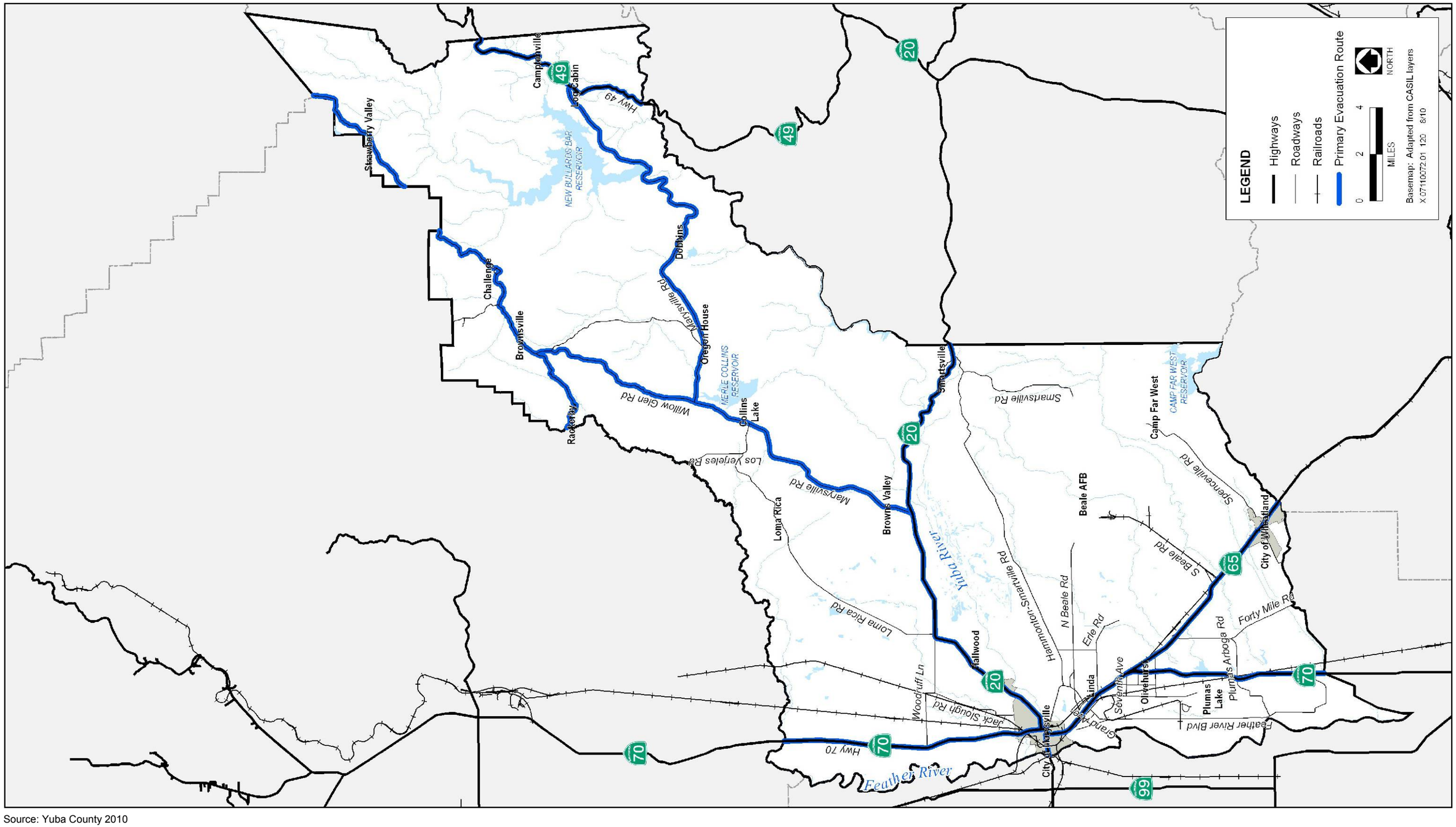
With advance warning, evacuation can be effective in reducing life loss and injury during a catastrophic event. The main transportation corridors that can serve as evacuation routes for the County are Highways 20, 70, and 65 in the lower half of the County and Marysville Road, a two-lane road traversing the northern half of the County from east to west. Marysville Road initiates at State Highway 20 in the west end and terminates in the east at State Highway 49. Marysville Road is fed by Frenchtown Road from the north and Rice's Crossing from the south. The northernmost portion of the County is serviced by the La Porte–Quincy Road (Yuba 2007a). Exhibit 4.8-3 shows primary evacuation routes in Yuba County.



Source: Yuba County 2007

Yuba County Airports

Exhibit 4.8-2



Source: Yuba County 2010

Primary Evacuation Routes **Exhibit 4.8-3**

4.8.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

This analysis considers the range and nature of foreseeable hazardous materials use, storage, and disposal resulting from implementation of the 2030 General Plan, and identifies the primary ways that these hazardous materials could expose individuals or the environment to health and safety risks.

This analysis is limited to a qualitative evaluation of impacts associated with the potential presence of hazardous materials or hazards in the County, and an evaluation of the extent to which the 2030 General Plan would allow industrial uses and other uses which commonly employ or generate hazardous materials or waste in their production processes.

The range and types of uses accommodated under the 2030 General Plan can be identified only in general terms. The nature of general plans, consistent with state law and common practice, is that specific land uses are generally not identified. Rather, categories of land use are defined that would allow a wide range of specific uses. The specific types of businesses allowed in commercial and mixed use land use designations, for example, and whether or not they would generate or use hazardous materials cannot be known at this time. Businesses, such as gasoline service stations and dry cleaners are some of the most common commercial operations that routinely use hazardous materials (motor fuels and solvents, respectively), but other possible commercial and industrial uses could potentially use a range of oils and lubricants, solvents, fertilizers, pesticides and herbicides, and other chemicals and materials in liquid, solid, or gas form.

Future development in the County could involve a variety of land uses, including residences, commercial uses, industrial uses, community uses, office space, and public services facilities (i.e., educational and institutional uses). As a result, this analysis assumes and evaluates a broad range of potential uses that could handle hazardous materials, and a broad range of potential hazardous materials that could be used.

As discussed in Section 4.8.1, "Regulatory Setting," compliance with applicable federal, state, and regional and local health and safety laws and regulations by residents and businesses in the County would protect the health and safety of the public. State and local agencies are required to enforce applicable requirements. In determining the level of significance, the analysis in this section considers development in the County in the context of required federal, state, and local ordinances and regulations.

A preliminary review of environmental risk databases was conducted, but this analysis did not include any sampling, site specific review, laboratory analysis, or inspection of buildings or site surfaces. Site specific investigation for projects developed under the General Plan will be required to address hazardous materials conditions. Phase I environmental site assessments would be required for specific projects pursuant to California Government Code Section 65962.5, and if this assessment indicates the presence or likely presence of contamination, Phase II soil/groundwater testing and remediation could be required before development on a site-specific basis. These activities would be conducted during subsequent environmental reviews, required for future development activities.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a hazards and hazardous materials impact is considered significant if the proposed project would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or,

- 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; or,
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or,
- be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; or,
- result in a safety hazard for people residing or working in the project location within an airport land use plan or within two miles of a public airport or private airstrip; or,
- impair implementation of or physically interfere with an adopted emergency-response plan or emergency-evacuation plan; or
- 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.

IMPACT ANALYSIS

IMPACT 4.8-1 **Routine Transport, Use, or Disposal and Possible Release of Hazardous Materials from Upset or Accident Conditions.** *Future population growth through buildout of the 2030 General Plan would result in an increase in the routine transport, use, and/or disposal of hazardous materials, which could result in greater exposure of the public to such materials and exposure of increasing numbers of people through either routine use or accidental release. Implementation of 2030 General Plan policies, in combination with existing federal and state regulations, would reduce the potential impacts related to the routine transportation of hazardous materials. This impact would be* ***less than significant****.*

Land uses and development consistent with the 2030 General Plan would allow development of new residential, commercial, and industrial uses. New residential development would result in increased use, storage, and disposal of household hazardous materials. New commercial and industrial development would also result in increased use, storage, and/or disposal of hazardous materials during routine operations. Of particular concern are facilities with USTs or other methods of storage that could accidentally leak into the soil, surface water, groundwater, or air. Specific examples of such facilities include gas stations, automotive repair shops, and dry cleaners.

The amount of hazardous materials transported through the County on main local and regional routes, the UPRR, and state routes (i.e., SRs 20, 65, and 70) is likely to increase as a result of new development accommodated under the 2030 General Plan and region growth. With additional development anticipated under the 2030 General Plan along the abovementioned major transportation corridors, more people would be potentially exposed to toxic spills or releases under buildout conditions compared to existing conditions.

Transportation of hazardous materials on area roadways is regulated by CHP and Caltrans, and use of these materials is regulated by DTSC, as outlined in Title 22 of the California Code of Regulations (CCR). USDOT (through the Hazardous Materials Transportation Act), and other regulatory agencies (including the California Public Utilities Commission for natural gas transmission lines) provide standards designed to avoid releases including provisions regarding securing materials and container design. Facilities developed under the 2030 General Plan that would use hazardous materials on-site would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases and protect the public health.

Relevant Policies and Actions of the 2030 General Plan

The following 2030 General Plan policy would address the routine transport of hazardous materials in Yuba County:

- **Policy HS7.1:** The County will assess risks associated with public investments and other County-initiated actions, and new private developments shall assess and mitigate hazardous materials risks and ensure safe handling, storage, and movement in compliance with local, state, and federal safety standards.

Conclusion

Projects potentially developed under the General Plan that would involve the use, transport, and disposal of hazardous materials are subject to regulations that are designed to protect the public health. The above 2030 General Plan policies also require consideration of hazardous materials issues in the land use planning process. Implementation of current state and federal regulations, as well as the policies of the 2030 General Plan may not prevent all potential releases of hazardous materials, but would serve to minimize both the frequency and the magnitude, if such a release occurs. In combination with existing federal and state regulations, these policies would also reduce the potential impacts of the routine transportation of hazardous materials in the County. This impact would be **less than significant**.

IMPACT 4.8-2 Emission or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School. *Implementation of the 2030 General Plan could result in development of uses that would emit or handle hazardous waste in proximity to new or existing schools. However, implementation of 2030 General Plan policies and compliance with existing regulations would ensure that the impact is less than significant.*

Because the proposed land uses identified in the 2030 General Plan are conceptual, it cannot be specifically demonstrated that the necessary one-quarter mile distance would be implemented between incompatible land uses and the potential school sites. The 2030 General Plan encourages the development mixed land uses in Valley Neighborhoods and Rural Communities to promote walking and biking between residential uses and public uses such as schools, so it is reasonable to assume that new development would occur in close proximity to existing and newly developed schools.

However, the California Department of Education enforces school siting requirements, and new facilities would not be constructed within ¼ mile of facilities emitting or handling materials based on these requirements. Furthermore, permitting requirements for individual hazardous material handlers or emitters, including enforcement of Public Resources Code Section 21151.4, would require evaluation and notification where potential material handling and emission could occur in proximity to schools.

Relevant Policies and Actions of the 2030 General Plan

The following 2030 General Plan policies would address hazards near schools in Yuba County:

- **Policy HS7.1:** The County will assess risks associated with public investments and other County-initiated actions, and new private developments shall assess and mitigate hazardous materials risks and ensure safe handling, storage, and movement in compliance with local, state, and federal safety standards.

- **Policy HS7.5:** The County will support compliance with state law regarding the location of school sites and sources of hazardous air emissions to ensure against endangerment of public health.

- **Policy CD3.1:** Commercial and industrial developments shall be located, buffered, or otherwise designed to avoid significant noise and air quality impacts.

- **Policy CD3.4:** The County will use performance-based standards in mixed-use areas to ensure that important aspects of compatibility (air, noise, vibration, heavy truck traffic, light, glare) are addressed without impeding mixed-use development.

- **Policy CD14.6:** The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.

- **Policy CD15.9:** The County will require that new developments include safe and convenient access to nearby schools and work with the local school districts to ensure safe access.

Conclusion

The 2030 General Plan policy listed above ensures that state laws regarding the location of school sites are followed during new development. In addition, consideration is made of land uses potentially handling hazardous materials, which would further ensure that such land uses are not developed in proximity to schools.

In addition, enforcement of California Department of Education school siting regulations, permitting requirements for individual hazardous material handlers and emitters, and enforcement of Public Resources Code Section 21151.4 during project-level environmental review for projects developed under the General Plan would prevent future conflicts between hazardous materials handling and emissions and schools. This impact would be **less than significant.**

IMPACT 4.8-3 Public Health Hazards from Project Development on a Known Hazardous Materials Site Compiled Pursuant to Government Code Section 65962.5. *Several sites within the County are listed on the Cortese List as known hazardous materials sites. Implementation of the proposed project could expose construction workers to hazards and hazardous materials from these sites during construction activities, and hazardous materials on-site could create an environmental or health hazard if left in place. This impact would be less than significant.*

There are more than 400 known hazardous materials sites in the County. There are more than 100 known leaking underground storage tanks, which are monitored by DTSC. Of the more serious known contaminated sites listed as active sites in the Envirostor database, four of the listed sites were soil investigations for school sites, and any contamination found at those sites would be remediated under the supervision of DTSC prior to any school operations. Of the other active sites listed in the database, there was one former automobile repair and dismantling shop, which is currently undergoing remediation. There are three DTSC-listed sites within Beale AFB, and another is located at Camp Beale. Remediation efforts at Camp Beale are on-going and several activities, including site inspection reports and a Remedial Action Plan must be completed before contaminated areas can be developed for residential or commercial uses. Hazardous materials contamination has been found within the Beale AFB grounds, and the base was placed on the EPA National Priorities List in 1989 as a Superfund project. The primary environmental contaminants found at Beale AFB include solvents, metals, and fuels. Cleanup and mitigation for contamination is ongoing, but public access to the base, particularly known contamination sites, is limited, in order to minimize risk of exposure to the public. Soil and groundwater are contaminated with volatile organic compounds from use of solvents.

Ground disturbance associated with development at sites listed on a known hazardous materials site list compiled pursuant to Government Code Section 65962.5 (Cortese List) could potentially result in the exposure of construction workers, the public, and the environment to hazards associated with contaminated soil and/or groundwater if not properly remediated and/or monitored. In particular, development activities at the former Camp Beale site could result in hazards associated with unknown unexploded ordnance if not properly remediated.

Relevant Policies and Actions of the 2030 General Plan

The following 2030 General Plan policies would address hazards associated with known contaminated and hazardous materials sites:

- **Policy HS7.1:** The County will assess risks associated with public investments and other County-initiated actions, and new private developments shall assess and mitigate hazardous materials risks and ensure safe handling, storage, and movement in compliance with local, state, and federal safety standards.

- **Policy HS7.2:** Hazardous materials waste sites and areas of contamination shall be remediated in conformance with applicable federal and state standards prior to new development that could be substantially and adversely affected by the presence of such contamination.

- **Policy HS7.3:** The County will collaborate with appropriate federal, state, and regional agencies in an effort to identify and remediate soils and groundwater contaminated with toxic materials and to identify and eliminate sources contributing to such contamination.

- **Policy HS7.6:** The County's entitlement review procedures should be updated to ensure the public safety in the former Camp Beale area.

- **Policy HS7.7:** The County will coordinate with the Army Corps of Engineers regarding cleanup of the former Camp Beale Army Base.

- **Policy HS7.8:** New developments and public investments involving earth disturbance in the former Camp Beale Army Base area shall incorporate permit requirements in coordination with the State Department of Toxic Substances Control to reduce risk associated with munitions or explosives.

- **Action HS7.1: Revise County Standards for Camp Beale Area.** Following adoption of the General Plan, the County will revise its standards to address the potential for residual buried munitions in the former Camp Beale area. The intent of these revisions would be to ensure that public safety is considered in County approvals for any type of earth disturbance, such as grading, installation of foundations, trenching for underground utilities, installation of septic systems, and other actions. The County would revise its Ordinances to clarify the process for entitlements in areas identified as having a high probability to contain munitions or other hazardous materials associated with the former Army Base.

    - Related Goals: Goal HS7
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General fund
    - Time Frame: Adopt by 2015

Conclusion

The vast majority of planned development under the 2030 General Plan is not expected to occur in areas listed in the Envirostor database. For areas with existing hazardous materials issues, 2030 General Plan policies and action, in addition to application of current regulations would not absolutely prevent exposure to hazards and hazardous materials, but would use existing facility information to identify areas of hazardous materials use. In combination with existing required federal and state regulations pertaining to hazardous site cleanup, these policies would also reduce the potential impacts of development on listed hazardous materials sites in the County under the 2030 General Plan.

Ongoing remediation activities combined with the implementation of required federal and state regulations and the 2030 General Plan policies and action listed about would ensure that this impact would be **less than significant**.

IMPACT 4.8-4 **Safety Hazards Associated with Public and Private Airports.** *Implementation of the 2030 General Plan could locate development within the vicinity of a public-use or private airstrip, potentially resulting in a safety hazard for people residing or working in the area. Policies and actions included in the 2030 General Plan, along with existing state local regulations associated with development in the vicinity of airports, would address these hazards. This impact would be* ***less than significant****.*

Implementation of the 2030 General Plan could result in land uses and development located near airports within Yuba County. SACOG serves as the County ALUC, which is empowered by state law to prepare the CLUP for airports located in the County. SACOG ensures the orderly development of airports and the adoption of land use measures to minimize the public's exposure to excessive noise and safety hazards within areas around public airports, to the extent that these areas are not already devoted to incompatible uses.

SACOG has adopted plans, the policies of which apply to all existing airports in the county and to any new airport or heliport (except private-use facilities) that may be proposed in the future. Plans address current airport facilities located throughout the county, including Yuba County Airport, Brownsville Aeropines Airport, and Beale AFB. State law requires local agencies to modify their general plans and any affected specific plans to be consistent with CLUPs. A general plan must address compatibility planning issues and avoid direct conflicts with compatibility planning criteria.

Beale AFB also has a JLUS and AICUZ Study, which identify constraints from flight operations and encourage consultation between Beale AFB and local governments to ensure land use compatibility and public safety in conjunction with ongoing military operations.

Relevant Policies and Actions of the 2030 General Plan

The following 2030 General Plan policies and actions would address hazards associated with:

- **Policy HS4.1:** The County will collaborate with the Sacramento Area Council of Governments to update local airport land use compatibility plans and will condition projects, as necessary, to ensure compliance with these plans.

- **Policy HS4.2:** New developments shall be located and designed to avoid conflicts with current and potential future operations at Beale Air Force Base, including Beale's Phased Array Warning System.

- **Policy HS4.3:** New construction within the Air Installation Compatibility Use Zone 65 dB CNEL noise contours for the existing and potential future missions shall use building material s and construction techniques to mitigate noise impacts.

- **Action HS4.1: Airport Land Use Compatibility Planning.** During General Plan buildout, the County will collaborate with the Sacramento Area Council of Governments and local airports to update compatibility plans. The County will regulate and condition new development according to restrictions of local airport land use compatibility plans.

    - Related Goals: Goal HS4, Goal HS7, Goal HS10, Goal CD3, Goal CD22
    - Agency/Department: Community Development and Services Agency
    - Funding Source: State and federal grants, other State or federal funding, General Fund
    - Time Frame: Adopt Yuba County and Beale CLUPs by 2012 with periodic revisions during General Plan buildout

- **Action HS4.2: Beale Air Force Base Coordination.** The County, along with the cities and other public service agencies, will coordinate with Beale Air Force Base representatives to ensure continued land use compatibility between County lands and base operations. The County will involve Beale representatives in development project review and conditions.

    - Related Goals: Goal HS4, Goal CD3, Goal CD10
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund, project applicant funds
    - Time Frame: Ongoing, and as needed, in response to project proposals near Beale AFB.

Conclusion

The placement of land uses that would be occupied by large numbers of people in areas susceptible to potential aircraft crash hazards, such as in overflight zones, would increase severity of such of an event, if it were to occur. In addition, the location of land uses utilizing significant quantities of hazardous materials near airports raises the possibility that aircraft accidents could result in explosions, fire, or other occurrences that could cause the release of these materials and subsequent exposure of employees and other people to harm.

Development in the vicinity of airports would be subject to discretionary review as well as review by the County ALUC, in this case, SACOG. Projects would be required to comply with the ALUC's adopted CLUP, which provides safety, noise, and compatibility standards that reduce the likelihood of accidents affecting land uses on the ground. This, along with the policies and actions from the 2030 General Plan listed above, would ensure that incompatible land uses are not placed in areas with a higher risk of aircraft crashes and that all applicable regulations are implemented, ensuring that this impact would be **less than significant**.

IMPACT 4.8-5 Interference with an Adopted Emergency Response Plan and Evacuation Plan. *Implementation of the 2030 General Plan would add additional traffic and residences requiring evacuation in case of an emergency. Implementation of 2030 General Plan policies would ensure conformance with local emergency-response programs and continued cooperation with emergency-response service providers. This impact would be less than significant.*

The County participates in updates and implementation of Multi-Hazard Mitigation Plans, which are designed to mitigate against the hazards that affect Yuba County, protecting the lives and property of all of its citizens, as well as reducing the costs to the County. The Plan incorporates all jurisdictions within the County, helping to ensure that all citizens will be protected when disaster strikes. The Plan process is designed to provide a forum for collaboration, establishing the groundwork for future interagency cooperation in pre-disaster planning, emergency response, and evacuation, if necessary.

During General Plan buildout, the County will frequently communicate with emergency service providers on issues of mutual interest. However, the focus of General Plan policy, given the County's jurisdiction and the role of general plans, is on the location of development, design of circulation systems, and other physical elements that are required for emergency response, as opposed to programmatic elements of emergency preparedness and response. An efficient roadway and circulation system is vital for the evacuation of residents and the mobility of fire suppression, emergency response, and law enforcement vehicles. Implementation of the 2030 General Plan would create additional traffic and develop new residences and businesses requiring evacuation in case of an emergency.

Relevant Policies and Actions of the 2030 General Plan

The following 2030 General Plan policies and action would address the potential effects on evacuation routes and emergency response:

- **Policy HS9.1:** The County will review development projects, plans, and public investment decisions to ensure consistency with the Multi-Jurisdictional Multi-Hazard Mitigation Plan.

- **Policy HS9.2:** The County will provide public access to emergency response procedures in such locations as the Government Center, the County library, and public schools and will otherwise promote awareness of emergency response and evacuation plans.

- **Policy HS9.3 :** The County will coordinate with Caltrans to maintain Highways 20, 70, 49, and 65 in the lower half of the County and the County will maintain Marysville Road, Frenchtown Road, and La Porte–Quincy Road in the upper half of the County as primary emergency access and evacuation routes and improve other roads, as necessary, such as Plumas Arboga Road, to create additional evacuation routes (Exhibit Public Health & Safety-11).

- **Policy HS9.4:** The County's development and improvement standards will require a circulation system with multiple access points, adequate provision for emergency equipment access, and evacuation egress.

- **Action HS9.1: Emergency Access and Evacuation Routes.** The County will seek funding to implement Action Items listed in the Multi-Hazard Mitigation Plan and future revisions to this Plan, including those actions intended to avoid flooding over emergency access routes. The County will consider, as a part of future revisions to the Multi-Hazard Mitigation Plan, whether new growth accommodated under the General Plan will require improvements to circulation or drainage in order to ensure adequate emergency access and evacuation egress, even in the event of a flood. As noted in Action HS1.2, the County will collaborate with Wheatland and Marysville on development of a flood emergency plan.

    - Related Goals: Goal HS9
    - Agency/Department: County Office of Emergency Services
    - Funding Source: Grant funding
    - Time Frame: Ongoing, as funding is available

Conclusion

In addition to the operation of the Yuba County Office of Emergency Services (OES) and implementation of the Multi-Hazard Mitigation Plan, implementation of the 2030 General Plan policies and action listed above would ensure that future development would not interfere with emergency response or evacuation plans, thereby protecting County residents from adverse effects in the event of a disaster. This impact is considered **less than significant**.

IMPACT 4.8-6 Exposure of People and Structures to Urban and Wildland Fires. *Development of the 2030 General Plan could potentially increase risk to fire for both people and property. However, implementation of 2030 General Plan policies and actions, along with existing regulations would ensure that people and structures would not be exposed to a significant risk of loss of injury involving fires. This impact is considered* ***less than significant****.*

Areas at risk for extreme wildfires are designated by CAL FIRE as those lands where dense vegetation with severe burning potential prevails, as well as areas with limited access due to topography or lack of roads. As mentioned above under "Wildfire Risk Areas," the majority of lands in the foothills and mountainous portions of the County are within higher risk fire zones, as mapped by CAL FIRE. Fire hazard is greatest in the foothill and mountain areas of the County. Many of Yuba County's residential communities—Smartsville, Dobbins, Browns Valley, Loma Rica, Brownsville, and Challenge, for example—are located in areas of high or very high fire hazard.

Grassland fires are a concern within urban areas, but the greater fire threat in the core of Yuba County's urban areas is from structural fires. Fire and building codes are designed to reduce overall risk to fire risk related to

structural fires. Older buildings can be retrofitted to current safety standards. Fire stations, equipment, and personnel must be planned in coordination with development to ensure adequate fire suppression in the County's growing areas. Connected transportation networks are important to ensuring emergency access to both the County's urban and rural areas, to facilitate rapid response to fires.

Many of the fire protection agencies in the foothills and mountains of Yuba County contract with CAL FIRE for fire protection services. The USFS also provides fire protection services on federal lands, although new development is not anticipated on federal lands under the 2030 General Plan. Development within the rural communities would be limited under the 2030 General Plan, but any development in these areas would be more susceptible to wildfire risk. However, all new development in these areas would be required to comply with the Fire Code and with state requirements for defensible space surrounding rural properties and water for adequate fire flows.

Reducing wildfire risk during buildout of this General Plan will require collaborations among agencies and property owners to reduce fuels, ensure emergency access, coordinate response efforts, and manage how and where people and property are introduced into areas with high fire risk.

Relevant Policies and Actions of the 2030 General Plan

The following 2030 General Plan policies would address wildfire risks in Yuba County:

- **Policy HS2.1:** Prior to approval, new developments proposed in areas of very high, high, or moderate fire hazard, as designated on maps maintained by Cal Fire, shall demonstrate compliance with Fire Safety Regulations and local regulations for defensible space, ignition-resistant construction materials, property maintenance to reduce fuels, natural hazards disclosure requirements, emergency access and multiple access points, availability of water for fire suppression, and other relevant building and development standards.

- **Policy HS2.2:** The County will communicate with appropriate local, state, and federal fire protection personnel during the development review process and will condition projects considering input from these agencies to require defensible space, fire-wise landscaping, fuel breaks, emergency access, fire flow, hydrants, sprinkler systems, fire stations and other improvements and conditions, as appropriate.

- **Policy HS2.3:** New development projects shall pay on a fair-share basis for fire stations, equipment, and other fire suppression improvements necessary to provide adequate fire protection services.

- **Policy HS2.4:** All community water systems serving new development projects are required to meet or exceed County minimum standards for provision of water for fire flows.

- **Policy HS2.5:** Road and building construction on slopes of more than 15% is strongly discouraged and will only be approved if consistent with County standards and the Yuba County Wildfire Safety Plan.

- **Policy HS2.6:** The County will seek funding for, and cooperate with efforts to protect watersheds, reforest areas, and restore ecosystems affected by wildfire.

- **Policy HS2.7:** The County will use the best available science to evaluate and protect people and property from changes in fire risk attributable to climate change, insects, and disease.

- **Policy HS2.8:** Communication and electricity infrastructure in areas prone to wildfire should be located and designed to avoid interruptions during periods of fire activity.

- **Policy HS2.9:** Public trails and unimproved roads should be maintained, where feasible, to provide emergency access, including evacuation and wildfire response. These rights-of-way are not considered

primary evacuation or emergency access routes and vehicles that cannot successfully navigate these routes shall not make use of them.

- **Policy HS2.10:** New developments shall provide access that will allow safe evacuation and movement of firefighting equipment during a wildfire. Evacuation routes shall have the capacity to accommodate traffic in relation to the population served.

- **Policy HS2.11:** New developments in moderate, high, or very high fire hazard areas cannot propose limited access roads unless such access limitations do not adversely affect fire response and suppression.

- **Policy HS2.12:** Property owners may manage fuel load on County road easements and rights-of-way adjacent to their properties with prior approval of the County and in compliance with applicable County standards.

- **Policy HS2.13:** Clustered developments in Rural Community portions of the foothills are encouraged to take advantage of natural and manmade fire breaks, provide defensible space for clusters of buildings (rather than individual buildings), locate and orient buildings and pervious areas to reduce fire risk, avoid areas of steep topography and dense vegetation, and otherwise use a site plan review process in coordination with County staff to ensure that wildfire risk is minimized.

- **Policy HS2.14:** The County will encourage the retrofitting of older buildings to current safety standards in coordination with proposed major remodeling or additions.

- **Policy HS2.15:** Developments in the Valley Growth Boundary shall be planned and constructed to resist the encroachment of uncontrolled fire.

- **Action HS2.1: Fire Standards.** The County will maintain a planning and entitlement review process that documents compliance with state and local standards for fire safety. The County will update zoning, development, improvement standards, and building standards, as necessary, to maintain compliance with relevant fire codes, including those maintained by Cal Fire. County codes would be anticipated to address such topics as landscaping standards and fire-resistant plant materials, fire resistant building materials for exterior walls and other exterior features of structures, defensible space standards for different topographic conditions, sprinklers, emergency access, water supply and pressure for firefighting, building and road construction in areas prone to fire risk and greater slopes, and other relevant topics.

  - Related Goals: Goal HS2
  - Agency/Department: Community Development and Services Agency; Office of Emergency Services; Yuba Watershed Protection and Fire Safe Council
  - Funding Source: Grants, development fees, and other funding sources, and if necessary, General Fund
  - Time Frame: Ongoing, as necessary to maintain consistency with relevant fire codes.

- **Action HS2.2: Yuba County Wildfire Safety Plan.** The County will prepare, adopt, and implement a comprehensive wildfire safety plan for foothills portions of the County with high and very high wildfire risk. This plan will be designed to reduce fuel loads, ensure emergency access and evacuation routes, and provide incentives for property owners to improve properties in order to reduce wildfire risk and improve fire resiliency for existing developed areas.

  As a part of this planning effort, the County will collaborate with other public agencies and nonprofits to implement fire breaks and fuel reduction projects in areas of high and very high fire risk, including removal of invasive species that increase understory fuel loads. Areas of particular focus could include County roads,

ridges surrounding rural communities, and defensible space around existing structures. The County will seek funding from sources, such as the Bureau of Land Management and the U.S. Department of Agriculture for fire fuel reduction projects.

The County will collaborate with land owners in fire prone areas without adequate secondary access to improve access, add water tanks, or otherwise improve fire safety conditions. The County will seek funding to provide incentives for property owners to retrofit existing structures in high and very high fire risk areas to reduce combustibility.

Planning for emergency access and evacuation routes will take into account records of historic fire activities affecting foothills portions of the County. Emergency access and evacuation will also take into account fire behavior modeling, including consideration of wildfire driven by winds that could limit the use of existing evacuation routes. The County will analyze and consider planning and fair-share funding of improvements needed to provide for emergency access and evacuation routes generally leading away from the head of a wildfire that has the characteristics of the worst-case predicted wildfire and secondary access allowing egress oriented in a direction of approximately 180 degrees from the previously described route.

The County would examine fair-share funding approaches and grant funding approaches for improvements needed to provide adequate emergency access and evacuation.

- Related Goals: Goal HS2
- Agency/Department: Community Development and Services Agency; Office of Emergency Services; Yuba Watershed Protection and Fire Safe Council
- Funding Source: State and federal grants, other State or federal funding, and private funding from landowners of affected properties.
- Time Frame: As funding is available.

Conclusion

Implementation of 2030 General Plan policies and actions and existing regulations would ensure that people or structures would not be exposed to a significant risk of loss of injury involving fires. County policies and County and State regulations ensure adequate emergency access and evacuation in the case of fire; installation of sprinkler systems, where needed, as well as other building and fire code requirements designed to protect the public health; inclusion of defensible space in areas prone to wildfire; and other mechanisms, as described above and in the regulatory setting portion of this EIR section. With the incorporation of these policies and regulations, this impact is considered **less than significant**.

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4.9 HYDROLOGY AND WATER QUALITY

This section presents the existing conditions with regard to surface water and groundwater resources related to the 2030 General Plan, summarizes the regulatory and planning framework, and analyzes the impacts on surface water and groundwater resources associated with the implementation of the 2030 General Plan. Impacts on water supply and wastewater treatment are discussed in Section 4.14, "Utilities."

4.9.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal Clean Water Act

The Clean Water Act of 1972 (CWA) is the primary federal law that governs and authorizes water quality control activities by the U.S. Environmental Protection Agency (EPA), the lead federal agency responsible for water quality management. By employing a variety of regulatory and non-regulatory tools, including establishing water quality standards, issuing permits, monitoring discharges, and managing polluted runoff, the CWA seeks to restore and maintain the chemical, physical, and biological integrity of surface waters to support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

EPA is the federal agency with primary authority for implementing regulations adopted pursuant to CWA, and has delegated the State of California as the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the Porter-Cologne Water Quality Control Act of 1969 described below.

Water Quality Criteria and Standards

Pursuant to federal law, EPA published water quality regulations under Volume 40 of the Code of Federal Regulations (40 CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements:

(1) designated beneficial uses of the water body in question; and
(2) criteria that protect the designated uses.

Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Section 303(d) lists the water bodies and associated pollutants that exceed water quality criteria.

National Pollutant Discharge Elimination System Permit Program

The National Pollutant Discharge Elimination System (NPDES) permit program was established as part of the CWA to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point source municipal waste discharges and nonpoint source stormwater runoff. NPDES permits generally identify:

- limits on the concentrations and/or mass emissions of pollutants in effluent discharged into receiving waters;
- prohibitions on discharges not specifically allowed under the permit; and
- provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

More specifically, the discharge prohibitions and limitations in an NPDES permit for wastewater treatment plants are designed to ensure the maintenance of public health and safety, protection of receiving water resources, and safeguarding of the water's designated beneficial uses. Discharge limitations typically define allowable effluent quantities for flow, biochemical oxygen demand, total suspended matter, residual chlorine, settleable matter, total coliform, oil and grease, pH, and toxic pollutants. Limitations also typically encompass narrative requirements regarding mineralization and toxicity to aquatic life.

In November 1990, EPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase 1 of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons. Phase 1 also applied to stormwater discharges from a large variety of industrial activities including general construction activity if the project would disturb greater than 5 acres.

Phase 2 of the NPDES stormwater permit regulations became effective in March 2003 and required NPDES permits be issued for construction activity for projects that disturb between 1 and 5 acres. Phase 2 of the municipal permit system (i.e., known as the NPDES General Permit for Small MS4s) required small municipality areas of less than 100,000 persons to develop stormwater management programs. The County of Yuba Storm Water Management Plan (SWMP), implemented by Yuba County to fulfill these Phase 2 requirements, is discussed in "Regional and Local Plans, Policies, Regulations, and Ordinances" below. California's regional water quality control boards (RWQCBs) are responsible for implementing the NPDES permit system (refer to additional details in the section, "State Regulations," below).

Section 401 Water Quality Certification or Waiver

Under Section 401 of the CWA, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria.

In California, the authority to either grant water quality certification or waive the requirements is delegated by the State Water Resources Control Board (SWRCB) to the nine regional boards. The Central Valley RWQCB is responsible for the area that includes Yuba County.

Section 404 of the CWA establishes a requirement to obtain a permit before conducting any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. This permit is issued by U.S. Army Corps of Engineers (USACE).

Antidegradation Policy

The federal antidegradation policy has been in existence since 1968. It is designed to protect existing water uses, water quality, and national water resources. The federal policy directs states to adopt a statewide policy that includes the following primary provisions:

- existing instream uses and the water quality necessary to protect those uses shall be maintained and protected;
- where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and
- where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (SDWA) passed in 1974, EPA regulates contaminants of concern to domestic water supply. Contaminants of concern relevant to domestic water supply are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA's primary and secondary maximum contaminant levels (MCLs). MCLs and the process for setting these standards are reviewed every 3 years. Amendments to the SDWA enacted in 1986 established an accelerated schedule for setting drinking water MCLs.

EPA has delegated to the California Department of Public Health (CDPH) the responsibility for California's drinking water program. CDPH is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA to implement the SDWA.

Title 22 of the California Administrative Code (Article 16, Section 64449) defines secondary drinking water standards, which are established primarily for reasons of consumer acceptance, rather than for health issues. These apply to constituents such as taste and odor. For minerals such as total dissolved solids (TDS) and chloride, the secondary standards are expressed in the form of recommended, upper, and short-term MCLs. For example, the recommended secondary standard upper and short-term MCLs for TDS, described in the water quality section, are 500, 1,000, and 1,500 milligrams per liter, respectively.

Section 303(d) Impaired Waters List

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that would not attain water quality objectives after implementation of required levels of treatment by point source dischargers (municipalities and industries). Section 303(d) requires that the state develop a total maximum daily load (TMDL) for each of the listed pollutants. The TMDL is the amount of loading that the water body can receive and still be in compliance with water quality objectives. The TMDL is also a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. The TMDL prepared by the state must include an allocation of allowable loadings to point and nonpoint sources, with consideration of background loadings and a margin of safety. The TMDL must also include an analysis that shows the link between loading reductions and the attainment of water quality objectives. EPA must either approve a TMDL prepared by the state or disapprove the state's TMDL and issue its own. NPDES permit limits for listed pollutants must be consistent with the waste load allocation prescribed in the TMDL. The goal of the TMDL program is that, after implementation of a TMDL for a given pollutant on the 303(d) list, the causes that led to the pollutant's placement on the list would be remediated.

National Toxics Rule

In 1992, EPA issued the National Toxics Rule under the CWA to establish numeric criteria for priority toxic pollutants for California. The National Toxics Rule established water quality standards for 42 pollutants not covered under California's statewide water quality regulations at that time. As a result of the court ordered revocation of California's statewide water quality control plans (basin plans) in September 1994, EPA initiated efforts to issue additional federal water quality standards for California.

In May 2000, EPA issued the California Toxics Rule, which includes all the priority pollutants for which EPA has issued numeric criteria not included in the National Toxics Rule. See "California Toxics Rule and State Implementation Plan" below.

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations to limit development in floodplains. Yuba County is a participant in the NFIP. FEMA also issues Flood Insurance Rate Maps that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in

the community. The design standard for flood protection is established by FEMA. The minimum level of flood protection for new development is the 1-in-100 Annual Exceedence Probability (AEP) standard. This is defined as a flood having a one percent chance of occurring in any given year. Flood zone areas in Yuba County anticipated to become effective in February 2011 are shown in Exhibit 4.9-1.

Participants in the NFIP must satisfy certain mandated floodplain management criteria. For instance, where levees provide flood protection, the levee crown must have 3 feet of freeboard above the 1-in-100-AEP water surface elevation, except in the vicinity of a structure such as a bridge, where the levee crown must have 4 feet of freeboard for a distance of 100 feet upstream and downstream from the structure. The County is occasionally audited by the California Department of Water Resources (DWR) to ensure the proper implementation of FEMA floodplain management regulations.

Based on the hydrologic, topographic, and water project infrastructure characteristics of Yuba County, three basic types of flood hazards are likely: streamside overbank flows, areas of flat terrain with slow surface drainage, and inundation from structural dam or levee failure. Documented flooding in the past has caused the following general damages and impacts on areas within Yuba County:

- Property Damage: Extensive water damage to building contents.
- Structural Damage: Structural damage to residential and commercial buildings and sewer system pipes/infrastructure.
- Business/Economic Impact: Some businesses must close for a period of time after flooding.
- Road/School/Other Closures: Bridges routinely close during high-water periods and floods.

Executive Order 11988

Executive Order 11988 (Floodplain Management) addresses floodplain issues related to public safety, conservation, and economics. It generally requires federal agencies constructing, permitting, or funding a project in a floodplain to do the following:

- avoid incompatible floodplain development;
- be consistent with the standards and criteria of the NFIP; and
- restore and preserve natural and beneficial floodplain values.

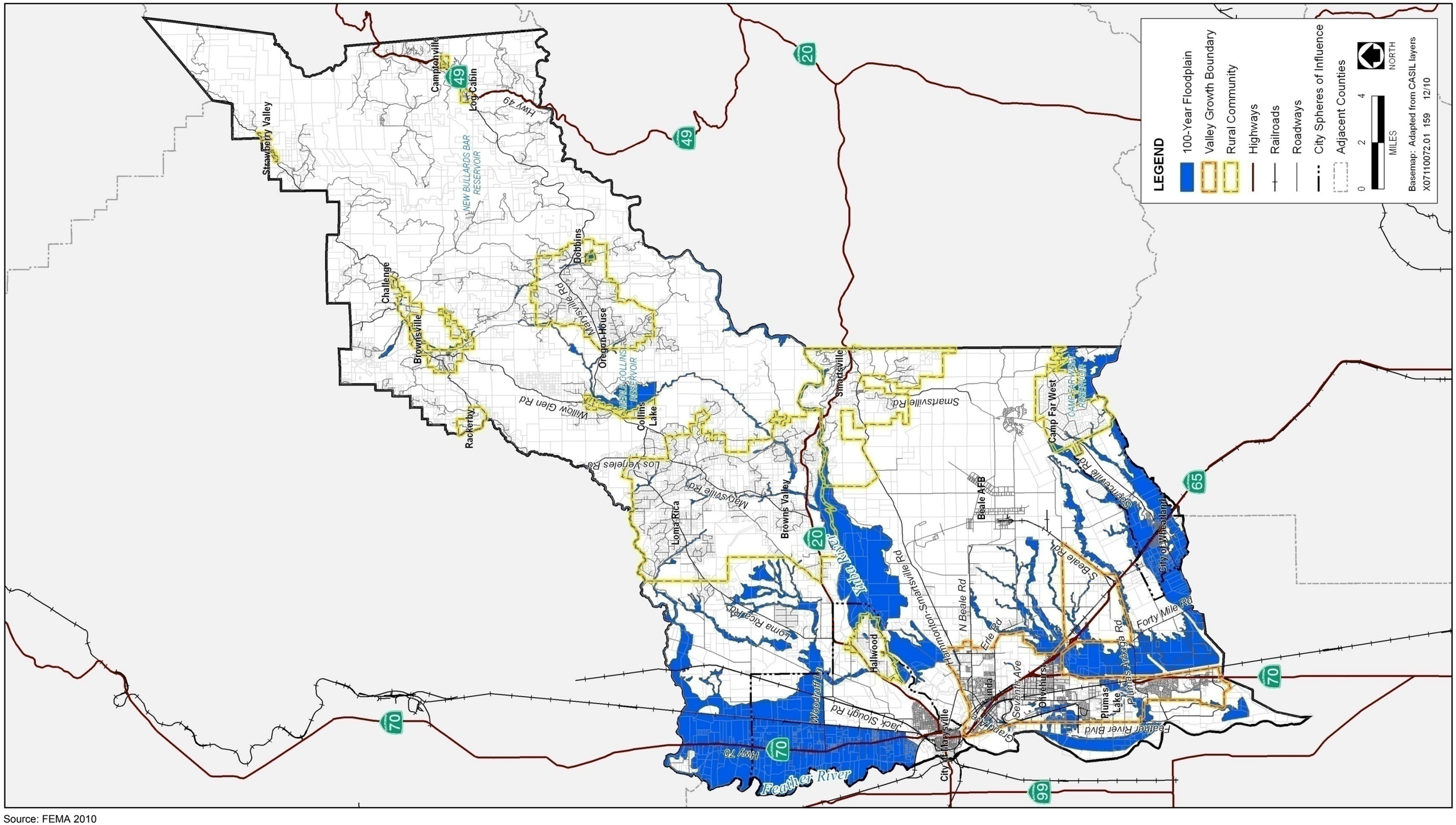
U.S. Army Corps of Engineers

USACE is responsible for issuing permits for the placement of fill or discharge of material into waters of the United States. These permits are required under Sections 401 and 404 of the Clean Water Act. Water supply projects that involve instream construction, such as dams or other types of diversion structures, trigger the need for these permits and related environmental reviews by USACE.

USACE also is responsible for flood control planning and assisting state and local agencies with the design and funding of local flood control projects.

U.S. Army Corps of Engineers Sacramento and San Joaquin River Basins Comprehensive Study

The Sacramento and San Joaquin River Basins Comprehensive Study is a joint effort by the State Reclamation Board and USACE, in coordination with federal, state, and local agencies, groups, and organizations in California's Central Valley, to develop a comprehensive plan for flood damage reduction and environmental restoration for the Sacramento and San Joaquin River Basins. The comprehensive study is more a regionwide planning effort than a regulatory program. However, consistency with its goals and objectives is important for any project affecting flood control in the Sacramento and San Joaquin River basins. Yuba County is in the Lower Sacramento River Region of the comprehensive study area.



Source: FEMA 2010

Flood Zone Areas in Yuba County **Exhibit 4.9-1**

U.S. Bureau of Reclamation

Reclamation is part of the U.S. Department of the Interior and is responsible for development and conservation of most water resources in the western United States. Reclamation's original purpose was to provide for the reclamation of arid and semiarid lands in the West. The agency's current mission covers a wider range of interrelated functions, including:

- providing municipal and industrial water supplies through the Central Valley Project (CVP);
- generating hydroelectric power; providing irrigation water for agriculture; improving water quality, flood control, and river navigation;
- providing river regulation and control and fish and wildlife enhancement;
- offering water-based recreation opportunities; and
- conducting research on a variety of water-related topics.

Reclamation has a long term agreement with the Yuba County Water Agency to purchase water for the CVP. It also oversees some levees in the County.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

State Water Resources Control Board

In California, the State Water Resources Control Board (SWRCB) has broad authority over water-quality control issues for the state. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the state by the federal government under the CWA. Other state agencies with jurisdiction over water quality regulation in California include CDPH (for drinking water regulations), the California Department of Pesticide Regulation, the California Department of Fish and Game (DFG), and the Office of Environmental Health and Hazard Assessment.

Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The regional boards are required to formulate and adopt Basin Plans for all areas in the region and establish water quality objectives in the plans. California water quality objectives (or "criteria" under the Clean Water Act) are found in the Basin Plans adopted by the State Water Resources Control Board and each of the nine Regional Water Quality Control Boards. Yuba County is located in Region 5, which is the Central Valley RWQCB.

California Department of Water Resources

DWR is responsible for preparation of the California Water Plan, management of the SWP, protection and restoration of the Delta, regulation of dams, provision of flood protection, and other functions related to surface water and groundwater resources. These other functions include helping water agencies prepare their Urban Water Management Plans (see "Urban Water Management Planning Act" below) and reviewing such plans to ensure that they comply with the related Urban Water Management Planning Act.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) of 1969 is California's statutory authority for the protection of water quality. Under the act, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. The

Porter-Cologne Act sets forth the obligations of the SWRCB and RWQCBs to adopt and periodically update water quality control plans (basin plans). The Central Valley RWQCB is responsible for Yuba County.

Basin plans are the regional water quality control plans required by both the CWA and Porter-Cologne Act in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The act also requires waste dischargers to notify the RWQCBs of such activities through the filing of Reports of Waste Discharge (RWD) and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWD requirements and WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects, when implemented according to prescribed terms and conditions.

Water Quality Control Plan for the Sacramento-San Joaquin River Basins

Yuba County is within the jurisdiction of the Central Valley RWQCB, which is responsible for the preparation and implementation of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), adopted in 1998 and revised in October 2007 (CVRWQCB 2007). The Basin Plan identifies the beneficial uses of water bodies and provides water quality objectives and standards for waters of the Sacramento River and San Joaquin River hydrologic regions, which includes waters within the County.

State and federal laws mandate the protection of designated "beneficial uses" of water bodies. State law defines beneficial uses as "...domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves" (Water Code Section 13050(f)). Although specific surface waters have not been identified for groundwater recharge or freshwater replenishment in the Basin Plan, these additional protected beneficial uses are designated in the Basin Plan. Beneficial uses of the major waterbodies in Yuba County are shown on Table 4.9-1.

Table 4.9-1
Basin Plan Beneficial Uses of Yuba County Major Rivers[1]

	Feather River	Yuba River	Bear River
Municipal and domestic supply	✓		✓
Irrigation	✓	✓	✓
Agricultural supply	✓	✓	✓
Industrial supply/power		✓	✓
Recreation (contact and noncontact)	✓	✓	✓
Freshwater habitat (warm and cold)	✓	✓	✓
Migration (warm and cold)	✓	✓	P
Spawning (warm and cold)	✓	✓	P
Wildlife habitat	✓	✓	✓

Notes: ✓ = beneficial use; P = proposed beneficial use

[1] Including tributary streams.

Source: Central Valley RWQCB 2004

The Basin Plan contains specific narrative and numeric water quality objectives for a number of physical properties (e.g., temperature, dissolved oxygen, turbidity and suspended solids), biological constituents (e.g., coliform bacteria), and chemical constituents of concern including inorganic parameters and trace metals and organic compounds. Water quality objectives for toxic priority pollutants (i.e., select trace metals and synthetic organic compounds) are included in the Basin Plan and the California Toxics Rule described below.

The primary drainages in Yuba County are the Bear River, North, Middle, and mainstream Yuba Rivers, Dry Creek, Honcut and South Honcut Creeks, and Feather River. Major reservoirs include Englebright, Merle Collins, New Bullards Bar, and Camp Far West.

Dry Creek, Honcut and South Honcut Creeks do not currently have any specifically designated beneficial uses attributed to them in the Basin Plan. Consequently, the Central Valley RWQCB applies the Basin Plan's "tributary rule" and assigns to these creeks the beneficial uses designated for the nearest downstream location.

Title 22 Standards

California's drinking water quality standards are contained in Title 22 of the California Code of Regulations (CCR). Water quality standards are enforceable limits composed of two parts:

- the designated beneficial uses of water, and
- criteria (i.e., numeric or narrative limits) to protect those beneficial uses.

Municipal and domestic supply (MUN) is among the "beneficial uses" defined in Section 13050(f) of the Porter-Cologne Act as uses of surface water and groundwater that must be protected against water quality degradation. Maximum contaminant levels (MCLs) are components of the drinking water standards adopted by the California Department of Health Services (now Department of Public Health or DPH) pursuant to the California Safe Drinking Water Act (Title 22 of the CCR, Division 4, Chapter 15, Domestic Water Quality and Monitoring). Primary water quality objectives were established for protection of health. Secondary water quality objectives were established for aesthetic concerns (e.g., taste and odor, staining of laundry and porcelain fixtures), and at elevated levels do not pose a health hazard.

Drinking water MCLs directly apply to water supply systems "at the tap" (i.e., at the point of use by consumers in, for example, their home and office), and are enforceable by the State. California MCLs, both primary and secondary, directly apply to groundwater and surface water resources when they are specifically referenced as water quality objectives in the pertinent basin plan. In such cases, MCLs become enforceable limits by the SWRCB and RWQCBs. When fully health protective, MCLs may also be used to interpret narrative water quality objectives prohibiting toxicity to humans in water designated as a source of drinking water (MUN) in the basin plan.

California State Non-degradation Policy

In 1968, as required under the federal anti-degradation policy described above, the SWRCB adopted a non-degradation policy aimed at maintaining high quality for waters in California. The non-degradation policy states that the disposal of wastes into state waters shall be regulated to achieve the highest water quality consistent with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of the state. The policy provides as follows:

- Where the existing quality of water is better than required under existing water quality control plans, such quality would be maintained until it has been demonstrated that any change would be consistent with maximum benefit to the people of the State and would not unreasonably affect present and anticipated beneficial uses of such water.

- Any activity which produces waste or increases the volume or concentration of waste and which discharges to existing high-quality waters would be required to meet waste discharge requirements, which would ensure (1) pollution or nuisance would not occur and (2) the highest water quality consistent with the maximum benefit to the people of the State would be maintained.

California Toxics Rule and State Implementation Plan

The California Toxics Rule (CTR) was presented in 2000 in response to requirements of the EPA National Toxics Rule (NTR) and establishes numeric water quality criteria for approximately 130 priority pollutant trace metals and organic compounds. The CTR criteria are regulatory criteria adopted for inland surface waters, enclosed bays, and estuaries in California that are on the CWA Section 303(c) listing for contaminants. The CTR includes criteria for the protection of aquatic life and human health.

Human health criteria (water and organism based) apply to all waters with a Municipal and Domestic Water Supply Beneficial Use designation as indicated in the basin plans. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Plan (SIP), was adopted by the SWRCB in 2000. It establishes provisions for translating CTR criteria, NTR criteria, and basin plan water quality objectives for toxic pollutants into:

- NPDES permit effluent limits,
- effluent compliance determinations,
- monitoring for 2,3,7,8-TCDD (dioxin) and its toxic equivalents,
- chronic (long-term) toxicity control provisions,
- site-specific water quality objectives, and
- granting of effluent compliance exceptions.

The goal of the SIP is to establish a standardized approach for permitting discharges of toxic effluents to inland surface waters, enclosed bays, and estuaries throughout the state.

NPDES Permit System and WDRs

The SWRCB and Central Valley RWQCB have adopted specific NPDES permits for a variety of activities that have potential to discharge wastes to waters of the state. The NPDES permits all involve similar processes including submittal of Notices of Intent (NOI) to discharge to the Central Valley RWQCB and implementation of best management practices (BMPs) to minimize those discharges. The Central Valley RWQCB may also issue site-specific WDRs, or waivers to WDRs, for certain waste discharges to land or waters of the state.

NPDES Permit System and Waste Discharge Requirements for Construction

The latest SWRCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-Division of Water Quality [DWQ] – the Construction General Permit (CGP) is applicable to all land-disturbing construction activities that would affect 1 acre or more. Construction activities subject to the CGP include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-storm water discharges to storm sewer systems and other waters. The permit also requires dischargers to consider the use of post-construction permanent BMPs that will remain in service to protect water quality throughout the life of the project. Types of BMPs include source controls, treatment controls, and site planning measures.

Activities subject to the NPDES general permit for construction activity must develop and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes a site map and description of construction activities and identifies the BMPs that will be employed to prevent soil erosion and discharge of other construction related pollutants, such as petroleum products, solvents, paints, cement, that could contaminate nearby water resources. A monitoring program is generally required to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of storm water related pollutants.

The CGP became effective on July 1, 2010 and includes the following requirements:

- Risk-Based Permitting Approach: the amended general permit establishes three levels of risk possible for a construction site. Risk is calculated in two parts: 1) Project Sediment Risk, and 2) Receiving Water Risk.

- Rainfall Erosivity Waiver: the amended general permit includes the option allowing a small construction site (>1 and <5 acres) to self-certify if the rainfall erosivity value (R value) for their project's given location and time frame calculates to be less than or equal to 5 (the variable "R" in the EPA's Revised Universal Soil Loss Equation). Dischargers can access the an online rainfall erosivity calculator from EPA's website.

- Technology-Based Numeric Action Levels (NAL): the amended general permit includes NALs for pH and turbidity.

- Technology-Based Numeric Effluent Limitations (NEL): the amended general permit contains daily average NELs for pH during any construction phase where there is a high risk of pH discharge and daily average NELs turbidity for all discharges in Risk Level 3. The daily average NEL for turbidity is set at 500 NTU (Nephelometric Turbidity Units) to represent the minimum technology that sites need to employ (to meet the traditional Best Available Technology Economically Achievable (BAT)/ Best Conventional Pollutant Control Technology (BCT) standard) and the traditional, numeric receiving water limitations for turbidity.

- Minimum Requirements Specified: the amended general permit imposes more minimum BMPs and requirements that were previously only required as elements of the SWPPP or were suggested by guidance.

- Project Site Soil Characteristics Monitoring and Reporting: the amended general permit provides the option for dischargers to monitor and report the soil characteristics at their project location. The primary purpose of this requirement is to provide better risk determination and eventually better program evaluation.

- Effluent Monitoring and Reporting: the amended general permit requires effluent monitoring and reporting for pH and turbidity in storm water discharges. The purpose of this monitoring is to determine compliance with the NELs and evaluate whether NALs included in this General Permit are exceeded.

- Receiving Water Monitoring and Reporting: the amended general permit requires some Risk Level 3 dischargers to monitor receiving waters and conduct bioassements.

- Post-Construction Storm Water Performance Standards: the amended general permit specifies runoff reduction requirements for all sites not covered by a Phase I or Phase II MS4 NPDES permit, to avoid, minimize and/or mitigate post-construction storm water runoff impacts.

- Rain Event Action Plan: the amended general permit requires certain sites to develop and implement a Rain Event Action Plan (REAP) that must be designed to protect all exposed portions of the site within 48 hours prior to any likely precipitation event.

- Annual Reporting: the amended general permit requires all projects that are enrolled for more than one continuous three-month period to submit information and annually certify that their site is in compliance Draft Fact Sheet CGP -6- April 22, 2009 with these requirements. The primary purpose of this requirement is to provide information needed for overall program evaluation and pubic information.

- Certification/Training Requirements for Key Project Personnel: the amended general permit requires that key personnel (e.g., SWPPP preparers, inspectors, etc.) have specific training or certifications to ensure their level of knowledge and skills are adequate to ensure their ability to design and evaluate project specifications that will comply with General Permit requirements.

- Linear Underground/Overhead Projects: the amended general permit includes requirements for all Linear Underground/Overhead Projects (LUPs).

Senate Bill 318 – Urban Water Management Planning Act

Each urban water supplier in California is required to prepare an urban water management plan (UWMP) and update the plan on or before December 31 in years ending in 5 and 0, pursuant to California Water Code Sections 10610–10657, as last amended by Senate Bill (SB) 318 (Chapter 688, Statutes of 2004), the Urban Water Management Planning Act. SB 318 is the 18th amendment to the original bill requiring a UWMP, which was initially enacted in 1983. Water Supply and Demand is discussed in detail in Section 4.14 "Utilities."

Senate Bill 610

SB 610 (Chapter 643, Statues of 2001) became effective January 1, 2002. The purpose of SB 610 is to strengthen the process by which local agencies determine whether current and future water supplies are adequate and sufficient to meet current and future demand. SB 610 amended the California Public Resources Code to incorporate California Water Code requirements within the CEQA process for certain types of projects. Projects requiring water supply assessments include (State Water Code Section 10912 (a):

- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- a proposed hotel or motel, or both, having more than 500 rooms;
- a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- a mixed-use project that includes one or more of the projects specified in this subdivision; or,
- a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

SB 610 also amended the California Water Code to broaden the types of information required to be included in an UWMP (Water Code Section 10610 et seq.). Water Supply and Demand is discussed in detail in Section 4.14, "Utilities."

Senate Bill 221

SB 221 (Chapter 642, Statues of 2001) requires a county or city to include as a condition of approval of any tentative map, parcel map, or development agreement for residential subdivisions of more than 500 units or a 10% increase for public systems with fewer than 5,000 connections that a "sufficient water supply" be available. Proof of a sufficient water supply must be based on a written verification from the public water system that would serve the development. To determine "sufficient water supply", the water supplier must consider:

- the availability of water supplies over a historical record of at least 20 years,
- the applicability of an urban water shortage contingency analysis,

- any reductions in water supply allocated to a specific water use sector pursuant to an adopted resolution or ordinance or contractual obligation on the part of the public water system, and

- the amount of water that the water supplier can reasonably rely on receiving from other water supply projects.

The written verification of a water supplier's ability or inability to provide sufficient water to a subdivision needs to be supported by substantial evidence, which may include the public water system's most recently adopted urban water management plan or other information relating to the sufficiency of the water supply. Water Supply and Demand is discussed in detail in Section 4.14, "Utilities."

Recycled Wastewater Requirements

Wastewater recycling in California is regulated under Title 22, Division 4 of the California Code of Regulations (CCR) under the jurisdiction of CDPH. The intent of these regulations is to ensure protection of public health associated with the use of recycled water. Title 22 regulations establish acceptable levels of constituents in recycled water for a range of uses and stipulate means for ensuring reliability in the production of recycled water.

Recycled water is commonly given non-potable uses throughout the state and is an effective means of maximizing use of water resources in communities that are short on water. The CDPH has jurisdiction over the distribution of recycled wastewater and the enforcement of Title 22 regulations. The RWQCB is responsible for issuing WDRs (including discharge prohibitions, monitoring, and reporting programs). The RWQCB is also responsible for reuse requirements associated with implementing wastewater reclamation projects. Title 17, Division 1 of the CCR establishes requirements for protection of potable water systems where potable water and recycled water could cross contaminate.

Senate Bill 5

Senate Bill (SB) 5 enacts the Central Valley Flood Protection Act of 2008 and requires DWR and the Central Valley Flood Protection Board (previously known as the State Reclamation Board) to prepare and adopt a Central Valley Flood Protection Plan by 2012. The plan will establish that the 0.5% AEP event (otherwise known as 200-year flood protection) is to be the minimum urban level of flood protection.

SB 5 also sets deadlines for cities and counties in the Central Valley to amend their general plans and their zoning ordinances to conform to the plan and restricts approval of development agreements and subdivision maps in flood hazard zones, once the general plan and zoning ordinance amendments have been enacted, unless certain findings are made. The intent of SB 5 is to improve flood protection in urban areas and areas that rely on levees for flood protection.

Central Valley Flood Protection Plan

The Central Valley Flood Protection Plan (as set forth in California Water Code, section 9614) is a descriptive document that includes:

- a description of the Flood Management System, its performance, and the challenges to modifying it;

- a description of the facilities included in the State Plan of Flood Control;

- a description of probable impacts of projected climate change, land use patterns, and other potential challenges;

- an evaluation of needed structural improvements and a list of facilities recommended for removal; and

- a description of both structural and nonstructural methods for providing an urban level of flood protection to currently urbanized areas in the Central Valley.

State of California Reclamation Board

The State of California Reclamation Board (the Reclamation Board) also has jurisdiction over flood control in California. It is responsible for ensuring the serviceability of levees and requires permits for any activity that may affect the capacity of the flood control system. The Reclamation Board cooperates with USACE to control flooding along the Sacramento and San Joaquin Rivers and tributaries, and its jurisdiction includes the Central Valley, including all tributaries and distributaries of the Sacramento and San Joaquin Rivers.

Within its jurisdiction, the Reclamation Board enforces appropriate standards for the construction, maintenance, and protection of adopted flood control plans that will best protect the public from floods. Approval by the Reclamation Board is required for projects or uses that encroach into rivers and waterways within flood control project areas authorized by the federal and state government and within regulated streams adopted by the Reclamation Board. The following rivers and streams in Yuba County are regulated as such (23 CCR Section 112, Table 8.1):

- Bear River,
- Best Slough,
- Dry Creek,
- Feather River,
- Honcut Creek,
- Jack Slough,
- Simmerly Slough,
- Western Pacific Interceptor Channel, and
- Yuba River.

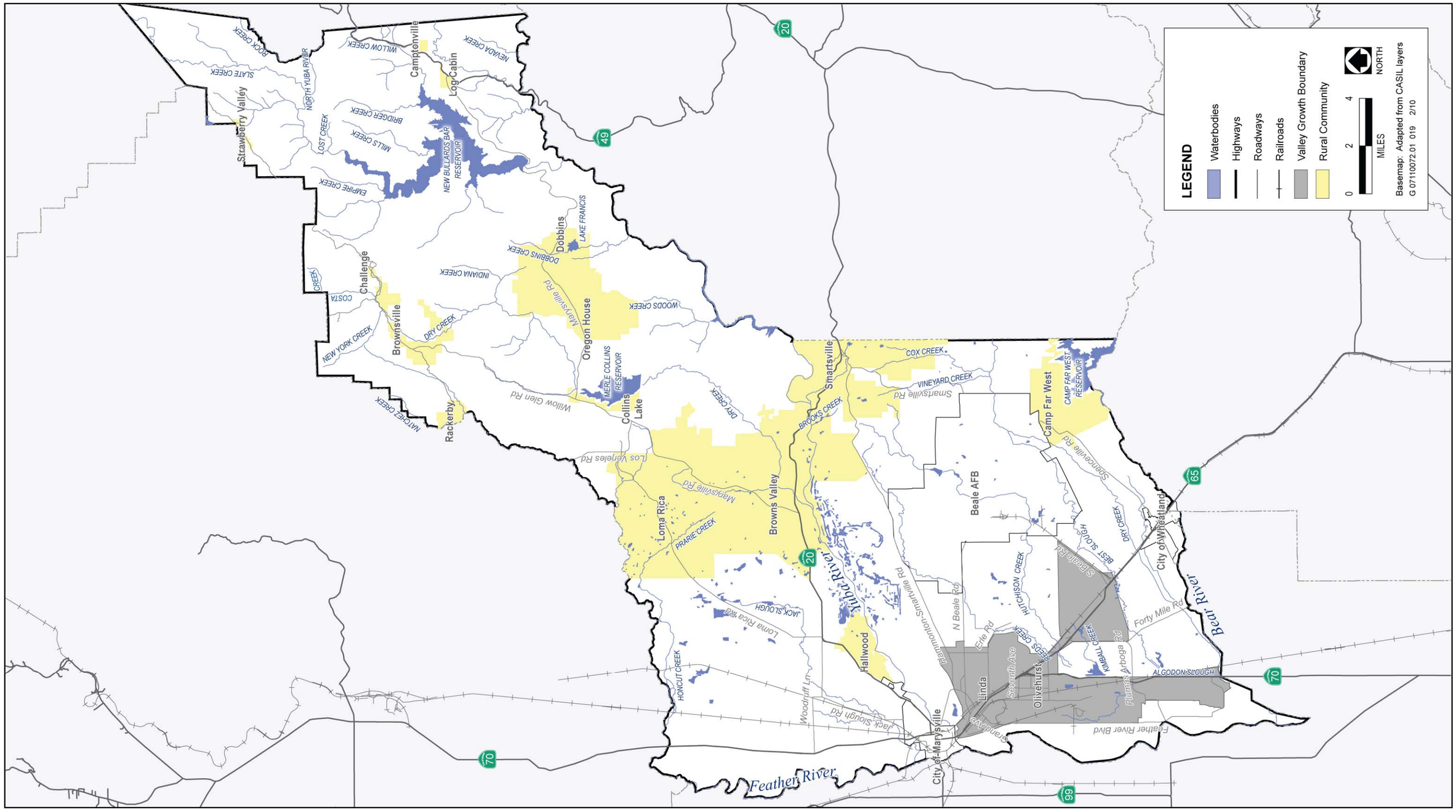
In areas of California that may be subject to frequent overflow or flooding that makes the land unusable, the legislature enacted law (Water Code Section 50000 et seq.) so reclamation districts could be formed to provide a means for counties to finance the reclamation of land made unusable by overflow or flooding. Yuba County Reclamation Districts are described below.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Sacramento River Flood Control Project

The primary facilities for controlling flood damage in the Yuba-Feather River system are levees along the flood channels and reservoirs that provide flood storage (Exhibit 4.9-2). Also important in preventing flood damage are coordinated preparations for flood fighting and emergency planning, including evacuation. Several federal, state, and local agencies have responsibilities for different aspects of operations and maintenance of flood control facilities and for emergency response. These agencies include USACE; the National Weather Service; DWR, including its Division of Safety of Dams; The Reclamation Board; the Governor's Office of Emergency Services (OES); Yuba County Water Agency (YCWA); Yuba County Office of Emergency Services; and local reclamation and levee districts.

The flood control facilities on the Feather and Yuba Rivers are part of the joint federal-state Sacramento River Flood Control Project (SRFCP). USACE, in conjunction with the State of California, developed a flood control plan for the Feather and Yuba Rivers as part of the SRFCP. This plan included levee construction, channel improvements, and reservoir flood storage. The USACE developed specific design capacities for the river channels and flood control operation rules for Lake Oroville on the Feather River and New Bullards Bar Reservoir on the North Yuba River, both of which control flows in the Feather River below Marysville. These operating rules are in force for defined flood seasons. During flood operations, USACE monitors the operation of the reservoirs to ensure compliance with the written regulations.



Source: Yuba County GIS 2007, Adapted by AECOM 2010

Yuba County Major Waterbodies **Exhibit 4.9-2**

The levees on the east bank of the Feather River and the south bank of the Yuba River in the Feather River Levee Repair Project area were constructed by USACE as part of the SRFCP. USACE does not actively participate in the flood operation of the river and levee system, but has undertaken construction and repair of the existing levees along the Feather and Yuba Rivers over the years as part of its ongoing efforts to maintain the regional protections provided by the SRFCP. "Project" levees in California must meet the standards for design and construction specified by USACE in Engineering Manual 1110-2-1913 (U.S. Army Corps of Engineers 2000).

The Reclamation Board enforces appropriate standards for the construction, maintenance, and protection of flood control facilities in the Central Valley and must approve any activity that may affect "project works" to ensure that the activity maintains the integrity and safety of flood control project levees and floodways and is consistent with the flood control plans adopted by the board and the California Legislature. Project works include levees, bank protection projects, weirs, pumping plants, floodways, and any other related flood control works or rights-of-way that have been constructed using state or federal funds. Project works also include flood control plans. Rules in the CCR (23 CCR Sections 111–137) regulate the modification and construction of levees to ensure public safety. The rules state that existing levees may not be excavated or left partially excavated during the flood season. The flood season for the Feather and Yuba Rivers is November 1 through April 15.

Levee operation and maintenance are overseen by DWR, which inspects the levees and issues a biannual report. The report covers the general condition of the levees, vegetation control, rodent control, and flood preparedness. The report contains maintenance recommendations that are subsequently implemented by the applicable levee district or reclamation district. Forecasts issued by the State-Federal Flood Operations Center, jointly operated by DWR and the National Weather Service, are the primary notification received by local levee districts and reclamation districts for the need to patrol the levees. If levee defects are found that are beyond the capability of the responsible levee or reclamation district to manage, the district will request assistance from the state and USACE. Such requests are coordinated through the OES system.

County of Yuba Storm Water Management Plan

The County of Yuba Storm Water Management Plan (SWMP) is implemented by Yuba County to fulfill requirements of the NPDES Phase II requirements for Small Municipal Separate Storm Sewer Systems (Small MS4s) (Yuba County 2004). The six minimum control measures required by the Phase II requirements and implemented by the SWMP are:

- Public Education: Education of the public regarding the importance of the SWMP and the importance of the public's role in the program.
- Public Participation: Involve the public in the ongoing development and refinement of the SWMP, allow for input on the control measures, and encourage public participation in implementation of the measures.
- Illicit Discharge Detection and Elimination: Pursue ordinances or take equivalent measures that prohibit illicit discharges and develop programs to detect illicit discharges.
- Construction Site Stormwater Runoff Control: Develop measures to control the discharge of pollutants from construction sites greater than or equal to 1 acre in size within the County. The programs must include inspections of construction sites and enforcement actions against violators.
- Post-construction Stormwater Management: Develop measures to require long-term BMP's that protect water quality and control runoff flow to be incorporated into development and substantial redevelopment projects.
- Pollution Prevention/Good Housekeeping for Municipal Operations: The County and other affected agencies within the County will evaluate their activities and develop a program to prevent the discharge of pollutants from those activities. At a minimum, the program will educate staff on pollution prevention and minimize pollutant sources.

Through these control measures the SWMP is focused on reducing the discharge of pollutants to stormwater to the maximum extent practicable, and preparing an annual report on the progress of the SWMP implementation.

Yuba County Ordinances

Chapter 10.30 of the Building and Construction Ordinance of Yuba County

The purpose of the Chapter 10.30 "Floodplain Management" ordinance includes minimizing public and private losses due to flood conditions within flood prone, mudslide or flood related erosion areas. In order to accomplish its purposes, this ordinance includes regulations to:

- restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;
- require that uses vulnerable to flood, including facilities which serve such uses, be protected against flood damage at the time of initial construction, and mitigated to prevent future losses for existing structure;
- control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- control filling, grading, dredging, and other development which may increase flood damage; and
- prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

Section 11.15.670 of the Subdivision Ordinance of Yuba County

This section relates specifically to general drainage requirements and hydraulic design parameters for new subdivisions. The ordinance requires that:

- subdivisions be protected from flood hazard and inundation by stormwaters originating without and within the proposed subdivision;
- drainage water entering the subdivision shall be discharged at locations and in a manner closely resembling conditions prior to the project and shall be conveyed into a permanent drainage facility with sufficient capacity;
- design of drainage features in the subdivision will rely on the rational formula for determining flows; and
- the hydraulic design of the subdivision shall meet 10-year storm average recurrence intervals.

All of the above requirements must be reviewed and approved by the Yuba County Department of Public Works.

Yuba County Integrated Regional Water Management Plan

The YCWA is lead agency for the Yuba County Integrated Regional Water Management Plan (IRWMP) (YCWA 2008a), which addresses local water resource planning and management needs from existing conditions (as represented by 2005) through 2030. The State of California Water Code (CWC) 79562.5(b) specifies standards for IRWMPs. The Yuba County IRWMP has complied with these standards (see YCWA 2008a, Table 1-1). The IRWMP addresses forecasted water demands for urban needs, agriculture uses and water supply availability, flood protection requirements, ecosystem restoration needs, and recreational opportunities.

Developing the Yuba County IRWMP has involved a comprehensive, integrated planning process for the valley floor of Yuba County that solicits, evaluates, prioritizes, and documents water projects. This planning process will facilitate obtaining funding for implementation of the projects from existing and future state funds.

The service area for the Yuba County IRWMP includes the valley floor and foothill/mountain areas of Yuba County and includes communities having a variety of water resource issues. As detailed in "Groundwater" below, the valley floor portion of the county overlies the alluvial aquifer system of the Sacramento Valley. Good soils and access to surface and groundwater supplies have developed and supported the agricultural economy of the region. Recent increases in urbanization have resulted in changes in water supply requirements and supply sources. In contrast, the foothill/mountain areas have a much less intensive agricultural and urban development. Water supply availability and reliability is one of the primary issues because of the lack of groundwater and difficulty moving water from the rivers to the areas of use across the rugged terrain (YCWA 2008b:ES-2).

The cities of Marysville and Wheatland, and proposed development areas of Linda and Olivehurst, are included within the Yuba County IRWMP. Yuba City is included within the IRWMP for the purpose of exploring the integration of common wastewater management issues and water recycling with Linda County Water District, the City of Marysville, and the Olivehurst Public Utilities District.

A Regional Water Management Group (RWMG), which represents participating agencies, was formed to develop the Yuba County IRWMP. Participating agencies on the RWMG include:

- Yuba County Water Agency (lead agency),
- Browns Valley Irrigation District,
- Olivehurst Public Utilities District,
- Linda County Water District,
- City of Marysville—California Water Service Company,
- City of Yuba City,
- Reclamation District 784,
- Yuba County,
- North Yuba Water District,
- City of Wheatland, and
- Yuba County Resource Conservation District.

In addition to IRWMP efforts, the RWMG, or some variation of it, may have long-term value as a forum for detailed project proposals and project implementation. The IRWMP determined that the most important regional water management issues were: local flood protection and regional flood management; water supply reliability, ecosystem preservation and enhancement; and recreation and public access (YCWA 2008a).

TRLIA and County Reclamation Districts

Four reclamation districts are in Yuba County: Reclamation Districts 10, 784, 817, and 2103. Within Yuba County, levee maintenance is the responsibility of the reclamation districts (YCWA 2008a). Reclamation District 784 serves a large area along the Feather River to the south of Marysville. Reclamation Districts 817 and 2103 serve areas at the southern boundary of the County along the Feather River. Reclamation District 10 serves an area along the Feather River north of Marysville. Lake Oroville and New Bullards Bar Reservoir, as well as an extensive system of levees, provide flood control along the Feather, Yuba, and Bear Rivers, and Huncut Creek.

The County and Reclamation District 784 signed a joint powers agency agreement to create the Three Rivers Levee Improvement Authority (TRLIA) to finance and construct levee improvements designed to protect developed and developing portions of south Yuba County from flooding from the Yuba, Feather, and Bear rivers and the Western Pacific Interceptor Canal. Levee improvements are designed to provide protection against the 200-year flood.

The Reclamation District 784 levee system now meets the minimum certification criteria outlined in Title 44, Code of Federal Regulations, Section 65.10 (44 CFR 65.10) for protection from the 100-year flood along 29 miles of levees protecting Olivehurst, Linda, Argoba and Plumas Lake. The FEMA Digital Flood Insurance Rate Map (DFIRM) scheduled to become effective in February 2011 reflects this floodplain protection (Yuba County Public Works 2010).

The Upper Yuba River Levee Improvement Project will complete a levee system and setback levees designed to provide 200-year flood protection for 40,000 residents in South Yuba County, expected by mid-2011. The Feather River Levee Improvements will eliminate underseepage and provide 200-year flood protection for the Bear and Feather River floodplains (TRLIA 2010: http://www.trlia.org/).

4.9.2 ENVIRONMENTAL SETTING

REGIONAL CONDITIONS

Yuba County is located in the northern portion of California along the eastern edge of the Sacramento Valley within the Sacramento River Basin, which is one of the largest basins in California, encompassing approximately 26,500 square miles. The County occupies portions of California's Central Valley and Sierra Nevada geomorphic provinces. The County is predominantly drained by the Feather, Yuba, and Bear Rivers, which flow into the Sacramento River and ultimately into the Pacific Ocean through San Francisco Bay. The melting snow pack in the Sierra Nevada, in combination with the operation of numerous reservoirs within the system, maintains flows in Sacramento year round (Yuba County 2005).

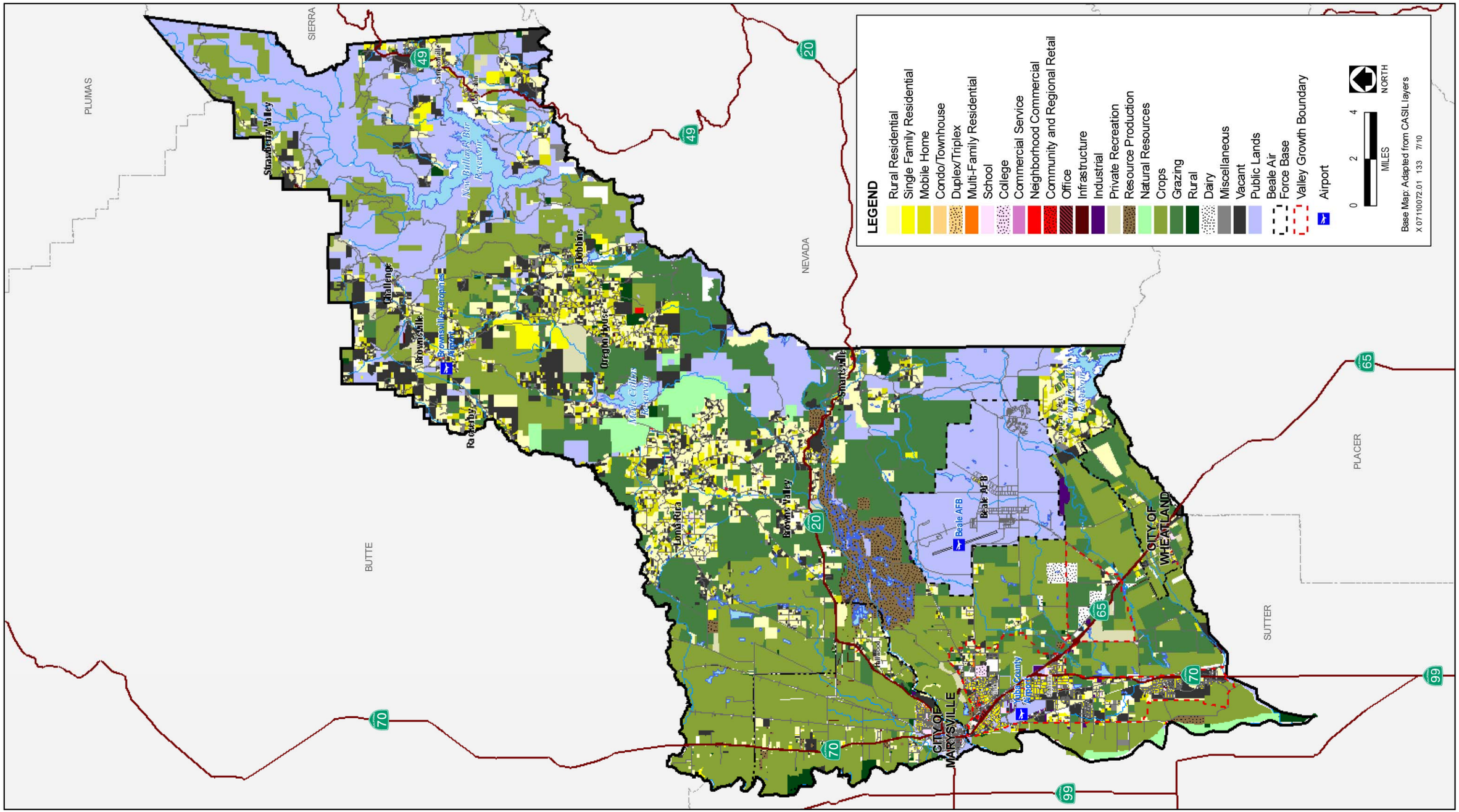
Yuba County's boundaries are marked by many of its major rivers. The western boundary of Yuba County is formed by the Feather River. South Honcut Creek forms part of the northern boundary of the County, while the Yuba River forms a part of the eastern boundary and the Bear River flows along the southern boundary (FEMA 2006).

Yuba County is composed of three general physiographic regions from west to east: the Sacramento River Basin (valley area), the Sierra foothills (foothill area), and Sierra Nevada range (mountain area). The precipitation generally increases in these regions with elevation and occurs mainly as rain in the lower elevations and snow in the higher elevations of the mountain area.

The valley area, encompassing the western portion of the County, is dominated by agriculture (e.g., field and tree crops, rice), urbanized areas, and Beale Air Force Base. The majority of populated areas are located in this area (Exhibit 4.9-3). The elevation ranges from approximately 30 feet above mean sea level (msl) at the Feather River, increasing easterly to approximately 250 feet above msl in the western Sierra Nevada foothill area.

The climate in the valley area is typical of the Central Valley, with cool, relatively mild winters and hot, dry summers. For each 300 foot rise in elevation in the foothill and mountain areas, the temperature generally decreases approximately 1°F and precipitation increases 2–4 inches, with the exception of inversions and local topography (Yuba County 1994). January is generally the coldest month, with average low and high temperatures approximately 35°F and 54°F respectively. July is generally the hottest month, with average low and high temperatures of 61°F and 96°F respectively, and high temperatures commonly exceeding 100°F. Precipitation in this area is about 18–23 inches annually. About 95% of the annual rainfall occurs between October and April.

The foothill area, in the central portion of the County, consists primarily of open space and agricultural and low density rural residential land uses. The elevation range of this region is from 250 feet above msl at the western edge of the Sierra Nevada foothills to approximately 1,600 feet at the eastern edge of the area to the Sierra Nevada range. Precipitation in this area is greater than in the valley area, about 27–45 inches annually.



Source: Yuba County Assessor's Office 2007, adapted by AECOM 2010

Existing Land Use **Exhibit 4.9-3**

The mountain area of the County is dominated by open space and lands used for timber production and residential land use. Portions of two national forests, Tahoe National Forest and Plumas National Forest, lie within this area of Yuba County. Rural residential development is an increasing part of the foothill and mountain landscape. Precipitation in the County is greatest in this area, averaging 45 inches or more annually.

SURFACE WATER

Surface water includes rivers, streams, reservoirs, and human-made waterways, such as canals. The primary drainages in Yuba County are the Bear River, North, Middle, and mainstem Yuba Rivers, Dry Creek, Honcut and South Honcut Creeks, and Feather River. Major reservoirs include Englebright, Merle Collins, New Bullards Bar, and Camp Far West. The Yuba River drains approximately one-third of the higher elevations of the County. Jack-Simmerly Slough and South Honcut Creek drain the northern area, and the Bear River drains the southern portion of the County via the Western Pacific Interceptor Canal.

According to the Integrated Regional Water Management Plan prepared by YCWA, the Yuba River provides the best opportunities for surface water management. Other surface water sources that affect water management in the valley portion of the County include the Feather and Bear Rivers, and Honcut Creek (YCWA 2008a).

Feather River

The Feather River drains an area of approximately 5,500 square miles at its confluence with the Bear River and 3,611 square miles above Oroville Dam in Butte and Plumas Counties. Between Oroville and Marysville, the Feather River drains an area of 369 square miles, flowing southerly through relatively flat or gently rolling terrain for 39 miles. North and South Honcut Creeks are principal tributaries to the Feather River between Marysville and Oroville and drain about 78 square miles of lower foothill and valley areas east of the Feather River.

Jack and Simmerly Sloughs, also tributaries to the Feather River, are bordered by levees in places to confine them to their channels during flood events. The sloughs drain approximately 55 square miles north of Marysville between the east bank levee of the Feather River and the north bank levee of the Yuba River. Most of the area drained by the sloughs is rice-growing land that is seasonally flooded (TRLIA 2006).

Yuba River

The Yuba River Recreation and Wildlife Enhancement Area classification identifies an area along that portion of the Yuba River situated between Park's Bar Road and the City of Marysville:

- that is to be protected from encroachments incompatible with recreational and wildlife uses;
- that is suitable for recreational uses, including camping, fishing, hiking, bike riding, equestrian use, and river rafting; and
- will serve as a connection between wildlife preserves and parklands.

The Yuba River drains the western slope of the Sierra Nevada and flows generally southwesterly to its confluence with the Feather River at Marysville (Exhibit 4.9-2). The mainstem of the Yuba River forms at the juncture of the Middle and North Yuba Rivers just south of New Bullards Bar Reservoir and is joined by the South Yuba River just a few miles downstream near Bridgeport in Nevada County, approximately one mile east of Yuba County. The North Yuba River above New Bullards Bar Dam drains approximately 489 square miles. Large portions of the Yuba River drainage (middle and south forks) are largely unregulated with respect to flood flows. The mainstem of the Yuba River in the Marysville vicinity drains approximately 1,339 square miles (TRLIA 2006, YCWA 2008a).

Feather and Yuba River Flows

The Feather and Yuba Rivers have similar seasonal distributions of flows. As shown in Table 4.9-2, the mean monthly flows (expressed in cubic feet per second [cfs]) are greatest in winter and early spring (January through March) and are at a minimum in late summer and early fall (July through October). The effects of reservoir storage capacity on flows are noticeable in extreme water years.

Table 4.9-2
Average Mean, Maximum, and Minimum Monthly Flows (cfs) on the Feather and Yuba Rivers

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Feather River at Oroville (Butte County), USGS Gauge 11407000 (1969–2005)												
Mean	571	734	1,120	2,760	2,090	1,890	949	747	531	538	526	518
Maximum	1,580	3,310	7,730	26,750	25,180	18,870	7,060	7,920	1,000	770	800	660
Minimum	400	400	390	400	400	400	400	390	410	400	390	390
Yuba River near Marysville, USGS Gauge 11421000 (1970–2005)												
Mean	1,070	1,320	2,320	4,090	4,330	4,280	2,880	2,530	1,970	1,310	1,440	1,240
Maximum	2,370	4,480	11,430	26,180	20,970	15,100	14,280	9,720	8,630	3,740	2,830	2,900
Minimum	130	180	370	230	210	190	170	170	150	90	70	90

Notes: cfs = cubic feet per second; USGS = U.S. Geological Survey
Source: USGS 2006; Three Rivers Levee Improvement Authority 2006

The Feather River has nearly uniform flows in different year types because of the very large storage capacity of Lake Oroville. However, Yuba River flows are greatly reduced in very dry years because of the more limited carryover storage capacity of New Bullards Bar Reservoir. During wet periods, the maximum monthly flow in the Feather River is often less than the maximum flow on the Yuba River, even though the Feather River watershed is more than three times the size of the Yuba River watershed, because the large storage volume of Lake Oroville can more effectively reduce the Feather River high flows.

Average unimpaired flows of the Yuba River at Smartsville are about 2.45 million af, although a portion of this amount is not available downstream due to diversions. These flows can vary greatly, depending on whether is a wet or dry year. For example, the Yuba River flows have ranged from a low of 370,000 af in 1977 to 4,925,000 af in 1986 (YCWA 2008a).

Bear River

The headwaters of the Bear River are in the vicinity of Emigrant Gap and Lake Spaulding. The Bear River flows generally southwesterly to a point approximately eight miles north of Auburn, where it turns more westward to its confluence with the Feather River, in the far southwest portion of Yuba County. Elevations within the Bear River basin range from about 125 feet above msl to more than 5,700 feet msl. Major tributaries to the Bear River are Greenhorn, Wolf, Rock, and Dry Creeks. The entire drainage of the Bear River is approximately 550 square miles (YCWA 2002). Unimpaired flows in the Bear River average 272,000 af annually, although they have ranged from 20,000 to 740,000 af (YCWA 2008a).

Major importation of water to the Bear River watershed occurs near its headwaters. Some irrigation spill and ditch seepage enters from the ridge between the South Yuba and Bear Rivers. Exports from the Bear River watershed are made through the conveyance facilities of Nevada Irrigation District and Pacific Gas and Electric Company. These diversions include nearly all the imported water and some of the natural flow. The diverted water is used

for irrigation, power generation, and domestic supply in the Auburn area. The net effect of the upstream uses, exports, and imports in the Yuba and Bear River basins has been to deplete the streamflows at the base of the foothills. In recent years, the average amount diverted has been more than 44,000 af seasonally, which primarily affects the Yuba River at Smartsville. The average depletion of the Bear River below Wheatland is relatively minor because of the imports of water farther upstream from the Yuba River basin (Three Rivers Levee Improvement Authority 2006).

Honcut Creek

The Honcut Creek watershed produces about 60,000 acre-feet (af) per year of runoff primarily from rainfall. There are no major reservoirs on Honcut Creek, but there are a number of riparian diverters. The watershed totals about 78 square miles above the town of Honcut (in Butte County).

Reservoirs

The major reservoirs in Yuba County are New Bullards Bar Reservoir on the North Yuba River, Camp Far West on the Bear River, Englebright Reservoir on the Yuba River, Merle Collins Reservoir on Dry Creek, and Lake Francis Reservoir. These reservoirs fulfill several purposes, including flood control, water supply, and recreation.

New Bullards Bar Reservoir, completed in 1970, is owned and operated by YCWA and is the principal flood control reservoir on the Yuba River system. The reservoir is on the North Yuba River just above its confluence with the Middle Yuba River. The largest Yuba County reservoir, New Bullards Bar Reservoir drains a watershed of 489 square miles, 37% of the total Yuba River drainage area. At elevation 1,956 feet msl, the 635 feet high reservoir provides a full pool of 966,000 af of storage, up to 170,000 af of which is required for flood control. The reservoir inundates 4,790 acres at this elevation. Power is generated at the New Colgate Powerhouse, which has a maximum outflow of 3,500 cfs (YCWA 2003, YCWA 2008a). Other water uses are irrigation, municipal, and recreation.

Camp Far West Reservoir, completed in 1963, is owned by South Sutter Irrigation District. The reservoir is near the southeastern extremity of Yuba County near Wheatland. The Bear River provides the majority of its water source, with Rock Creek and other minor tributaries also contributing. With a height of 185 feet, the reservoir has a capacity of 104,500 af, and is used primarily for irrigation (FEMA 2006, YCWA 2008a).

Englebright Reservoir, completed in 1941, is operated by USACE. The 280 feet high reservoir has a storage capacity of 70,000 af, and provides debris control, as well as power generation, and recreation. The reservoir is at a maximum elevation of 527 feet and has a surface area of approximately 400 acres.

Merle Collins Reservoir, also known as Collins Lake, was completed in 1963 by Browns Valley Irrigation District (BVID). Collins Reservoir was created by the Virginia Ranch Dam's impounding of French Dry Creek and has a storage capacity of 57,000 acre feet. Water stored in Collins Reservoir is used primarily to supply BVID's customers with untreated water for irrigation purposes (YCWA 2008a).

GROUNDWATER

Groundwater in the foothill and mountain areas of Yuba County is not well defined. The valley floor is underlain by an alluvial aquifer system that contains significant quantities of groundwater, while the foothill and mountain areas are underlain by a fractured rock aquifer (YCWA 2008a).

This fractured rock is considered the dominant controlling factor on the occurrence of groundwater in these areas. Wells within the foothill and mountain areas yield low to moderate flows adequate for domestic purposes but marginal for farming, ranching, or industrial uses. The principal aquifers in the valley area of Yuba County are composed of continental sediments of Pleistocene and Recent age. These aquifers consist of as much as 100 feet of Pleistocene sands and gravels overlain by as much as 125 feet of recent alluvial fan, floodplain, and stream

channel deposits. The pre-Eocene formations in the valley area of Yuba County have relatively low permeability and are moderate water producers (FEMA 2006).

Historically, groundwater flows from the eastern boundary of Yuba County toward the western boundary of the county. The hydraulic gradient dips steeply from the Sierra Nevada Mountain front, which abuts the eastern boundary of the County and gradually flattens out toward the west, eventually discharging into the Feather River (YCWA, 2008a). Groundwater in Yuba County is divided into two subbasins of the larger Sacramento Valley Groundwater Basin, which are called the North Yuba Subbasin and the South Yuba Subbasin. Overall, these two subbasins cover approximately 270 square miles (YCWA 2008a).

The North Yuba Subbasin (DWR Basin No. 5-22.60) is found in the northwest portion of Yuba County, bounded on the south by the Yuba River, on the west by the Feather River, by Honcut Creek on the north, and the Sierra Nevada on the east. The overall subbasin covers 50,000 acres (78 square miles) and includes Marysville and most of its sphere of influence. Based on an analysis of hydrographs, the Yuba River and Feather Rivers create a groundwater divide, which act as flow barriers in the shallow subsurface. Stream channel and floodplain deposits present along the Yuba River, Feather River, and Honcut Creek are highly permeable and provide for large amounts of groundwater recharge within the subbasin. The potential for artificial recharge of groundwater in the basin is limited since areas that have available storage space typically have overlying soils with very low infiltration rates that would restrict recharge potential (DWR 2006a).

Groundwater levels in the North Yuba Subbasin range from approximately 50 feet msl near the City of Marysville to 130 feet msl near the Yuba River. Groundwater levels are about 70 feet msl near the center of the subbasin (YCWA 2008a). The South Yuba Subbasin (DWR Basin No. 5-22.61) is found in the southwest portion of Yuba County, bounded on the north by the Yuba River and on the west by the Feather River. The overall subbasin covers 89,000 acres (138 square miles) and includes Wheatland and its sphere of influence, Beale Air Force Base, and other areas of south Yuba County (DWR, 2006b).

The South Yuba Subbasin has ground water levels that range from about 25 feet msl along portions of the Highway 70 to 140 feet msl at the edge of the subbasin near the Yuba River and Beale AFB. Near the center of the subbasin, groundwater is found at about 45 feet msl (YCWA 2008a). Groundwater levels in the South Yuba Subbasin have historically exhibited a well-developed regional cone of depression since as early as the 1940s. The cone of depression starts on the western side of Beale AFB and continues into the central region (west of Beale AFB) of the subbasin (YCWA, 2008a). In 1960, nearly all water levels in the subbasin were well below adjacent river levels on the Bear, Feather, and Yuba Rivers because of reliance on groundwater pumping.

By 1984, water levels in the center of the South Yuba cone of depression had fallen to 30 feet below sea level. The water level contours adjacent to the Bear and Yuba Rivers indicated a large gradient and seepage from the rivers. By 1990, water levels in this cone of depression rose to 10 feet above sea level because of increasing surface water irrigation supplies and reduced groundwater pumping. Current DWR records indicate groundwater levels continue to increase (DWR, 2006b).

The groundwater storage capacity for the North and South Yuba subbasins was estimated to be 7.5 million acre-feet, although the use of this entire volume of freshwater would not be feasible because of the numerous negative environmental impacts as well as potentially dewatering shallow wells in the basins. A recent analysis of the volume of fresh groundwater within 200 feet of the spring 2003 groundwater levels is estimated at about 2.8 million af, not all of which is usable because of impacts on shallow wells in the basin (YCWA, 2008a).

In addition to the alluvial groundwater basins found in the western portion of the County, the foothill area has limited availability of groundwater, due to the poorly understood nature of the fractured granite formations that make up the Sierra Nevada. Hardrock systems in the area prevent water from penetrating the rocks, so water can only enter at joints and fractures. Groundwater may be stored in limited amounts in these fractures, as well as in

small alluvial deposits located adjacent to local mountain streams. However, these areas of groundwater are not easily delineated or reliable.

Water quality in the limited groundwater storage areas of the foothills and mountains may also be affected by high levels of heavy metals and contamination from septic systems. Since many rural homes do not have access to municipal water systems, many are dependent on these unreliable groundwater resources (YCWA 2008a).

The significant groundwater recharge areas in this subbasin are found in stream channel and floodplain deposits along the Yuba River, Feather River, and Honcut Creek, which are highly permeable and provide for large amounts of groundwater recharge (Exhibit 4.9-4) (DWR 2006b). Groundwater recharge becomes limited in urban areas with paved or impermeable surfaces, since water can no longer filter through sediment. The area around the Daguerre Point Dam has also been identified as an enhanced recharge area from the Yuba River to the North and South Yuba Subbasins, due to its head benefit and impoundment of water (YCWA 2008a). The potential for artificial recharge of groundwater in the basin is limited because areas that have available storage space typically have overlying soils with very low infiltration rates that would restrict recharge potential (DWR 2006b).

WATER QUALITY

Surface and groundwater water quality in Yuba County is generally good. The greatest potential for water quality problems exists in the western portions of Yuba County where the majority of population and associated developed land uses exists or is being planned. Common contaminants from road runoff found in measurable quantities by the California Department of Transportation in the Marysville hydrologic unit that encompasses the more populated western valley areas of the County are:

- TDS, total suspended solids (TSS);
- dissolved and total organic carbon;
- nutrients (ammonia, nitrate, phosphorus, ortho-phosphate); and
- metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc).

The U.S. Geological Survey (USGS) completed an evaluation of water quality conditions of the Feather and Yuba Rivers in the Yuba County area as a component of an overall analysis of conditions in the Sacramento River watershed (USGS 2000). The evaluation indicated that the Yuba River generally has excellent water quality that is very low in contaminants. However, past gold mining activities have left a legacy of mercury contamination (because mercury was used extensively for ore extraction), and the Yuba River is considered a major source of mercury loading in the Sacramento River watershed.

Table 4.9-3 shows a summary of average concentrations from monthly water samples for conventional physical and inorganic chemical constituents measured in the Feather River at the Yuba River at Marysville and the Feather River at Nicolaus, approximately 15 miles downstream from Marysville in Sutter County, from February 1996 through April 1998. In general, the data indicate that both rivers are low in TDS, as indicated by measurements of electrical conductivity (EC), total hardness, and other parameters.

EC is used as an indicator of salinity; higher EC values correspond with higher salinity. The water has neutral pH, moderate alkalinity, and adequate dissolved oxygen levels for aquatic organisms. The water from both rivers is also generally low in nutrients (nitrogen and phosphorus) that can cause growth of nuisance algae and aquatic vascular plants. Trace metal content is low in both rivers.

Although mercury is routinely detected in both rivers, the concentrations have not exceeded ambient CTR criteria. Pesticides have been detected in the Feather River more frequently than in the Yuba River. With the exception of the drinking-water standard for carbofuran, there are no applicable regulatory criteria established for the pesticides that have been detected.

DFG has established guidance values for aquatic-life chronic (i.e., 4-day-average) criteria applicable to the organophosphate pesticides diazinon and chlorpyrifos. The DFG guidance values and other reference dose values for aquatic life or human health hazards that have been established for many pesticides are generally indicative of the lowest concentrations at which toxic effects have been detected.

The average concentration of diazinon in the Feather River exceeds the DFG guidance level of 50 nanograms per liter (Table 4.9-4). Pesticide levels in the Feather River are presumably related to the influence of the extensive agricultural and urban activities (Oroville, Marysville, and Yuba City) occurring in the surrounding watershed.

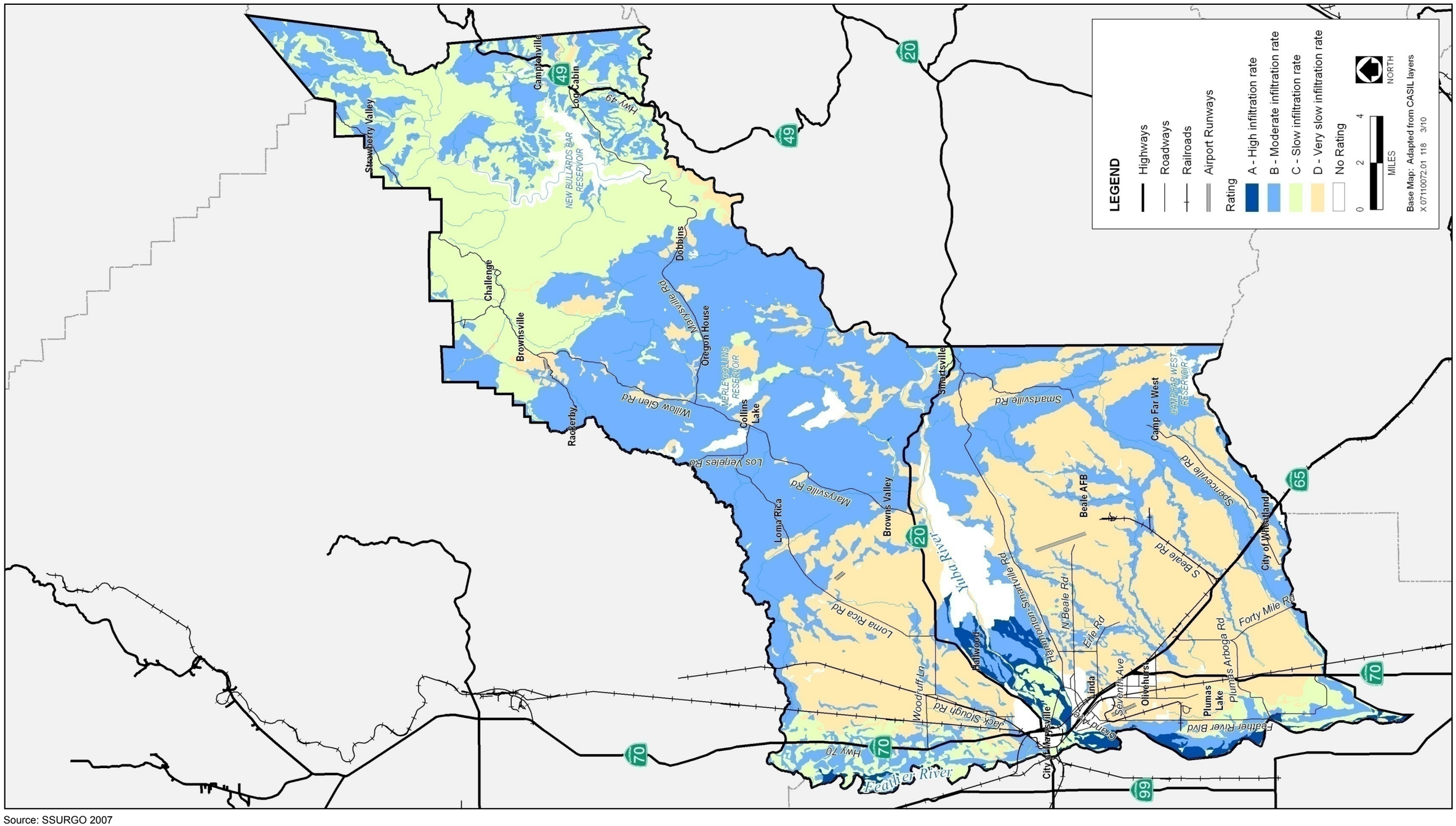
The Yuba County water bodies shown in Table 4.9-4 are impaired under the 303(d) listings described above. The Lower Feather River indicates the reach from Lake Oroville Dam to the confluence with the Sacramento River. The lower Bear River indicates the reach below Camp Far West Reservoir to the confluence with the Feather River.

The potential health risks associated with mercury include neurological dysfunction, particularly in children. It is ingested by humans mainly through fish and food consumption. It is persistent in the environment, and will bioaccumulate (i.e., greatly magnify its concentration from water and sediments up the food chain to fish and other organisms). Diazinon, one of the most widely used pesticides in the United States, can be toxic at high exposures, as described above. Group A pesticides, some of which are no longer manufactured in the United States, are classified as known, probable or possible human carcinogens.

In general, the mineral content of the well-defined North and South Yuba groundwater subbasins underlying the western valley portion of Yuba County is suitable for domestic and agricultural uses. Olivehurst has 10 wells and Linda has five wells that draw water from 300–600 feet below ground surface (Three Rivers Levee Improvement Authority 2006). Water quality samples routinely collected from these wells indicate that all regulated inorganic and organic pollutants meet the applicable drinking-water standards. However, groundwater in the area contains relatively high levels of iron, manganese, and gases (i.e., methane and hydrogen sulfide), which occasionally cause taste and odor problems but are not a threat to human health. The groundwater in both the North and South Yuba Subbasins is generally of very good quality with a low TDS range of 250–300 mg/l, well below the Title 22 MCL of 500 mg/l (DWR 2006a, 2006b).

Groundwater in the subbasins is generally considered to be of good quality. Overall, the groundwater in the County is characterized by major cations (calcium, magnesium, sodium, and potassium) and anions (carbonate, bicarbonate, sulfate, and chloride. Most of the groundwater in Yuba County is considered to be calcium-magnesium or magnesium bicarbonate water, although sodium-calcium chloride groundwater can be found near Wheatland, and there have been reports of calcium-sodium bicarbonate water in some of the County's groundwater wells. The sodium found in this water could be a concern for salt-sensitive crops, although testing has found that the sodium present in Yuba County groundwater contains low TDS and sodium concentrations, so it is suitable for irrigation use in most areas within the North and South Yuba Subbasins. A 2007 survey of groundwater monitoring wells found that none of the samples in the South Yuba Subbasin exceeded the federal and state primary and secondary maximum contaminant levels (MCLs), but that samples from one well in the North Yuba Subbasin exceeded both primary and secondary MCL limits for nitrates and TDS (YCWA 2008b).

Despite overall good groundwater quality in the County, groundwater in the Wheatland Water District has experienced water quality issues. In fact, two wells in the WWD have been capped due to the problem and more well closures are being considered (YCWA 2008a).



Source: SSURGO 2007

Groundwater Infiltration Areas

Exhibit 4.9-4

Table 4.9-3 Summary of Conventional Water Quality Constituents in the Feather and Yuba Rivers			
Constituent	Water Quality Objective	Feather River at Nicolaus	Yuba River at Marysville
Conventional Physical and Chemical Constituents			
Temperature	<2.5°F [a]	15.2°C	12.2°C
Flow (cfs)		359	125
EC (µS/cm)		84	72
DO (mg/L)	7.0 [a]	10.5	11.4
DO Saturation (%)	85 [a]	104	105
pH (standard units)	6.5 to 8.5 [b]	7.7	7.5
Alkalinity (mg/L $CaCO_3$)		34.2	28.4
Total Hardness (mg/L $CaCO_3$)		34.8	31.4
Suspended Sediment (mg/L)	narrative [c]	36.5	30.0
Calcium (mg/L)		8.2	7.9
Magnesium (mg/L)		3.5	2.8
Sodium (mg/L)		3.3	2.2
Potassium (mg/L)		0.9	0.5
Chloride (mg/L)	500 [d]	1.9	1.1
Sulfate (mg/L)	500 [d]	3.2	4.2
Silica (mg/L)		12.8	12.1
NO_2+NO_3 (mg/L N)	NO_3<10 [e]	0.17	0.08
Total Phosphorus (mg/L)		0.03	0.03
Trace Metals			
Arsenic (µg/L)	50 [f]	1.0	1.0
Chromium (µg/L)	180 [f]	<MRL	<MRL
Copper (µg/L)	5.1 [f]	1.3	1.5
Mercury (µg/L)	0.050 [g]	0.0085	0.0069
Nickel (µg/L)	52 [f]	1.0	1.2
Zinc (µg/L)	120 [f]	1.6	2.3
Organic Pesticides			
Molinate (ng/L)	13,000 [h]	373	<60
Simazine (ng/L)	3,400 [i]	88.9	<22
Carbofuran (ng/L)	40,000 [d], 500 [h]	38.5	<31
Diazinon (ng/L)	51 [j]	98	<28
Carbaryl (ng/L)	700 [i]	142	<41
Thiobencarb (ng/L)	1,000 [k]	167	<38
Chlorpyrifos (ng/L)	14 [j]	<25	<25
Methidathion (ng/L)		57	<38

Table 4.9-3
Summary of Conventional Water Quality Constituents in the Feather and Yuba Rivers

Notes: cfs = cubic feet per second; CaCo3 = calcium carbonate; DO = dissolved oxygen; µg/L = micrograms per liter; µS/cm = microsiemens per centimeter; mg/L = milligrams per liter; MRL = method reporting limit; ng/L = nanograms per liter; NO_2 = nitrogen dioxide; NO_3 = nitrogen trioxide

[a] Regional water quality control board (RWQCB) basin plan water quality objective
[b] RWQCB basin plan water quality objective; <0.5 allowable change from controllable factors
[c] RWQCB basin plan narrative objective: water shall not contain constituent in concentrations that would cause nuisance or adversely affect beneficial uses
[d] Secondary drinking water maximum contaminant level (MCL)
[e] Primary drinking water MCL
[f] California Toxics Rule aquatic life criteria for 4-day average dissolved concentration
[g] California Toxics Rule human health maximum criteria total recoverable concentration
[h] California Department of Fish and Game (DFG) hazard assessment value
[i] U.S. Environmental Protection Agency Integrated Risk Information System reference dose for drinking water quality
[j] California DFG aquatic life guidance value for 4-day average concentration
[k] RWQCB basin plan water quality objective for allowable change from controllable factors

Source: Three Rivers Levee Improvement Authority 2006; Constituent measurements from USGS 2000

Table 4.9-4
Impaired Water Bodies within Yuba County

Water Body	Pollutant	TMDL Priority	Estimated Area Affected	Potential Sources
Bear River (lower)	Diazinon	Medium	21 miles	Agriculture
Jack Slough	Diazinon	Medium	14 miles	Agriculture
Deer Creek	pH	Low	4.3 miles	Internal nutrient cycling (primarily lakes)
Englebright Lake	Mercury	Medium	754 acres	Resource extraction (abandoned mines)
Feather River (lower)	Diazinon	High	42 miles	Agriculture; urban runoff/storm sewers
	Mercury	Medium	42 miles	Abandoned placer sites
	Unknown Toxicity	Low	42 miles	Source unknown
	Group A Pesticides[1]	Low	42 miles	Agriculture

Notes: TMDL = total maximum daily load
[1] The Group A pesticides include: aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene.
Source: Central Valley RWQCB 2002

FLOODING

The areas that are prone to flooding, as defined by the FEMA 100-year flood zones described above, are shown on Exhibit 4.9-1. Flood conditions in Yuba County are primarily caused by backwater resulting from high stages on the Feather River (FEMA 2006). These conditions are particularly severe south of Marysville when high stages (water levels) on the Feather River combine with high Bear River flows to restrict outflows from the Western Pacific Interceptor Canal, causing flooding in the Plumas Lake area and lower areas of Olivehurst.

Ten flood periods on the Feather and Yuba rivers that occurred in the 19th century have been documented, and 11 major floods since 1900 have been recorded in1907, 1909, 1928, 1937, 1940, 1950, 1955, 1963, 1964, 1986, and 1997. The 1950 flood, the most destructive on record, inundated 43,000 acres. The 1955 flood broke through the Yuba City levees in Sutter County, causing extensive damage and loss of life. Construction of the New Bullards Bar Dam and Oroville Reservoir on the Feather River has reduced the peak flood stage (FEMA 2006).

In February 1986, a levee on the Yuba River near Linda failed during a storm, which resulted in the flooding of 7,000 acres, the deaths of 12 people, and the evacuation of 50,000 residents. In January 1997, a levee break resulted in the flooding of 16,000 acres of land and 850 homes near Marysville, and the loss of 3 lives (SF Examiner 1997, Bartkiewicz 2005).

The County has been making substantial investments in both drainage and flood control facilities to benefit portions of Linda and Olivehurst (including the Plumas Lake Specific Plan Area). Extensive levee systems have been constructed along the Feather, Yuba, and Bear Rivers, and Western Pacific Interceptor Canal to provide flood protection. The objectives of local and areawide flood protection facilities and drainage infrastructure include reducing the instance of flooding, improving local drainage, and enhancing flood protection for developed and developing areas near the Yuba, Feather, and Bear Rivers.

The County and Reclamation District 784 signed a joint powers agency agreement to create the Three Rivers Levee Improvement Authority (TRLIA) to finance and construct levee improvements designed to protect developed and developing portions of south Yuba County from flooding from the Yuba, Feather, and Bear rivers and the Western Pacific Interceptor Canal. Levee improvements are designed to provide protection against the 0.5% Annual Exceedance Probability (AEP) event (otherwise known as 200-year flood protection). Most of the necessary improvements to protect south Yuba County from wide-scale flooding have been completed, as of the writing of this document. Areas prone to flooding have changed over time as flood protection has improved. With recent flood protection improvements, FEMA has released a Letter of Map Revision (LOMR) that has removed portions of Yuba County from the 100-year floodplain (Yuba County Public Works 2010).

In addition to widespread flood risk associated with the Feather and Yuba Rivers, localized flooding from accumulated runoff has been a major problem for the community of Olivehurst. Lack of proper drainage conveyance systems, and the roadbeds of Olivehurst and Seventh Avenues, are causes of flooding to adjoining lands, and could be alleviated by improvements to the infrastructure in this area. Clark Slough and Clark Lateral are the major stormwater conveyances in this area (Yuba County 1995).

Dam Inundation Areas

A large portion of the low-lying valley area in the western portion of Yuba County would be exposed to potential flooding from catastrophic failure of major dams located in Butte and Yuba Counties. There are 12 dams with artificial barriers that are 25 feet or more high or that have an impoundment capacity of 50 af or more. These are under the jurisdiction of the California Department of Water Resources, Division of Dam Safety, and include Camp Far West and Camp Far West Diversion on the Bear River, Englebright on the Yuba River, and New Bullards Bar on the North Yuba. According to the Division of Dam Safety, the dams under its jurisdiction are safe and have a very low probability of failure (Yuba County 1994).

Existing Flood Control Conditions for Yuba County

Lake Oroville and New Bullards Bar Reservoir, as well as an extensive system of levees, provide flood control along the Feather, Yuba, and Bear Rivers, and Huncut Creek (Exhibit 4.9-2). Within Yuba County, level maintenance is the responsibility of the reclamation districts (RDs), including RD No. 10, RD No. 784, RD No. 817, and RD. No 2103 (YCWA 2008a). Release volumes from Lake Oroville in Butte County, and New Bullards Bar Reservoir depend on the combined flows of the Feather and Yuba Rivers downstream of Marysville.

Design Flows

The Sacramento River Flood Control Project (SRFCP) described in the regulatory settings section of this document includes design capacities specified by USACE for channels in the Yuba County area and flood control operation rules for Lake Oroville (in Butte County) and New Bullards Bar Reservoir, including design target flows for the Feather and Yuba Rivers. The maximum design target flows for the levee system that protects much of western Yuba County is shown in Table 4.9-5, along with the design-flow frequency, expressed in terms of the Average Exceedance Probability (AEP). The AEP is the probability that a given flow will be exceeded in any given year. For example, an AEP of 1 in 125 has a 1-in-125, or 0.8%, probability of being exceeded in any year, or could be expected to occur once every 125 years. Lake Oroville and New Bullards Bar Reservoir are operated to maintain flood flows at or below the flows shown in Table 4.9-5. The reservoirs fill and lose flood management capability at about the 1-in-150 AEP flood.

Table 4.9-5
Design Target Flows for Various Levees in Yuba County

River	Design Flow	Design-Flow Frequency (AEP)
Yuba River	120,000–180,000 cfs depending on Feather River flow	Less frequent than 1 in 125
Feather River between Yuba River and Bear River	300,000 cfs	Less frequent than 1 in 125
Bear River at mouth	40,000 cfs	Less frequent than 1 in 50
WPIC	Backwater from Bear River	NA
Feather River below Bear River	320,000 cfs	Less frequent than 1 in 100

Notes: AEP = annual exceedance probability; cfs = cubic feet per second; NA = not applicable; WPIC = Western Pacific Interceptor Canal
Source: Three Rivers Levee Improvement Authority 2006

Flood Management Strategies

The Integrated Regional Water Management Plan (IRWMP) prepared by YCWA identified four major strategies that could be used by the County to prevent and/or manage flood events, including:

- levee improvement;
- upstream flood control strategies;
- non-structural flood management; and
- stormwater management.

Specifically, the levee improvement strategy includes levee improvement projects located throughout the County to increase their reliability (YCWA 2008a).

Upstream flood control strategies could include the construction of additional dams to capture flood flows, reoperation of existing facilities to manage flood flows, and making improvements to existing facilities. Specific measures described are controlled surcharge of Lake Oroville, the Thermalito Bay Afterbay reoperation, both of which DWR has jurisdiction over, and an outlet capacity increase at New Bullards Bar Reservoir and New Colgate Powerhouse tailgate depression, both of which still require funding (YCWA 2008a).

Non-structural flood management programs would involve the actions of residents located in the floodplains and actions by local government. This includes forecast-coordinated operations of Lake Oroville and New Bullards Bar Reservoir, land use planning, a flood insurance program that could assist in financial recovery from flooding for land owners to alleviate the need for local funding, watershed management, improved emergency response

actions, improvements in flood warnings, and flood proofing, including raising foundations, and making structural improvements to structures in the floodplain to protect from flooding (YCWA 2008a).

Lastly, stormwater management programs could aid in flood management, since stormwater floods often coincide with peak flood flows and may require the commitment of resources that could otherwise be used during regional flood fights. Drainage studies can be prepared by the County, cities, and other entities that manage stormwater, which can identify areas needing improvement, provide potential solutions, and identify possible funding strategies for such improvements (YCWA 2008a).

Flood Management Projects

The IRWMP identified the specific project and programs listed below that support the flood management strategies mentioned above:

- New Colgate Powerhouse Tailwater Depression,
- New Bullards Bar Outlet Capacity Increase,
- Levee Geotechnical Evaluation for RD No. 10,
- External Flood Source Flood Protection Projects,
- Regional Flood Management Agency,
- Forecast-Coordinated Operations,
- Yuba County Levee Project,
- Bear River North Levee Rehabilitation Project,
- Feather River Levee Strengthening (Segment 1&3),
- Feather River Levee Setback (Segment 2),
- New Bullards Bar Reservoir Reoperation Manual,
- Complete East Interceptor Canal,
- Pump Station No. 3 Reconstruction,
- Edgewater Detention Pond and Pump Station Project,
- Clark Slough and Clark Lateral Mitigation Project,
- Pump Station No. 1 Improvements,
- Yuba County Airport Drainage Improvements,
- Pump Station No. 2 Improvements,
- Chestnut Pump Station,
- Hallwood Community Drainage Improvements,
- Pump Maintenance,
- Stormwater Management for North and South Grasshopper Slough,
- Drainage Study,
- Pump Station No. 10 Construction, and
- Expand North Drainage Basin C Regional Detention Pond.

4.9.3 Environmental Impacts and Mitigation Measures

Methodology

The effects of the 2030 General Plan were compared to environmental baseline conditions (i.e., existing conditions) to determine impacts. There is overlap of some 2030 General Plan policies, regulations, and programs as they pertain to water quality and hydrology. For instance, stormwater runoff is addressed in the Community Development, Natural Resources, and Public Health and Safety Element chapters.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (State CEQA Guidelines) and Senate Bill 5 (discussed above), a drainage, hydrology, or water quality impact is considered significant if implementation of the proposed project would do any of the following:

- 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, or result in increased flooding on- or off-site;
- 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;
- 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; or
- involving inundation by seiche, tsunami, or mudflow.

The General Plan Update may affect groundwater supplies or groundwater recharge. Development anticipated under the General Plan Update could change drainage patterns and/or contribute polluted stormwater runoff, if not appropriately mitigated. This chapter will summarize the existing hydrological setting, recharge, surface flows, flooding, and quality of water. The EIR will analyze and present impacts related to urban runoff and flooding potential, water quality, changes in drainage patterns, and effects on groundwater recharge or overdraw associated with development under the General Plan Update.

IMPACT ANALYSIS

IMPACT 4.9-1 **Violation of Water Quality Standards.** *Development anticipated under the 2030 General Plan would result in additional discharges of pollutants to receiving water bodies from nonpoint sources. Such pollutants would result in adverse changes to the water quality of local water bodies. However, with adoption and implementation of the proposed policies and actions in the 2030 General Plan, combined with current land use, stormwater, grading, and erosion control regulations, this impact would be* ***less than significant****.*

An increase in the amount of impervious surfaces (e.g., rooftops, sidewalks, driveways, streets, parking lots) as a result of implementation of the 2030 General Plan, and its ensuing conversion of existing agricultural land to urban and suburban residential land uses, would result in higher rates of runoff during rain events, which can be a source of surface-water pollution. Sediment, organic contaminants, nutrients, trace metals, pathogens (e.g., bacteria and viruses), and oil and grease compounds are common urban runoff pollutants.

Urban runoff pollutants may stem from erosion of disturbed areas, deposition of atmospheric particles derived from automobiles or industrial sources, corrosion or decay of building materials, rainfall contact with toxic substances, and spills of toxic materials on surfaces that receive rainfall and generate runoff. New urban industrial and commercial development can generate urban runoff from parking areas as well as any areas of hazardous materials storage exposed to rainfall.

Sediment sources include roads and parking lots, as well as destabilized landscape areas, streambanks, unprotected slopes, and denuded or disturbed areas. Sediments, in addition to being contaminants in their own right, transport other contaminants such as trace metals, nutrients, and hydrocarbons that adsorb to suspended sediment particles. Nutrients include nitrogen, phosphorus, and other organic compounds that can be found in organic litter, fertilizers, food waste, sewage, and sediment. Pet or farm animal wastes, sanitary sewer overflow, improperly sited or functioning septic systems, and landfill areas can contribute bacteria and viruses either to surface waters or to groundwater through percolation. Sources of oil and grease compounds include motor vehicles, food service establishments, and fueling stations.

Construction activities would occur over large areas as shown in Exhibit 4.9-3, and substantial construction-related alteration of drainages could result in soil erosion and stormwater discharges of suspended solids, increased turbidity, and potential mobilization of other pollutants from project construction sites, as contaminated runoff to on-site and ultimately off-site drainage channels. This is discussed in Impact 4.9-2, below. Stormwater discharges would be reduced based on a number of goals, policies, and actions included in the 2030 General Plan.

Erosion and Sediment Control Provisions

As described in "Regional and Local Plans, Policies, Regulations, and Ordinances," the Yuba County Subdivision Ordinance (Section 11.15.670) and Building and Construction Ordinance (Chapter 10.30) address erosion and sediment control. In addition, the County's SWMP, also discussed above, has been prepared, as directed by the Central Valley RWQCB, to be consistent with the NPDES Phase II permit procedures and was designed to enable the County to meet the mandate of the federal CWA to reduce pollutants to the maximum extent practicable.

Relevant Policies and Actions of the General Plan

The 2030 General Plan includes the following policies and actions that would protect water quality and enhance water resources.

Water Quality Protection

- **Policy CD12.3:** The County will implement stormwater master plans that are designed to provide collection, detention, and conveyance consistent with local standards for developed areas within the Valley Growth Boundary. In general, new developments will be required to demonstrate no net increase in stormwater runoff prior to approval.

- **Policy CD14.14:** The County will coordinate with reclamation districts, special districts, and the railroad and Caltrans for maintenance and improvement of storm drainage facilities, where appropriate.

- **Policy CD15.6:** New developments (public and private) should use Low Impact Development, Natural Drainage Systems, and other best management practices that reduce the rate of runoff, filter out pollutants, and facilitate groundwater infiltration.

- **Policy CD15.7:** County and reclamation district drainage fees should be structured to provide incentives for use of Low Impact Development and natural drainage approaches that slow down, disperse, and filter stormwater runoff.

- **Policy CD15.8:** The County will encourage the joint use of parks for school and public use, as well as stormwater detention, as appropriate.

- **Policy NR2.1:** The County will encourage urban greening projects that are designed to improve air and water quality.

- **Policy HS3.2:** County and regional water supply providers should monitor and proactively address water quality problems, with a focus on achieving and maintaining adequate water quality for "beneficial uses" of area waterways identified in the Yuba County Integrated Regional Water Management Plan. "Beneficial uses" in Yuba County include municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

- **Policy HS3.3:** The County will regulate new developments, as necessary, and collaborate with irrigation districts to address Regional Water Quality Control Board requirements intended to protect agricultural use and sustain the agricultural economy.

- **Policy HS3.4:** New developments shall be designed to control surface runoff discharges, in compliance with the permit requirements and the receiving water limitations administered by the Regional Water Quality Control Board.

- **Policy HS3.5:** The County will cooperate with local, state, and federal agencies to remediate issues related to groundwater contamination and increases in total dissolved solids.

- **Policy HS3.6:** New developments shall comply with streambed alteration standards and shall be designed to avoid harmful discharge that would substantially affect wetlands and riparian areas.

- **Policy HS3.8:** New developments in areas with moderate, severe, and very severe erosion potential shall provide technical documentation, to the satisfaction of the County, that adequate measures have been taken in site planning, design, and/or mitigation to avoid erosion and sediment loss.

- **Policy HS3.9:** The County will evaluate available septic system technologies and shared leach field systems to serve planned Rural Centers and allow their use if proven to be protective of water quality.

- **Policy HS3.10:** New developments proposing private well and septic systems shall demonstrate compliance with the County's standards for water wells and sewage disposal systems, which are designed to protect the public and environmental health.

- **Policy HS3.11:** New community wastewater disposal systems are discouraged, but if considered, projects proposing a new system shall provide bonding or other financial mechanisms that are adequate for ongoing maintenance and periodic replacement, subject to County approval.

- **Policy HS3.12:** New developments shall comply with applicable state siting, design, and monitoring standards for on-site wastewater treatment (septic) systems, including standards intended to protect the beneficial use of potentially affected waterbodies.

- **Policy HS3.13:** Proposed residential property subdivisions that would create lots of 1 acre or less shall be served by a public water and sewer system designed in compliance with County standards. Projects that propose parcels of between 1 and 2.5 acres shall provide either a public sewer system or public water supply, as determined by the County Environmental Health Director.

- **Policy HS3.15:** New projects and plans in the Valley Growth Boundary should employ runoff collection strategies located close to the point where water initially meets the ground to minimize urban runoff, where feasible.

- **Policy HS3.16:** New developments are encouraged to incorporate open, vegetated swales to filter, slow down, and convey stormwater and encourage groundwater infiltration.

- **Policy HS3.17:** New developments shall limit construction of new impervious surfaces, such as parking lots, travelways, vehicle waiting areas, and vehicle loading areas to the minimum amount needed to implement the subject project.

- **Policy HS3.18:** New developments shall break up parking areas, intersperse parking with vegetated areas, and incorporate other best management practices that filter and slow down runoff and promote infiltration.

- **Action HS3.1. Ongoing Monitoring and Corrective Actions.** During General Plan buildout, the County may conduct water quality monitoring along key waterways and watersheds. The County may require more stringent water quality standards for developments that may affect waterways or watersheds with identified water quality problems. The County, in collaboration with regional water supply providers, will conduct ongoing monitoring to ensure the application and effectiveness of construction and environmental policies and standards. Ongoing monitoring would be designed to identify problems that may require corrective actions. The County will collaborate with regional and state agencies on the need for corrective actions for ongoing uses that pollute the County's water supply.

    - Related Goals: Goal HS3, Goal NR12
    - Agency/Department: Community Development and Services Agency
    - Funding Source: State and federal grants, other State or federal funding, and private funding for projects near the County's waterbodies.
    - Time Frame: Ongoing, with corrective actions, as needed.

- **Action HS3.2: Improvement Standards and Design Guidelines.** The County will revise its development, subdivision, grading, and improvement standards to allow or require natural drainage systems and low impact development drainage strategies for new developments. The County will revise its improvement standards to encourage naturalized drainage swales, pervious driveways, pervious parking areas, tracked (or "Hollywood") driveways, and other stormwater management and landscaping best practices that maximize on-site infiltration and treatment of stormwater. The County's standards and guidelines will be designed to limit disturbances to natural water bodies, reduce short- and long-term water pollution, and incorporate natural drainage systems. The County will adopt design guidelines that provide certainty for new development, regarding acceptable approaches to drainage and erosion control methods.

    - Related Goals: Goal HS3, Goal NR12
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General fund, applicable fees
    - Time Frame: Adopt by 2013

Protection and Enhancement of Water Resources

- **Policy NR1.5:** New developments shall provide for open space corridors consistent with the County's Parks Master Plan, and as needed to provide naturalized drainage and bike/pedestrian connections to nearby neighborhoods and destinations.

- **Policy NR1.10:** The County's recreational open space should be designed to provide multiple benefits, including recreational, circulation, and stormwater drainage conveyance and detention. Applicable impact and in-lieu-fees will be reduced to reflect these overlapping uses for developments that include multi-use open space.

- **Policy NR1.14:** Recreational facilities and open space should be designed to use recycled materials and green building techniques, minimize surface runoff, reduce water demand, provide habitat for native species, reduce the need for ongoing maintenance, and incorporate universal access principles to facilitate use by people of all ages and abilities. Active portions of parks that may generate light and noise should be located and designed to promote compatibility with the surrounding neighborhood.

- **Action NR2.1. Urban Greening Projects.** During this General Plan time horizon, the County will identify and seek funding for urban greening projects that provide for a range of benefits including decreasing water pollution and increasing the reliability of local water supplies.

    - Related Goals: Goal NR1, Goal NR2, Goal CD8, Goal CD11, Goal CD12, Goal CD19
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Grant funding, as available
    - Time Frame: Throughout General Plan implementation, as funding is available

- **Policy HS3.7:** Valley Neighborhoods, Employment Village areas, Commercial Mixed Use areas, and Employment areas should have coordinated drainage master planning and avoid a site-by-site approach to detention and drainage. Drainage master planning should implement an areawide approach that incorporates existing and constructed swales for conveyance and planned open space and parkland for detention.

- **Policy HS3.14:** The County will encourage the preservation, creation, or restoration of riparian corridors, wetlands, open space buffers, and other types of open space that provide water quality benefits.

Conclusion

With adoption and implementation of the proposed policies and actions in the 2030 General Plan and compliance with existing stormwater, grading, and erosion control regulations, this impact would be **less than significant**.

Under the Policy CD12.3 stormwater master plans are required, and Policy CD14.13 and CD15.8 would require coordination with other County entities for storm drainage joint use, maintenance, and improvement. Policies CD15.6, CD15.7, HS3.15, 16, 17, and Action HS3.2 describes requirements for best management and design practices including naturalized drainage swales, planter strips, and other LID techniques. These Low Impact Development (LID) standards are designed to reduce stormwater runoff levels, improve infiltration to replenish groundwater sources, and reduce pollutants close to their source. The above Public Health & Safety Element policies are designed to reduce the rate of runoff, filter out pollutants, and/or facilitate groundwater infiltration. These policies and actions are designed to meet the NPDES MS4, Title 22, California Toxics Rule (CTR), and Basin Plan water quality objectives described in "State Plans, Policies, Regulations, and Laws" above.

Several technical studies have been conducted regarding the impacts of the water quality control features on surface water as described in the Policies and Implementation Programs (e.g., Preliminary Data Summary of Urban Storm Water Best Management Practices [EPA 1999]; Truckee River Basin Stormwater Management Program [County of Placer 2007]) and groundwater (e.g., California Storm Water Best Management Practices Handbook prepared by the Stormwater Quality Task Force [CASQA 2003]). These studies have found that water quality control features such as revegetation, erosion control measures, detention and infiltration basins, and LID features have been successful in controlling water quality and avoiding water quality impacts (metals and organic compounds associated with stormwater are typically lost within the first few feet of the soil of the retention basins associated with groundwater). Technical studies associated with the Truckee River Basin Stormwater Management Program demonstrated that the use of a variety BMPs such as source control, detention basins, revegetation and erosion control, have been able to maintain surface water quality conditions in adjacent receiving waters. Therefore, adoption and implementation of the proposed policies and actions in the 2030 General Plan, combined with enforcement of current land use, stormwater, grading, and erosion control regulations as described in Section 4.9.1, "Regulatory Setting," would reduce this impact to a **less-than-significant** level.

Mitigation Measure

No mitigation is required.

IMPACT 4.9-2 On-Site and Downstream Erosion and Sedimentation and Alteration of Drainage Patterns. *Development and land use change consistent with the 2030 General Plan would increase the amount of impervious surfaces, thereby increasing the total volume and peak discharge rate of stormwater runoff. This could alter local drainage patterns, increasing watershed flow rates above the natural background level (i.e., peak flow rates). Increased peak flow rates may exceed drainage system capacities, exacerbate erosion in overland flow and drainage swales and creeks, and result in downstream sedimentation. Sedimentation, in turn, could increase the rate of deposition in natural receiving waters and reduce conveyance capacities, resulting in an increased risk of flooding. Erosion of upstream areas and related downstream sedimentation typically leads to adverse changes to water quality and hydrology. However, with adoption and implementation of the proposed policies and actions in the 2030 General Plan, combined with current grading, erosion, and flood control regulations, this impact is considered* ***less than significant****.*

Storm drainage is addressed in the Yuba County Building and Construction ordinance and Subdivision ordinance (see "Regulatory Setting" section above). These design criteria, ordinances, and design standards would reduce downstream flooding and erosion by several means. Projects under the 2030 General Plan would be required to control the alteration of areas which help accommodate or channel flood waters (i.e. natural floodplains, stream channels, and natural protective barriers), control filling, grading, dredging, and other development which may increase flood damage, and with general drainage requirements and hydraulic design parameters, require that new subdivisions be protected from flood hazard and inundation by stormwater originating without and within the proposed subdivision.

The County SWMP would require that measures for long-term BMPs that protect water quality and control runoff flow to be incorporated into development and substantial redevelopment projects, pursuant to the NPDES Phase II requirements for Small Municipal Separate Storm Sewer Systems.

Relevant Policies and Actions of the General Plan

The 2030 General Plan includes the following policies that would reduce on-site and downstream erosion and sedimentation and reduce the alteration of drainage patterns as a result of implementation of the Plan.

- **Policy CD12.3:** The County will implement stormwater master plans designed to provide collection, detention, and conveyance consistent with local standards for developed areas within the Valley Growth Boundary. In general, new developments will be required to demonstrate no net increase in stormwater runoff prior to approval.

- **Policy CD15.7:** County and reclamation district drainage fees should be structured to provide incentives for use of Low Impact Development and natural drainage approaches that slow down, disperse, and filter stormwater runoff.

- **Policy CD15.8:** The County will encourage the joint use of parks for school and public use, as well as stormwater detention, as appropriate.

- **Action CD15.2. Drainage Planning and Funding.** The County will continue its already substantial efforts to implement the Yuba County Stormwater Management Plan and South Yuba Drainage Master Plan. The County will pursue funding to improve drainage facilities (curb, gutter, sidewalks, swales, buried pipes, etc., along with streetlights and other streetscape improvements) in existing developed portions of Linda and Olivehurst. In coordination with this ongoing effort, the County will examine opportunities to revise drainage and levee impact fees, particularly in targeted reinvestment and employment development areas. The

County's infill, reinvestment, and employment goals will be considered as impact fees are revised, taking opportunities to reduce impact fees for compact, mixed-use, and infill development. The County will coordinate with special districts that provide drainage services, as appropriate, to assist with fee updates in these areas, as well. The County will consider the feasibility of a "reverse drainage fee" that provides funding to projects that convert surface parking areas, roadways, and other impervious surfaces to parkspace, natural drainage swales, and other features that could detain stormwater, filter runoff, and provide other benefits. It is anticipated that this incentive would be consistent with a fair-share assessment of the cost of providing drainage services in the surrounding area during implementation of the General Plan.

- Related Goals: Goal CD2, Goal CD15, Goal NR1, Goal NR2, Goal NR12, Goal HS3
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund, impact fees, grant funding
- Time Frame: Ongoing implementation of Yuba County Stormwater Management Plan and South Yuba Drainage Master Plan, report to Board of Supervisors on feasibility of incentives for greening by 2015.

- **Policy NR1.5:** New developments shall provide for open space corridors consistent with the County's Parks Master Plan, and as needed to provide naturalized drainage and bike/pedestrian connections to nearby neighborhoods and destinations.

- **Policy NR1.10:** The County's recreational open space should be designed to provide multiple benefits, including recreational, circulation, and stormwater drainage conveyance and detention. Applicable impact and in-lieu-fees will be reduced to reflect these overlapping uses for developments that include multi-use open space.

- **Policy NR2.2:** The County will encourage for urban greening projects to be developed in underserved areas of Linda and Olivehurst, such as tree planting and maintenance, natural drainage systems improvements, ecological restoration, park development, renewable energy development and energy conservation projects, trail development, community gardens, and other appropriate project types.

- **Policy NR5.6:** New developments and public investments near Yuba County's streams and rivers shall be designed to avoid tree removal, erosion, or other modifications that would adversely affect salmonid habitat.

- **Policy NR5.15:** Roads, water lines, sewer lines, drainage facilities, and other public facilities constructed to serve unincorporated County development shall be located and designed to avoid substantial impacts to stream courses, associated riparian areas, and wetlands, to the greatest extent feasible.

- **Policy HS2.5:** Road and building construction on slopes of more than 15% is strongly discouraged and will only be approved if consistent with County standards and the Yuba County Wildfire Safety Plan.

- **Policy HS8.3:** A grading permit from the County is required for movement of dirt, soil, rock, debris or other material on over one acre of land and construction of retaining walls, bridges, and fill operations exceeding four feet, unless the activity is listed in the County Code as exempt from grading requirements.

- **Policy HS8.4:** Grading permits generally require submittal of grading plans and drainage study for review and approval by the Community Development and Services Agency, and where requested, a revegetation and winterization plan, and geotechnical investigation report.

- **Policy HS8.5:** An erosion and sediment control plan meeting County standards for preventing to increased discharge of sediment is required for:

- Projects that propose to grade more than ten thousand (10,000) square feet of area having a slope greater than ten (10) percent;
- Clearing and grubbing areas of one acre or more regardless of slope;
- Projects where more than two thousand five hundred (2,500) square feet will be inadequately protected from erosion during any portion of the rainy season;
- Projects that involve grading will occur within fifty (50) feet of any watercourse; or
- Where the County determines that the grading will or may pose a significant erosion, or sediment discharge hazard for any reason.

- **Policy HS8.6:** Project applicants may be required to show evidence of coverage, or application for coverage, under an NPDES general construction permit and a Storm Water Pollution Prevention Plan (SWPPP) with a State issued W.D.I.D. number, if applicable. Grading activities shall be located and designed to avoid contributing to the violation of provisions of any applicable NPDES stormwater discharge permit.
- **Policy HS8.7:** Grading activities shall be designed, per County standards, to avoid obstructing or impeding the natural flow of stormwaters, causing accelerated erosion, or aggravating any existing flooding condition.
- **Policy HS8.8:** For engineered grading, the peak off-site storm water discharge from the project site shall not exceed pre-construction conditions unless the applicant demonstrates that downstream storm water conveyance systems have sufficient capacity to handle the increased flow rate without exceeding established design standards, subject to County approval.
- **Policy HS8.9:** Grading activity and land disturbance shall be conducted such that the smallest practicable area of erodible land is exposed at any one time.
- **Policy HS8.10:** Grading activities shall preserve natural features, including vegetation, terrain, watercourses and similar resources, wherever feasible.
- **Policy HS8.11:** Grading activities within four hundred (400) feet of a landside levee toe shall require a registered geotechnical engineer to submit a stamped report demonstrating that the proposed action will not have an adverse impact on the integrity of the levee system. Agricultural practices are generally exempt from setback requirements except for the storage of agricultural waste.
- **Policy HS8.12:** Proponents of new developments shall notify owners of adjacent and abutting utilities prior to approval of a grading permit. The subject utility must either approve the permit, or, if 30 days pass after notifying the utility, or if the Agency Director waives the need for utility approval, the permit may also be approved.
- **Policy HS8.13:** Grading permittees shall be responsible for the prevention of damage to any adjacent public utilities or services and adjacent properties. No person(s) shall excavate or fill close to the property line without supporting and protecting such property from damage which may result. It shall be the responsibility of the permittee to control discharge of sediment and hazardous materials to any watercourse, drainage system, or adjacent property.
- **Policy HS8.14:** New developments that would involve earth disturbance of areas with slopes exceeding 5 percent shall prepare and implement an erosion control plan, subject to County approval.
- **Action HS8.1. Grading Permits, Erosion Control Plans, Drainage Studies, and Geotechnical Evaluations.** The County will update and maintain standards designed to avoid geologic hazards, mitigate for

soils related constraints, reduce impacts to hydrological and drainage conditions, and minimize erosion resulting from site grading and preparation, construction, and ongoing operations. Projects will be conditioned to include measures to avoid geologic and soils related impacts, as necessary. The County will require a geotechnical evaluation prior to construction of buildings meant for public occupancy in areas with potential risk related to geologic condition or soil limitations, as identified on maps maintained by the County. The geotechnical evaluation shall evaluate all relevant risks, which may include but are not limited to liquefaction, erosion, landslide, expansive soils, subsidence, and seismic activity. Recommendations from the geotechnical evaluation shall be incorporated into the subject project or plan in order to reduce risk to levels acceptable to the County. The County will also incorporate geotechnical evaluations and recommendations into its own public investments, as appropriate.

- Related Goals: Goal HS8, Goal HS3
- Agency/Department: Community Development and Services Agency
- Funding Source: Project applicant funding
- Time Frame: Ongoing, as projects are proposed

Conclusion

Downstream flooding and erosion would be reduced because of General Plan Policies CD12.3 requiring that the County prepare and maintain a drainage master plan, and Policies HS8.3, 4, and 5 and Action HS8.1, which require grading and sediment control plans. Performance standards created by General Plan policy and implementing regulations ensure that new development under the 2030 General Plan would be designed to control surface runoff discharges to comply with the County standards, National Pollutant Discharge Elimination System Permit requirements, and Regional Water Quality Control Board standards described in the "Regulatory Setting" section above. The above Public Health and Safety elements are designed to reduce the rate of runoff, filter out pollutants, and/or facilitate groundwater infiltration. These policies and implementation programs are designed to meet the NPDES MS4, Title 22, California Toxics Rule (CTR), and Basin Plan water quality objectives described in "State Plans, Policies, Regulations, and Laws" above. Adoption and implementation of the proposed policies and actions in the 2030 General Plan, combined with enforcement of the existing County grading, erosion, and flood control regulations as described above in this impact and in the "Regulatory Setting" section above would reduce this impact to a **less-than-significant** level.

Mitigation Measure

No mitigation is required.

IMPACT 4.9-3 Construction-Related Water Quality Impacts. *Construction and grading activities during development consistent with the 2030 General Plan could result in excess runoff, soil erosion, and stormwater discharges of suspended solids and increased turbidity. Such activities could mobilize other pollutants from project construction sites as contaminated runoff to on-site and ultimately off-site drainage channels. Many construction-related wastes have the potential to degrade existing water quality. Project construction activities that are implemented without mitigation could violate water quality standards or cause direct harm to aquatic organisms. However, with implementation of existing regulations and water quality policies and actions contained in the 2030 General Plan, this impact would be less than significant.*

Construction and grading activities during development consistent with the 2030 General Plan could result in soil erosion and stormwater discharges of suspended solids and increased turbidity. Such activities could mobilize other pollutants from project construction sites as contaminated runoff to on-site and ultimately off-site drainage channels. Many construction-related wastes have the potential to degrade existing water quality by altering the dissolved-oxygen content, temperature, pH, suspended-sediment and turbidity levels, or nutrient content, or by causing toxic effects in the aquatic environment. Project construction activities that are implemented without mitigation could violate water quality standards or cause direct harm to aquatic organisms.

Localized erosion hazards could occur in steep or hilly terrain, and intense rainfall and associated stormwater runoff could result in short periods of sheet erosion within areas of exposed or stockpiled soils in flat areas. If uncontrolled, these soil materials could cause sedimentation and blockage of drainage channels. Further, the compaction of soils by heavy equipment may reduce the infiltration capacity of soils and increase the potential for runoff and erosion. Non-stormwater discharges could also result from activities such as construction dewatering procedures, and discharge or accidental spills of hazardous substances, such as fuels, oils, concrete, paints, solvents, cleaners, or other construction materials.

As described in the "Regulatory Setting," section above, ongoing NPDES Phase II stormwater permitting programs regulate municipal storm drain systems, industrial facilities, and construction sites. NPDES permits generally identify effluent and receiving-water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. Under the NPDES permitting program, the preparation and implementation of SWPPPs is required for construction activities.

A SWPPP must include site maps and a description of construction activities, and must identify the BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants, such as petroleum products, solvents, paints, and cement, that could contaminate nearby water resources. All NPDES permits also have inspection, monitoring, and reporting requirements to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of stormwater-related pollutants. Source controls, treatment controls, and site planning measures are typical types of BMPs.

Construction activities subject to the general construction activity permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. The permit also requires dischargers to consider the use of post-construction permanent BMPs that will remain in service to protect water quality throughout the life of the project.

Relevant Policies and Actions of the General Plan

In addition to existing regulations, the County's 2030 General Plan includes additional measures to reduce impacts related to runoff, erosion, and stormwater discharges, including the following.

- **Policy HS3.4:** New developments shall be designed to control surface runoff discharges, in compliance with the permit requirements and the receiving water limitations administered by the Regional Water Quality Control Board.

- **Policy HS8.6:** Project applicants may be required to show evidence of coverage, or application for coverage, under an NPDES general construction permit and a Storm Water Pollution Prevention Plan (SWPPP) with a State issued Waste Discharge Identification number, if applicable. Grading activities shall be located and designed to avoid contributing to the violation of provisions of any applicable NPDES stormwater discharge permit.

Conclusion

Measures required during construction and operation will be required in order to conform with the SWRCB statewide NPDES stormwater permit for general construction activity, and any other necessary site-specific WDRs or waivers under the Porter-Cologne Act (see "State Plans, Policies, Regulations, and Laws" above), as well as Yuba County Department of Public Works Design Standards and Codes and Ordinances that regulate construction discharges (see "Regional And Local Plans, Policies, Regulations, And Ordinances" above). Adoption and implementation of the proposed policies and actions in the 2030 General Plan, combined with enforcement of current permitting requirements would reduce this impact to a **less-than-significant** level.

Mitigation Measure

No mitigation is required.

IMPACT 4.9-4 Interference with Groundwater Recharge or Substantial Depletion of Groundwater Supplies. *Development and land use change consistent with the 2030 General Plan could result in additional impervious surfaces and the diversion of groundwater to surface water. Resulting reductions in groundwater recharge in the groundwater basins underlying the Planning Area could affect groundwater levels and the yield of hydrologically connected wells. However, with implementation of the proposed policies and actions in the 2030 General Plan, this impact would be* ***less than significant****.*

Development and land use change consistent with the 2030 General Plan could result in additional impervious surfaces, and the diversion of groundwater to surface water through subsurface drainage features or localized dewatering measures. As a result, levels of groundwater recharge in the underlying groundwater basin would decline. Reductions in groundwater recharge in a given area could affect groundwater levels and the yield of hydrologically connected wells.

However, the 2030 General Plan includes open space designations for important recharge areas for the underlying groundwater basins as described in "Groundwater" above including areas near the Feather, Yuba, and Bear Rivers and Honcut Creek, which would protect them from reduction of groundwater recharge. Please refer to Exhibit Natural Resources – 1 - Open Space Diagram (General Plan Natural Resources Element) and Exhibit Community Develoment – 2 - Land Use Diagram (in the Community Development Element). This, in addition to the County groundwater use provisions and management plans and implementation of narrative policies and actions contained in the 2030 General Plan, would result in a **less-than-significant** impact.

Groundwater Use Provisions

Amendments to SB 318 (see the "Regulatory Setting" section above) address drought contingency planning, water demand management, reclamation, and groundwater resources. Under the current law, all urban water suppliers with more than 3,000 service connections or water use of more than 3,000 af per year are required to submit an UWMP to DWR every 5 years, designed to ensure that groundwater is used at a sustainable rate. UWMPs are described in detail in Section 4.14, "Utilities."

Yuba County Groundwater Management Plans

The Yuba County Water Agency has initiated a Groundwater Management Plan in accordance with the California Water Code, Article 10750 (YCWA 2005) with particular emphasis on the two major groundwater basins in the County as defined by DWR (North Yuba and South Yuba subbasins on the valley floor area of the County, (see the "Groundwater" section above). The overall goal is to ensure that the quantity and quality of groundwater in the County is sustained. This planning effort is being coordinated with local and state agencies, plus local agricultural and municipal water purveyors. The plan is designed to implement the following measures:

- conjunctive use (i.e., utilization of more groundwater in dry years when less surface water is available, and more surface water in wet years when supplies are plentiful and aquifers recharge);
- perennial yield (i.e., the sustainable rate at which groundwater can be withdrawn from a basin by pumping without lowering water levels); and
- avoidance of overdraft (i.e., pumping groundwater from a basin at a rate that exceeds recharge and perennial yield, thereby lowering water levels).

Implementation of Yuba County's Groundwater Management Plan will help to ensure reliable groundwater levels.

Preparation and adoption of the Groundwater Management Plan is a foundation of the Yuba County IRWMP (see the "Regulatory Setting" section above), which includes as its goals improving water supply reliability and providing groundwater management to protect and utilize the groundwater resources in a sustainable manner.

Relevant Policies and Actions of the General Plan

The 2030 General Plan includes the following policies that would reduce interference with groundwater recharge and depletion of groundwater supplies as a result of implementation of the Plan.

- **Policy CD15.6:** New developments (public and private) should use Low Impact Development, Natural Drainage Systems, and other best management practices that reduce the rate of runoff, filter out pollutants, and facilitate groundwater infiltration.

- **Policy NR12.1:** For new developments, the County will manage land use change in a way that reduces the potential for overdraft of groundwater supplies, recognizes overlying groundwater rights and surface water rights, and helps to ensure that the combined use of surface and groundwater resources provides for current and future water demand.

- **Policy NR12.3:** New developments are strongly discouraged in areas with high groundwater infiltration rates and the County's development standards will restrict the amount of impervious surface that can be added in these areas in the context of new developments.

- **Policy HS3.16:** New developments are encouraged to incorporate open, vegetated swales to filter, slow down, and convey stormwater and encourage groundwater infiltration.

- **Policy HS3.18:** New developments shall break up parking areas, intersperse parking with vegetated areas, and incorporate other best management practices that filter and slow down runoff and promote infiltration.

Conclusion

Adoption and implementation of the proposed policies in the 2030 General Plan would reduce the potential for impacts on groundwater levels resulting from increased impervious-surface coverage in areas that contribute to groundwater recharge. Policies CD15.6, HS3.16, and HS3.18 would require that projects promote groundwater infiltration and the Natural Resource Element policies would require that groundwater overdraft protections be implemented.

2030 General Plan policies would be in coordination with the Yuba County Groundwater Management Plan on a regional level to ensure conjunctive use, perennial yield, and avoidance of groundwater overdraft within the County and in surrounding areas that are hydrologically connected to it. This would also be the case with the IRWMP, which includes providing groundwater management to protect and utilize the groundwater resources in a sustainable manner. With incorporation of 2030 General Plan policies, the Yuba County Groundwater Management Plan, and the IRWMP, this impact is considered **less than significant**.

IMPACT 4.9-5 **Exposure of People or Structures to Flood Hazards.** *Development and land use changes consistent with the 2030 General Plan could result in the development of residential or commercial structures in floodplains, thereby exposing people and structures to flood hazards. However, implementation of the proposed policies and programs in the 2030 General Plan, combined with enforcement of existing flood control regulations would reduce this impact to a less-than-significant level. This impact would be* ***less than significant****.*

Yuba County is vulnerable to four types of floods:

- localized flooding,
- riverine flooding,
- levee failure/overtopping (see Impact 4.9-6), and
- dam failure (see Impact 4.9-7).

Flood hazards affecting developed and planned development areas in the County primarily relate to high flows on the Feather, Bear, and Yuba rivers, as well as other creeks and drainage channels. Localized flooding has also been a problem for the unincorporated communities of Linda and Olivehurst. High intensity rainfall is the primary cause of localized flooding. Flooding from weather events frequently occurs in developed or urbanized areas with large amounts of impervious surfaces or in areas that have inadequate storm drainage systems. Riverine flooding occurs during or after prolonged periods of rainfall, or if rain events and snowmelt are combined with saturated soils. Development within the 100-year floodplain would occur under the 2030 General Plan.

County Flood Protection Efforts

The County has been making substantial investments in both drainage and flood control facilities to benefit portions of Linda and Olivehurst (including the Plumas Lake Specific Plan Area). Extensive levee systems have been constructed along the Feather, Yuba, and Bear Rivers, and Western Pacific Interceptor Canal to provide flood protection. The objectives of local and areawide flood protection facilities and drainage infrastructure include reducing the instance of flooding, improving local drainage, and enhancing flood protection for developed and developing areas near the Yuba, Feather, and Bear Rivers.

The County and Reclamation District 784 signed a joint powers agency agreement to create the Three Rivers Levee Improvement Authority (TRLIA) to finance and construct levee improvements designed to protect developed and developing portions of south Yuba County from flooding from the Yuba, Feather, and Bear rivers and the Western Pacific Interceptor Canal. Levee improvements are designed to provide protection against the 0.5% Annual Exceedance Probability (AEP) event (otherwise known as 200-year flood protection). Most of the necessary improvements to protect south Yuba County from wide-scale flooding have been completed, as of the writing of this document. Areas prone to flooding have changed over time as flood protection has improved.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes the following policies that would reduce the exposure of people or structures to flooding hazards.

Community Development Element

- **Policy CD14.9:** The County will support agreements with Marysville and Wheatland that promote mutual goals for fiscal sustainability, growth management, review of spheres of influence, transportation planning, agricultural preservation, emergency access and response, flood protection, renewable energy development, regional infrastructure provision, and other important planning and environmental issues, consistent with the General Plan.

- **Policy CD15.1:** Infrastructure and facilities constructed to meet demand within unincorporated County areas should be located and designed to minimize adverse impacts related to habitats for special-status species, floodplains, farmlands, cultural resources, and watershed areas.

Natural Resources Element

- **Policy NR1.12:** The County will incorporate trails along canals, transmission lines, and other easements and rights-of-way, where feasible, including trail development atop levees, so long as flood protection facilities are not adversely affected.

Public Health and Safety Element

- **Policy HS1.1:** The County will not approve new housing development that would have a finished floor within the 100-year floodplain, as defined by the Federal Emergency Management Agency.

- **Policy HS1.2:** For areas under the jurisdiction of the Central Valley Flood Protection Board, the County will not approve new developments within a flood hazard area or an area of moderate flood hazard without demonstrating adequate flood protection according to Government Code Sections 65865.5, 65962, and 66474.5.

- **Policy HS1.3:** The County may allow non-residential improvements within the 100-year floodplain so long as the proposed improvements do not:

    - Increase flood heights or velocities;
    - Inhibit emergency access;
    - Create excessive costs in providing governmental services during or after flooding;
    - Interfere with the existing waterflow capacity of the floodway;
    - Substantially increase erosion and/or sedimentation; or
    - Contribute to the deterioration of any watercourse or the quality of water in any body of water.

- **Policy HS1.4:** Public buildings are discouraged in the 100-year flood zone, but if they are constructed, they should be flood-proofed to a point at or above the base flood level elevation.

- **Policy HS1.5:** The County will continue to collaborate with the Yuba County Water Agency, local reclamation districts, levee commissions, and U.S. Army Corps of Engineers to improve, certify, and maintain the levee system that protects developed and planned development areas in Linda and Olivehurst, including the Plumas Lake Specific Plan Area. Urban areas in Yuba County should have 200-year flood protection or greater.

- **Policy HS1.6:** The County will prohibit construction near levees that would adversely affect the integrity of the subject levee or would impede maintenance, inspection, or planned levee expansion.

- **Policy HS1.7:** The County will use the best available flood hazard information and mapping from regional, state, and federal agencies to inform land use, zoning, and public facility investment decisions.

- **Policy HS1.8:** The County will update its policies and standards, if necessary, to remain consistent with state and federal standards for floodplains, levee design criteria, and urban development in areas subject to flooding during General Plan buildout.

- **Policy HS1.9:** New developments shall evaluate potential flood hazards and demonstrate compliance with state and federal flood standards prior to approval.

- **Policy HS1.10:** New developments shall provide drainage improvements according to County standards.

- **Policy HS1.11:** Natural waterways should be protected from unnecessary alteration whenever flood protection structures or other forms of construction are proposed.

- **Action HS1.1. General Plan and Zoning Updates.** The County will monitor maps issued by the State Department of Water Resources and the Federal Emergency Management Agency and will amend the General Plan, as necessary, to ensure compliance with state and federal standards for development in flood hazard areas. The County will communicate with staff from the Central Valley Flood Protection Board to ensure that local policies and standards are consistent with state law and regulations. The County will amend the Public Health & Safety Element and Community Development Element, if necessary, to ensure adequate flood protection is provided in areas anticipated for urban development or to provide demonstration of adequate progress toward the requisite level of flood protection. Policies and actions in the General Plan related to flood protection will integrate data from the State Plan of Flood Control. For flood-related revisions to the Public Health & Safety Element, the County will consult with the Central Valley Flood Protection Board and local flood protection agencies serving the County. Following flood-related updates to the General Plan, the County will, if necessary, amend applicable development standards, including the Zoning Ordinance, Subdivision Ordinance, improvement standards, and other codes to ensure consistency with flood protection policies. Subdivision approvals, development agreements, permits, and other County and special district approvals should incorporate amended flood policies and regulations.

    - Related Goals: Goal HS1, Goal CD15, Goal NR12
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund and/or Permit fees
    - Time Frame: Annually, following issuance of official updated flood hazard maps from the Federal Emergency Management Agency and the State Department of Water Resources

Conclusion

Adoption and implementation of the proposed policies and programs in the 2030 General Plan would require enforcement of and compliance with existing State and federal flood control regulations, and would reduce the potential for impacts on localized flooding that would result from increased impervious-surfaces, minimizing the exposure of people or structures to flood hazards resulting from development under the 2030 General Plan. These policies and programs include coordination and design that would ensure adequate drainage and detention of stormwater in the appropriate facilities. Therefore, this impact would be **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.9-6 Potential for Failure of a Levee. *Levees can fail because of earthquake-induced slumping, landslides, liquefaction, overtopping, and high volume flows. Levee failure results in exposure of people and structures to inundation, and death, injury, or loss of property could result. The Feather River Levee system protects the Sutter Basin area, which includes much of Western Yuba County. Extensive levee systems have been constructed along the Yuba, and Bear Rivers, and Western Pacific Interceptor Canal to provide flood protection. Implementation of the proposed policies and programs in the 2030 General Plan, combined with other relevant state and local regulations, would reduce the potential for effects on the area from levee failure. The impact is considered* ***less than significant****.*

Much of the floodplain area of Yuba County is protected by levees. In the north, this includes levees along Honcut Creek and the Feather River. Both banks of the Yuba River have levees from its mouth to high ground along the goldfields. The City of Marysville is protected by a ring levee around the entire city. Levees are present along the entire left bank of the Feather River between the Yuba and Bear Rivers. This levee continues along the right bank of the Bear River upstream to the Western Pacific Interceptor Canal (WPIC), which drains to the Bear River and along Dry Creek (Yuba County 2008a:4-9 – 4.10). Riverine flooding can overwhelm the integrity of the local or regional levee system. Levee failure can result if water overtops a levee, if high river levels saturate the levee banks, or if the levee itself is structurally defective. Levee failure can occur very rapidly with little warning. Once a levee is breached, floodwaters can inundate large low-lying areas. Levee overtopping or failure could cause catastrophic flooding. When levees fail, people and structures are exposed to inundation, and death, injury, or loss of property can result.

The Yuba County IRWMP levee improvement strategy (YCWA 2008a:6-3) is designed to improve the levee system within Yuba County to provide the 200-year level of protection to those areas within the floodplain. Local flood protection programs and areas which require improvement have been inventoried as part of this strategy. For example, in Reclamation District (RD) 10 maintenance is performed by volunteers, with a minimal annual budget and no permanent maintenance staff. Routine maintenance has been performed on the levees that have resulted in a satisfactory grade in the most recent inspections by DWR in the past year. RD 10 is in the process of forming an assessment district to fund levee maintenance and improvement programs (YCWA 2008a:6-4 – 6-5)

RD 817 is subject to flooding from levees that are not in its district. Failure of RD 817 levees would pond flood waters high enough to flood the western portion of Wheatland. Additional studies have not been conducted on the RD 817 levees. Preliminary information indicates that reaches of RD 817 levees do not have adequate freeboard to meet FEMA certification requirements. The IRWMP proposes a problem identification study for RD 817 that would include a survey of the levees, an analysis for erosion, and a geotechnical evaluation. Preliminary information along the Bear River and Dry Creek indicates that reaches of the RD 2103 encompasses approximately 4,000 acres of agricultural and urban land uses, including the City of Wheatland. The Dry Creek south levee is not adequate for 100-year flood protection, and remediation measures are proposed (YCWA 2008a:6-4 – 6-8).

The TRLIA levee system within Yuba County described above in “TRLIA and County Reclamation Districts” now meets the criteria for protection from the 100-year flood. The FEMA Digital Flood Insurance Rate Map (DFIRM) scheduled to become effective in February 2011 reflects this protection from the base flood (Yuba County Public Works 2010). The TRLIA levee restoration and rehabilitation efforts are ongoing for protection from the 200-year flood, as described in the “TRLIA and County Reclamation Districts” section above.

Relevant Policies and Actions of the 2030 General Plan

Public Health and Safety Element

- **Policy HS1.5:** The County will continue to collaborate with the Yuba County Water Agency, local reclamation districts, levee commissions, and U.S. Army Corps of Engineers to improve, certify, and maintain the levee system that protects developed and planned development areas in Linda and Olivehurst, including the Plumas Lake Specific Plan Area. Urban areas in Yuba County should have 200-year flood protection or greater.

- **Policy HS1.6:** The County will prohibit construction near levees that would adversely affect the integrity of the subject levee or would impede maintenance, inspection, or planned levee expansion.

- **Policy HS1.7:** The County will use the best available flood hazard information and mapping from regional, state, and federal agencies to inform land use, zoning, and public facility investment decisions.

- **Policy HS1.8:** The County will update its policies and standards, if necessary, to remain consistent with state and federal standards for floodplains, levee design criteria, and urban development in areas subject to flooding during General Plan buildout.

- **Policy HS1.9:** New developments shall evaluate potential flood hazards and demonstrate compliance with state and federal flood standards prior to approval.

Conclusion

Adoption and implementation of the proposed policies in the 2030 General Plan, as well as existing state and local regulations, would reduce the risk for people and structures involving flooding that could result from failure of a levee. The potential for failure of a levee would remain, but state law, state regulations, and federal regulations are designed to reduce flood risk to an acceptable level (e.g., 200-year flood protection). Policy HS1.5 requires that the County commit to participation in the TRLIA and YCWA IRWMP ongoing efforts for levee certification, as well as compliance with state law related to flood protection for urbanized areas. Policies HS1.7 and HS1.8 require that the County utilize the best available flood hazard information when developing in floodplains, and Policy HS1.9 requires the County to demonstrate compliance with state and federal flood standards prior to approval of any development. According to this policy, levees must be certified pursuant to FEMA 100-year standards and 200-year standards with the implementation of recent changes in state law. The impact is considered **less than significant.**

Mitigation Measure

No mitigation is required.

IMPACT 4.9-7 Potential for Failure of a Dam. *The Yuba County Water Agency Multi-Hazard Mitigation Plan has identified five dams in or outside the County where dam inundation has the potential to result in major loss of life and property in Yuba County in the unlikely event of dam failure, and three dams that would result in major damage on a smaller scale. Implementation of the proposed policies and programs in the 2030 General Plan, combined with other relevant state and local regulations, would minimize the potential for effects from dam failure. This impact would be less than significant.*

Flood inundation maps prepared by the DWR indicate that much of the County is within the flood hazard zone for five dams which have the potential to cause substantial damage: Camp Far West Dam, Englebright Dam, Virginia Ranch Dam (Collins Reservoir), New Bullards Bar Dam, and Oroville Dam. Other dams have the potential of causing damage but on a much smaller scale, including Lake Francis Dam, and Log Cabin Dam (Yuba County 2005) (see Exhibit 4.9-5).

However, according to the Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan, “failure of these dams during a catastrophic event such as a severe earthquake is considered a very unlikely event. Due to the method of construction, they have performed well and failure is not expected to occur.” (YCWA 2005b:257).

Procedures for Protection against Threats of Dam Failure

Dam inundation mapping procedures (19 CCR Section 2575) are required by the State Office of Emergency Services (OES) for all dams where human life is potentially endangered by dam flooding inundation. The County OES serves the County of Yuba by facilitating the four phases of emergency management: Preparedness, Response, Recovery, and Mitigation. OES works to prepare businesses and residents for emergencies or disasters that could significantly affect the greater community. In this capacity, OES provides training and public information with respect to natural disasters, such as flooding or wildfire, and manmade disasters such as hazardous material releases or acts of terrorism.

OES develops emergency plans and standard operating procedures for handling the operational objectives the County undertakes during a disaster. By increasing preparedness and expediting response OES reduces the effects emergencies have on the County. When disaster strikes, OES is prepared to ensure the resources necessary to resume "normal" life are available to local businesses and residents. The capability of the County to respond to emergencies is greatly enhanced by the coordination OES provides between local, state and federal government. Whether through the management of the County's Emergency Operation Center or the administration of the Homeland Security Grant program, OES maintains a state of readiness and provides first responders with tools to address emergencies within minutes. Coordination of state and federal assistance to victims following significant disasters is handled by OES. Assistance may include restoring critical services, such as public utilities, or can be provided through special post-disaster funding programs.

A dam evacuation plan incorporating OES dam evacuation requirements is part of the Yuba County Multi-Hazard Mitigation Plan (YCWA 2005b). The Federal Energy Regulatory Commission (FERC), as required by federal law, has reviewed and approved comprehensive Emergency Action Plans (EAP) for each of the dams with potential to cause massive damage. The EAP is intended to minimize the threat to public safety and to minimize the response time to an impending or actual sudden release of water from project dams. The EAP Plan is used to provide emergency notification when flood water releases may present a potential for major flooding (YCWA 2005b:257). Yuba County coordinates with the cities, special districts, community service districts, cemetery districts, fire department and fire protection districts, school districts, reclamation districts, water and irrigation districts, and private and public organizations to update the Multi-Hazard Mitigation Plan (Yuba County 2010).

Relevant Policies and Actions of the 2030 General Plan

Public Health and Safety Element

- **Policy HS9.1:** The County will review development projects, plans, and public investment decisions to ensure consistency with the Multi-Jurisdictional Multi-Hazard Mitigation Plan.

- **Policy HS9.2:** The County will provide public access to emergency response procedures in such locations as the Government Center, the County library, and public schools and will otherwise promote awareness of emergency response and evacuation plans.

- **Policy HS9.3:** The County will coordinate with Caltrans to maintain Highways 20, 70, 49, and 65 in the lower half of the County and the County will maintain Marysville Road, Frenchtown Road, and La Porte–Quincy Road in the upper half of the County as primary emergency access and evacuation routes and improve other roads, as necessary, such as Plumas Arboga Road, to create additional evacuation routes (Exhibit Public Health & Safety-11).

- **Policy HS9.4:** The County's development and improvement standards will require a circulation system with multiple access points, adequate provision for emergency equipment access, and evacuation egress.

- **Action HS9.1.** Emergency Access and Evacuation Routes. The County will seek funding to implement Action Items listed in the Multi-Hazard Mitigation Plan and future revisions to this Plan, including those actions intended to avoid flooding over emergency access routes. The County will consider, as a part of future revisions to the Multi-Hazard Mitigation Plan, whether new growth accommodated under the General Plan will require improvements to circulation or drainage in order to ensure adequate emergency access and evacuation egress, even in the event of a flood. As noted in Action HS1.2, the County will collaborate with Wheatland and Marysville on development of a flood emergency plan.

    - Related Goals: Goal HS9
    - Agency/Department: County Office of Emergency Services
    - Funding Source: Grant funding
    - Time Frame: Ongoing, as funding is available

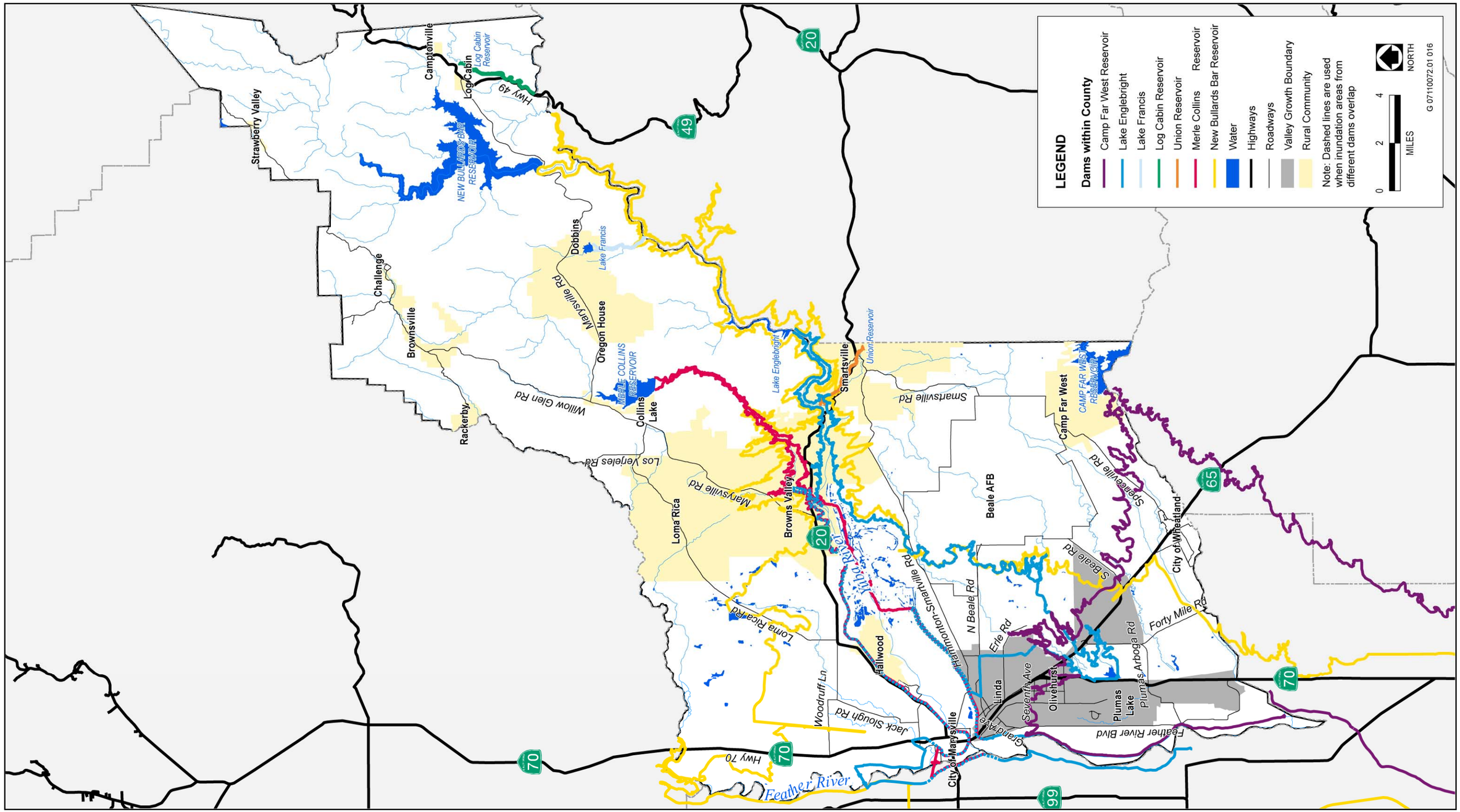
Conclusion

Adoption and implementation of the proposed policies and actions in the 2030 General Plan would reduce the potential for impacts to human life and property due to dam failure and the resulting inundation. These measures include coordination and collaboration with the Multi-Jurisdictional Multi-Hazard Mitigation Plan, and Policies HS9.3, HS9.4, and Action HS9.1 would provide emergency access and evacuation routes to be used in the Plan.

There is no substantial evidence to suggest that dam failure is likely, and implementation of the 2030 General Plan would do nothing to increase the potential for dam failure. The 2030 General Plan policies and actions, combined with other relevant state and local regulations, would minimize the potential for effects on the County from inundation as a result of dam failure. Therefore, this impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.



Source: Yuba County GIS 2010

Yuba County Dam Inundation Areas **Exhibit 4.9-5**

4.10 LAND USE PLANNING, POPULATION, AND HOUSING

This section contains an analysis of the impacts the 2030 General Plan related to land use, population, and housing. Provided in this section is a description of existing land use patterns, population trends, and housing conditions, as well as a brief analysis of regulations and plans pertinent to the implementation of the 2030 General Plan.

4.10.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to land use, population, and housing are applicable to the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Planning Law

California planning law requires cities and counties to prepare and adopt a "comprehensive, long-range general plan" to guide development (Government Code Section 65300). To successfully guide long-range development, the General Plan requires a complex set of analyses, comprehensive public outreach and input, and public policy for a vast range of topic areas. State law also specifies the content of general plans. Current law requires seven mandated elements: land use; circulation; housing, conservation; open space; noise; and, safety.

A general plan must contain development policies, diagrams, and text that describe objectives, principles, standards, and plan proposals. According to the Governor's Office of Planning and Research's (OPR) guidelines regarding general plans, topics from different elements may be combined, but all must be addressed within the general plan.

State Housing Element Requirements

Article 10.6 of the California Government Code outlines the State's Housing Element requirements. The Housing Element must analyze existing and projected housing needs, examine special housing needs within the population, evaluate the effectiveness of current goals and policies, identify governmental and other constraints, determine compliance with other housing laws, and identify opportunities to incorporate energy conservation into the housing stock. The element must also establish goals, policies and programs to maintain, enhance, and develop housing.

Regional Housing Needs Assessment

State law requires that all cities and counties provide a certain amount of housing to accommodate the demands of the growing population. The California Department of Housing and Community Development is responsible for determining the statewide housing need, while local governments and councils of governments determine the specific housing needs within their jurisdictions and prepare a Regional Housing Needs Allocation (RHNA). Construction of new housing is not mandated by the RHNA, which is intended as a planning tool and a guide to an equitable distribution of housing.

Sacramento Area Council of Governments (SACOG) prepares the Regional Housing Needs Plan (RHNP) for the Sacramento region to determine potential locations for future housing stock based on projected population growth, employment trends, and development suitability. The RHNP allocates to SACOG cities and counties their "fair share" of the region's projected housing needs (the RHNA). Yuba County's RHNA for the planning years, 2006 through 2013, projected a need for the construction of an additional 6,636 housing units, allocated as

follows: very low income (1,261 units), low income (966 units), moderate income (1,382 units), and above moderate income (3,027 units) (Table 4.10-1). Future RHNAs from SACOG would guide planning for housing development during implementation of the 2030 General Plan in Yuba County beyond 2013.

Table 4.10-1
Housing Unit Allocation for Unincorporated Yuba County

Income Group	New Units Needed
Very Low	1,261
Low	966
Moderate	1,382
Above Moderate	3,027
Total	**6,636**

California Relocation Law

The California Relocation Law, California Public Resources Code Section 7260(b), requires the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a public entity. The law requires agencies to prepare a relocation plan, provide relocation payments, and identify substitute housing opportunities for any resident that is to be displaced by a public project.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Sacramento Area Council of Governments (SACOG)

SACOG is an association of local governments in the six-county greater Sacramento region, including El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba Counties, as well as the region's incorporated cities. SACOG provides planning for transportation and other regional issues, including the distribution of affordable housing, bicycle networks, air quality issues, airport land uses, and public transit. SACOG works closely with the local governments in the region to develop the Blueprint Project, which promotes smart growth principles for land development and transportation projects within the region.

The SACOG Board of Directors adopted the Preferred Blueprint Scenario in December 2004 and used the Preferred Blueprint Scenario to guide the transportation investments included in the Metropolitan Transportation Plan for 2035. The Preferred Blueprint Scenario does not regulate land use in the SACOG jurisdictions, but does include a conceptual land use diagram that helps to illustrate Blueprint principles. The Blueprint Preferred Scenario provides estimates of housing and job growth for Marysville, Plumas Lake, Wheatland and the unincorporated County.

Airport and Air Force Base Land Use Plans

Yuba County is the site of Beale Air Force Base (AFB), the Yuba County Airport, and the Brownsville/Aeropines Airport. Pursuant to State statutes, each airport has a Comprehensive Land Use Plan (CLUP) [also now known as Airport Land Use Compatibility Plans (ALUCPs)] establishing land use requirements in order to enable them to serve their functions while maintaining a safe environment for nearby residents and businesses. These requirements are defined in the Airport Land Use Commission Law, and are intended to protect public health, welfare, and safety by minimizing the public's exposure to safety hazards and excessive noise levels. The requirements are further intended to prevent the encroachment of incompatible uses around public-use airports, preserving the utility of these airports into the future. The Beale AFB Comprehensive Land Use Plan is described in more detail below.

Yuba County Local Agency Formation Commission

The Yuba County Local Agency Formation Commission (LAFCo) is responsible for coordinating changes in local governmental boundaries, including city, agency, and special district boundaries and spheres of influence. This includes establishing boundaries and spheres of influence for each city and special district within Yuba County. The LAFCo's efforts are directed toward seeing that services are provided efficiently and economically while agricultural and open-space lands are protected.

Yuba County Existing (1996) General Plan

This EIR does not generally present information from the County's existing (1996) General Plan, since the project, in this case, would comprehensively revise the existing General Plan. However, for this section, which addresses consistency with adopted plans and policies, some discussion of the existing General Plan is appropriate. Also addressed below is the County's existing Housing Element of the General Plan, which was adopted December 30th, 2009. Inclusion of this information in the EIR is strictly for comparison to the proposed 2030 General Plan. The proposed General Plan does not have to be consistent with the current General Plan to reach a less-than-significance conclusion. Rather, the revised plan will, by definition, be consistent with itself.

Yuba County Existing General Plan Designations

The existing General Plan includes 15 land use designations for the County's unincorporated area, including community areas. These 15 designations include:

Foothill Agriculture

The Foothill Agriculture classification is used to:

- preserve foothill areas of the County located outside of established community boundaries by providing for areas of intensive and extensive agricultural uses;
- protect grazing land;
- identify and conserve areas of open space, recreation, scenic, natural, and historic value;
- protect timber and forest lands; and
- promote and encourage the use of forest lands for multiple purposes such as preservation of wildlife, hunting, hiking, or other compatible uses.

In addition to agricultural uses and forestry uses, recreational uses including recreational vehicle (RV) parks, golf courses, and resort facilities are permitted in this designation, along with single-family dwellings, clustered housing projects, caretaker/employee housing, and farmworker housing.

Valley Agriculture

The Valley Agriculture classification is used to identify areas on the valley floor located outside of Community Boundaries:

- that are suitable for commercial agriculture and where it is desirable to retain agriculture as the primary land use;
- that will protect the agricultural community from encroachment of unrelated agricultural uses which, by their nature, would be injurious to the physical and economic well-being of the agricultural community; and

- that encourage the preservation of agricultural land, both productive and potentially productive, which is identified as State-designated Important Farmlands and/or Class I and II soils by the Natural Resources Conservation Service (NRCS).

This classification is also used for areas within the Wheatland Community Boundary but outside the Wheatland City limits that have since been designated for various land uses in the City of Wheatland's General Plan. Uses which are permitted under this designation include primarily agricultural uses, with limited residential development permitted for property owners, caretaker/employee housing, and farmworker housing. To date, this area has not been developed.

Agriculture/Rural Residential

The Agriculture/Rural Residential designation is intended to be implemented through a variety of parcel sizes, and identifies areas suitable for larger lot, low-density residential development compatible with a rural character and lifestyle. Single-family residences, agriculture, and domestic livestock farming are permitted uses under this designation. The County's community areas are the primary location of agriculture/rural residential designation.

Single Family Residential

The Single-Family Residential designation includes areas suitable for development of one-household, detached dwelling units, although attached units may be permitted under limited circumstances at compatible densities. This designation includes standard single-family detached houses, as well as mobile home subdivisions and parks, and planned unit developments.

Multiple Family Residential

The Multiple Family Residential classification is used in areas suitable for development of structures containing more than one dwelling unit, including duplexes and triplexes. Appropriate uses include attached housing, apartments, group housing, condominiums, mobile home parks, and planned residential developments.

Neighborhood Commercial

The Neighborhood Commercial designation includes areas of small, localized retail, recreational, and service businesses providing goods and services to the immediate surrounding area. Appropriate uses include eating and drinking establishments, food and beverage sales, limited personal, medical, professional, and repair services, as well as retail sales for the surrounding neighborhoods.

Community Commercial

The Community Commercial classification provides for a full range of commercial retail and service establishments for more than a single residential neighborhood or area. Appropriate uses include gasoline service stations, retail sales, eating and drinking establishments, food and beverage sales, public buildings, professional and finance offices, automobile sales, mobile home sales, and hotels/motels.

Regional Commercial

The Regional Commercial classification is used for sites appropriate for large, integrated shopping centers with a mix of stores and other facilities attracting shoppers from a wide area. Centers will contain one or more large regional or national retailers along with a variety of smaller outlets.

Industrial

The purpose of the Industrial classification is to provide for a range of manufacturing operations; the processing of natural resources; and the processing of agricultural products. The intent is to encourage appropriate industrial/manufacturing development that will be compatible with adjacent land uses and will not create adverse environmental impacts. Appropriate uses include light manufacturing, service commercial uses, fabrication shops, large warehouses, equipment storage yards, distribution sales, batch plants, lumber mills, auto wrecking, salvage and junk yards, fuel tank farms, and energy facilities.

Research and Development Park

The purpose of the Research and Development Park classification is to strengthen and enhance industrial and business development potential. This designation is limited to an area 2,492 acres in size located east of State Highway 65 and southwest of Beale AFB. Appropriate uses include offices, research and development facilities, industrial/manufacturing uses, and warehousing.

Timber Production

The Timber Production classification is used to:

- protect and preserve the forest resources and timberlands of Yuba County for the production of timber, recreational opportunities, watershed protection and maintenance of fisheries and wildlife;
- to protect and preserve the forest resources and timberlands from encroachment of unrelated uses; and
- to identify privately held parcels within the County which are subject to the Z'berg-Warren-Keene-Collier Forest Taxation Reform Act of 1976.

Appropriate uses include the growing and harvesting of timber and forest products, associated uses, watershed management, fish and wildlife habitat management, exploration and extraction of mineral resources, limited recreational uses, and public facilities. Limited residential development is permitted where necessary for caretaker or timber management operations.

Extractive Industrial

The Extractive Industrial classification is used to identify areas where significant and commercially viable mineral and aggregate resources are located and to protect those areas from the encroachment of incompatible uses. Permissible uses include surface and underground mining, quarrying, dredging, oil and gas exploration and development, concrete and asphalt production, limited recreational uses, and agricultural uses. Only incidental dwellings are permitted when associated with mining uses.

Public

The Public classification is used to:

- identify areas having open space value as primitive or natural areas, including national forest and park lands;
- identify areas in public ownership which are reserved for wilderness use or as a wildlife or nature preserve; to retain certain lands in a natural or undisturbed state;
- identify lake recreation areas and to provide for use of these areas for active or passive public recreation purposes; and

- provide areas for development of public facilities to meet public needs.

Appropriate uses include wildlife or nature preserves, non-intensive recreational uses, public campgrounds, public parks, important natural resource areas, institutional or governmental services, and Beale AFB.

Planning Reserve

The Planning Reserve designation is used for lands that may be needed to accommodate future urban residential, commercial, or industrial uses. These areas do not have urban services, but such services can be extended to support future development. The Planning Reserve designation is used along the SR-65 corridor extending south from Olivehurst.

Specific Plan

The specific plan designation is used for areas with adopted specific plans (consistent with the general plan) which provide a more detailed level of comprehensive planning. Appropriate uses vary, and land use classifications are described in each particular plan.

Yuba County Housing Element

The Housing Element is a five-year plan for the 2008–2013 period. This differs from other General Plan elements, which have a longer time horizon. The Housing Element serves as an integral part of the General Plan, but is updated more frequently to ensure its relevancy and accuracy. The Housing Element identifies strategies and programs that focus on:

- matching housing supply with need,
- maximizing housing choice throughout the community,
- assisting in the provision of affordable housing,
- removing governmental and other constraints to housing investment, and
- promoting fair and equal housing opportunities.

The Housing Element consists of the following components:

- the County's Housing Plan to address identified housing needs through housing goals, policies and programs;
- a community profile containing data and analysis of the County's demographics, housing characteristics, and existing housing needs;
- an analysis of future housing needs;
- an analysis of constraints to housing production and maintenance, such as market, governmental, and environmental factors affecting the County's ability to meet identified housing needs;
- an identification of resources to meet housing needs, including vacant land for new construction, as well as financial and administrative resources available for housing; and
- an assessment of past accomplishments.

The Housing Element for the General Plan update was certified by the state department of Housing and Community Development in March of 2010, and adopted by the Yuba County Board of Supervisors on December 30, 2009 (HCD 2010).

Specific Plan Areas, Community Plan Areas, and Other Special Areas

Yuba County has a variety of specific plan areas, community plan areas, and other special areas, as described below. Under State law, specific plans are required to be consistent with the relevant community's General Plan. The 2030 General Plan assumes development consistent with adopted Specific Plans, including:

- East Linda Specific Plan,
- Olivehurst Avenue Specific Plan,
- Plumas Lake Specific Plan, and
- Spring Valley Specific Plan.

Specific plans come in many varieties from the general or conceptual, to those with specific lotting patterns. A specific plan can have policies and conceptual development proposals, or can provide every detail related to the proposed land use change. Specific plans can address large areas of land or small, focused areas in existing developed areas. Generally, specific plans describe future land use, provide for major infrastructure and public facilities, present standards for development and conservation, and outline implementation measures to carry out the plan.

Community and area plans guide development in different parts of the County. Land uses in community and area plans include agricultural/residential, commercial, and public uses. Several of the County's unincorporated communities have been identified as community areas for planning purposes. Designated community areas in the existing General Plan include Camptonville, Log Cabin, Rackerby, Brownsville/Challenge, Oregon House/Dobbins, Loma Rica/Brown's Valley, and the Linda/Olivehurst General Plan area. In addition, in 1993 the County separately adopted the River Highlands Community Plan.

Unlike a specific plan, which is a separate planning document, a community plan is typically part of a general plan. Community plans apply to a defined geographic portion of the general plan planning area. Community plans may reference each mandatory element of the general plan in applying more specific development and conservation policies to the community plan area, or may rely on the General Plan to address some of the subjects of one or more General Plan elements. Community plans are then implemented through local ordinances, such as zoning and subdivision regulations. Like specific plans, community plans must be consistent with the balance of the general plan. Unlike specific plans, community plans do not require a description of major infrastructure components and the financing of those improvements.

River Highlands Community Plan

The River Highlands Community Plan Area covers approximately 34 square miles, and includes the historic communities of Timbuktoo and Smartsville, as well as a 3,700-acre portion of the Spenceville Recreation and Wildlife Refuge. Key policies of the plan include a maximum of two dwelling units/acre, and a minimum of 25% open space.

North Arboga Study Area

The North Arboga Study Area includes an area of approximately 1,300 acres located west of SR-70 near the intersection with SR-65. The study area identifies a program of development for approximately 2,500 dwelling units, 205 acres of industrial uses, and 10 to 20 acres of commercial uses.

County Zoning Ordinance

Title XII of the Yuba County Ordinance Code is the Zoning Ordinance for Yuba County. The Zoning Ordinance provides a precise plan for land use and development standards within Yuba County, and is the primary tool to implement the General Plan. General plan land use designations are associated with zoning districts, which include specific requirements, including setbacks, height limits, and development standards. The Zoning

Ordinance must be consistent with the General Plan, and so amendments and updates to the General Plan require corresponding Zoning Ordinance changes.

Existing Cities, Spheres of Influence, and Planning Areas

In addition to the various specific plan areas and unincorporated communities of the County, Yuba County has two incorporated cities: Marysville and Wheatland. Land use within the City limits of these communities is outside the County's jurisdiction.

In addition to the actual incorporated area of the City, each of Yuba County's two cities has a much larger Sphere of Influence (SOI) area. Although technically the County maintains land use jurisdiction over the SOI, land use decisions affecting this area are made in coordination between the cities and the County, since development in the Sphere of Influence is expected to be annexed to the respective city.

City General Plans

Each of Yuba County's two cities (Marysville and Wheatland) has its own general plan regulating land use and development within the city's boundaries. These general plans, and the associated land use diagrams, are particularly relevant to areas of the unincorporated county that are adjacent to or near city boundaries.

Beale AFB Comprehensive Land Use Plan

Beale AFB is located in southern Yuba County 13 miles east of Marysville. Beale AFB is situated on 22,944 acres of federally-owned land consisting of base buildings, base housing, and one active concrete runway. The Beale AFB CLUP, which was prepared in 1992, establishes land use requirements to serve the mission of the AFB while maintaining a safe environment for nearby residents and businesses.

Flight paths are integrated to minimize conflict with aircraft operations from neighboring airports. Scheduled missions, practice takeoffs, landings, instrument approaches and run-up activities generally occur during hours and in areas that minimize public annoyance with regard to noise.

Beale AFB currently has one active runway, which is 12,000 feet long and 300 feet wide. This runway is capable of handling any Air Force aircraft. The Air Force maintains 3,000 foot square Clear Zones at the each end of the runway. These Clear Zones are the areas close to the ends of the runways. These zones have the most restrictive regulations relative to land use because they are the areas with the highest potential for hazards such as accidents or crashes.

Beale Joint Land Use Study

A Joint Land Use Study (JLUS) was recently completed for Beale AFB. The JLUS process is intended to provide a framework for Beale AFB to interact with local agencies and jurisdictions to minimize land use conflicts with the base. The JLUS includes the recommendation that jurisdictions updating General Plans should consult with Beale AFB to ensure that the latest information related to operations and compatibility issues is available. Furthermore, the JLUS recommends that the plan establish Military Influence Areas (MIAs) and associated controls as identified through the JLUS.

4.10.2 ENVIRONMENTAL SETTING

Yuba County is generally bounded by the Feather River on the west, the Bear River on the south, and Honcut Creek on the north. The eastern boundary is not defined by natural features, but runs from Camp Far West Lake to Smartsville, and then follows the South Yuba River past State Route 49 (SR 49) before turning northwards.

Yuba County is physically diverse and is composed of three general physiographic regions: the valley, foothills, and mountains. County elevation ranges from about 30 feet above sea level along the Feather River to more than 4,800 feet above sea level in the northeastern corner of the County.

Located in Yuba County are the cities of Marysville (the County seat), and Wheatland. Major unincorporated communities include Linda and Olivehurst on the valley floor and Loma Rica/Browns Valley, Brownsville/Challenge, Oregon House/Dobbins, Log Cabin, Rackerby, Camptonville, and Smartsville in the foothill and mountain regions. These unincorporated communities include those areas recognized by Yuba County as community areas for planning purposes.

EXISTING LAND USES

Table 4.10-2 summarizes existing land uses and their relative proportions of the County, including both incorporated and unincorporated areas of the County. This table is intended to provide a snapshot of the existing land uses in Yuba County.

Table 4.10-2
Existing Land Uses

Existing Land Use	Acres	Total Residential Units	Percent of Total Acreage
College	149	--	<1%
Commercial Service	80	678	<1%
Community and Regional Retail	72	--	<1%
Condo/Townhouse	10	222	<1%
Crops	114,783	--	28%
Dairy	1,333	--	<1%
Duplex/Triplex	89	961	<1%
Grazing	70,033	--	17%
Industrial	749	--	<1%
Infrastructure	408	--	<1%
Multiple Family Residential	179	3,266	<1%
Miscellaneous	2,087	--	1%
Mobile Home	12,053	3,880	3%
Natural Resources	6,398	--	2%
Neighborhood Commercial	395	--	<1%
Office	127	--	<1%
Private Recreation	4,164	--	1%
Public Lands	91,777	196	23%
Resource Production	11,444	--	3%
Rural	3,391	--	1%
Rural Residential	39,594	4,614	10%
School	388	1	<1%
Single Family Residential	7,498	11,883	2%
Vacant	30,892	--	8%
No Data	7,489	--	2%
Grand Total	**405,582**	**25,701**	**100%**

Because this existing land use information is largely based on data tracked by the County Assessor for taxation purposes, the land use descriptions and categories do not match the County Zoning Districts or General Plan Land Use Designations. The County Assessor's land use categories have certain limitations when used to describe existing land uses throughout the County. For instance, the "public" land category includes a wide range of very different uses, including Beale AFB, the Yuba County Airport, and National Forest areas, as well as properties owned by cities and Yuba County. Although there may be some relationship between County Assessor land use categories, Zoning, and General Plan Land Use Designations, the relationship is not consistent.

Agricultural land uses (cropland, grazing, and dairies) occupy roughly 55% of the County's lands and are important to the local economy. Approximately 115,000 acres of land in Yuba County (28%) is in use for crops (which includes agricultural and forest lands). Areas designated as crops include areas used for cultivation of peaches, prunes, pears, walnuts, olives, grapes, kiwis, mixed orchards, rice (including hunting uses), row crops, irrigated and non-irrigated field crops, timber, and timber preserve zone (TPZ) areas. Agricultural areas include much of the western quarter of the County. There are also large areas of forest land located in the eastern one-third of the County. The County contains approximately 70,000 acres of grazing land, about 17% of the total County acreage.

Public lands include city, county, state, and federally-owned properties, as well as hospitals, rest homes, cemeteries, historical properties, charitable and fraternal organizations, and other non-taxable properties. Approximately 92,000 acres of land (23% of the total) are categorized as public lands. The primary blocks of public lands include Beale AFB, Spenceville Wildlife Refuge, and the Tahoe National Forest.

Residential lands in the County include condos, townhomes, duplexes, triplexes, fourplexes, rural residential dwellings, urban single-family dwellings, mobile homes, and multi-family residential units. Residential development occupies 60,000 acres (15%) of the County's total land area. Single-family residential areas are concentrated in Linda, Olivehurst, and the Plumas Lake development project area, with scattered parcels in foothill and upcountry community plan areas. Condominium and townhomes, duplex and triplex units, and multi-family residential dwellings are focused in developed areas within the valley portion of the County.

Commercial and industrial lands occupy roughly 1,300 acres (less than 1%) of the County's total land area. Commercial properties are located primarily along highways and major roadways. Community and regional retail lands are generally located next to SR-65 and SR-70, particularly in Linda. Industrial lands are mostly along railroad lines and around the Yuba County Airport. Mining areas are mostly focused along the Yuba River.

POPULATION

As of the 2000 U.S. Census, the population of Yuba County was 60,219, with a population of 45,679 (76%) in unincorporated areas and 14,540 (24%) in incorporated areas. The number of households in Yuba County was 20,535, with an average household size of 2.87 persons (the same as California as a whole).

The County has experienced population growth in the recent past, and this growth is forecast to continue. Yuba County's projected growth rate through 2050 is the second-highest in the state after neighboring Sutter County. Yuba County is expected to add 130,582 new residents by 2050, for a total of 201,327.

The California Department of Finance has determined that in 2010, Yuba County's total population increased to 73,380 with 22% in incorporated areas and 78% in unincorporated areas (Table 4.10-3). Table 4.10-3 indicates changes in population between 1990 and 2000, and 1990 and 2010. The California Department of Finance forecasts that there will be 201,327 residents of Yuba County in 2050, representing an increase of 179% over the 2010 estimated population (Table 4.10-4)

Table 4.10-3 Population Statistics, Yuba County					
Jurisdiction	1990	2000	2010	% Growth (1990-2000)	% Growth (1990-2010)
Yuba County Unincorporated	44,273	45,679	56,955	3	29
Marysville	12,324	12,268	12,867	0	4
Wheatland	1,631	2,272	3,558	39	118
County Total	58,228	60,219	73,380	3	26
Source: Department of Finance 2010.					

Table 4.10-4 Forecast Population				
Population	2020	2030	2040	2050
Yuba County	109,216	137,322	168,040	201,327
Source: Department of Finance 2007.				

HOUSING

Table 4.10-5 displays the housing unit distribution within Yuba County. Approximately 78% of existing housing stock is located within the unincorporated areas of the County. The bulk of new housing construction has occurred in the unincorporated areas of the county, where an increase of 15,527 units since 1990 has raised the total number of units to 22,010 in the unincorporated county, and 28,244 total dwelling units in the County.

Table 4.10-5 Housing Units, Yuba County					
Jurisdiction	1990	2000	2010	% Growth (1990-2000)	% Growth (1990-2010)
Unincorporated County	6,483	16,822	22,010	159	240
Marysville	5,083	4,999	5,019	-2	-1
Wheatland	679	815	1,215	20	79
County Total	12,245	22,636	28,244	85	131
Source: Department of Finance 2010.					

The County is characterized primarily by single-family detached housing units, which make up 67% of units (Table 4.10-6). The County also has a significant number of mobile homes, with 3,880 units that comprise 14% of the County's total housing stock. Attached single-family and multifamily units make up approximately 19% of the total.

Table 4.10-6 Housing Types, 2010										
Jurisdiction	Detached		Attached		Two to Four Units		Five-Plus Units		Mobile Homes	
Unincorporated	15,275	69%	915	4%	713	3%	1,208	5%	3,899	18%
Marysville	2,788	56%	340	7%	764	15%	1,119	22%	8	0%
Wheatland	929	76%	37	3%	155	13%	55	5%	39	3%
County Total	18,992	67%	1,292	5%	1,632	6%	2,382	8%	3,946	14%
Source: Department of Finance 2010.										

Employment

The availability of employment opportunities within a community often influences location decisions by households, and therefore employment information is important to the analysis presented in this section of the EIR.

During the 1990s and 2000s, Yuba County added a substantial number of dwelling units, particularly in the southern, valley portions of the County. This housing was constructed largely to serve employees of Sacramento, south Placer County, and other employment centers. Between 1990 and 2009, the jobs-to-housing ratio in Yuba County decreased by approximately 33% (from 0.83 to 0.56) (Table 4.10-7).

Table 4.10-7 Yuba County Jobs and Housing Units, 1990 – 2009			
Year	Local Jobs	Housing Units	Jobs-to-Housing Ratio
1990	17,700	21,245	0.83
2000	18,100	22,636	0.80
2009	15,700	28,016	0.56
Sources: DOF 2010 and EDD 2010			

4.10.3 Environmental Impacts and Mitigation Measures

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a land use, population, or housing impact is considered significant if the proposed project would:

- physically divide an established community;
- conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project, adopted for the purpose of avoiding or mitigating an environmental effect;
- conflict with any applicable habitat conservation plan or natural community conservation plan;
- induce substantial population growth in an area, either directly or indirectly; or
- displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.

IMPACT ANALYSIS

IMPACT 4.10-1 **Disrupt or Divide an Established Community.** *Compliance with goals and policies in the 2030 General Plan would ensure that development pursuant to the 2030 General Plan would not disrupt or divide established communities. This impact is considered* ***less than significant****.*

The 2030 General Plan goals and policies and Land Use Diagram focus development within the Valley Growth Boundary on undeveloped land, as well as infill and redevelopment in areas already developed. Limited development could occur outside of the boundary in rural communities. However, the majority of new development under the 2030 General Plan would occur within the Valley Growth Boundary.

The General Plan does not propose land use changes and infrastructure planning elements that would divide any established communities. The Goldfields Parkway, which is a planned four- to-six lane expressway, is a previously planned roadway improvement prior to the 2030 General Plan and is included as a part of the County's circulation system. This facility is planned for the eastern portion of the unincorporated community of Linda. The alignment for the Goldfields Parkway is planned adjacent to newly developed residential development located just west of the planning roadway. East of the planning roadway alignment is open space. There is some scattered rural scale residential development east of the Goldfields Parkway. However, this future roadway is not planned in a location that would divide an existing neighborhood or defined residential community. It is on the edge of a newly developing area.

Many of the proposed land use changes and policies in the 2030 General Plan would promote integrated land use and transportation planning that fosters enhanced connectivity between land uses and the circulation system, thereby reducing barriers to connectivity. The following policies demonstrate how the 2030 General Plan would promote land use and circulation system connectivity and avoid or minimize the division of established communities:

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD5.4:** New developments within the Valley Growth Boundary shall provide a highly connected travel network that supports all local travel modes.
- **Policy CD8.3:** New cul-de-sacs are allowed within the Valley Neighborhoods and residential portions of Employment Village areas where they would not create a barrier for pedestrian and bicycle access or circulation between homes and destinations.
- **Policy CD8.9:** Fences and walls are discouraged along public travelways where they would present substantial barriers to casual surveillance or multi-modal travel.
- **Policy CD8.11**: Multi-family housing developments should be well connected to the surrounding neighborhood. Parking areas should be sized and broken up to avoid creating barriers to pedestrian and bicycle circulation.
- **Policy CD20.1:** New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided, wherever feasible.
- **Policy CD20.3:** New developments shall connect with adjacent roadways and stubbed roads and shall provide frequent stubbed roadways in coordination with future planned development areas.Plans and projects shall connect to adjacent planned development areas and adjacent roadways at a minimum of 600-foot intervals. This minimum interval does not apply to development areas that are adjacent to existing or planned future limited-access highways, freeways, or expressways, or other areas where physical constraints would make this level of connectivity infeasible.

- **Policy CD20.4:** The County discourages the use of sound walls within neighborhoods. Traffic dispersal on a finely connected network of smaller roadways and other planning and site design solutions should be used instead of sound walls to address noise issues, to the greatest extent feasible.

- **Policy CD20.5:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.

- **Policy CD20.7:** The County will seek frequent street and trail connections between new residential developments and established Valley Neighborhoods.

Conclusion

The 2030 General Plan accommodates land use change, which would be focused within the Valley Growth Boundary and within rural communities between present and 2030. Buildout of the 2030 General Plan would result in the development of new residential, commercial, and industrial uses and would extend infrastructure in portions of the County. The General Plan provides the overall framework for roadway and infrastructure improvements that would be needed to serve land use change within the unincorporated County anticipated under the 2030 General Plan. The General Plan will be implemented through several measures, including changes to County development and improvement standards, infrastructure planning, approval and development of plans and projects, and through other means.

The 2030 General Plan policy diagrams would accommodate development in and adjacent to existing communities, but these policy diagrams do not include improvements that would divide existing communities. The 2030 General Plan does not identify new infrastructure improvements that would be located in a way that would divide an established community.

The 2030 General Plan would incorporate numerous goals, policies, and actions aimed at preventing or minimizing the division or disruption of both existing and planned communities. Implementation of the goals, policies, and actions contained within 2030 General Plan, as described above, would ensure that community divisions with adverse effects on the physical environment would either not occur or be minimized. This impact would be **less than significant**.

IMPACT 4.10-2 Conflicts with Other Plans. *The goals, policies, and actions proposed in the 2030 General Plan would not conflict with other land use plans, policies, or agency regulations with jurisdiction over projects that could be developed under the 2030 General Plan. The impact is less than significant.*

The State CEQA Guidelines Section 15125(d) requires that an EIR analyze the potential for inconsistencies between the project, in this case implementation of the 2030 General Plan, and other relevant plans, programs, regulations, and agencies with some authority over the project. However, it should be noted that the General Plan was designed to be consistent with a number of relevant plans and policies. Land use and other plans, regulations, and programs that are relevant to lands within the County are listed below, along with an evaluation of their consistency with the proposed 2030 General Plan.

Yuba County Local Agency Formation Commission

Yuba County LAFCo is responsible for annexations and detachments of lands to cities and special districts, as well as the formation and dissolution of cities, special districts, and spheres of influence. The County is required to work with LAFCo during the annexation process to ensure that municipal services are provided to newly annexed areas. This would ensure consistency with LAFCo policies. In addition to the requirement for LAFCo

approval of annexations and boundary changes, the following policy would further ensure the County's coordination with Yuba LAFCo during future annexations:

- **Policy CD14.3:** The County will support an orderly framework for communication with Wheatland, Marysville, Beale Air Force Base, LAFCo, service providers, SACOG, Sutter County, and other regional service providers and agencies.

Sacramento Area Council of Governments Blueprint

The SACOG Preferred Blueprint Scenario, referred to as the Blueprint, is a voluntary framework for regional transportation and land use planning that was developed to aid the jurisdictions in the six-county greater Sacramento area in guiding development through 2050.

The Blueprint is intended to suggest different development patterns and density in the future compared to past trends in part to provide for more efficient public facilities and infrastructure, to reduce vehicle miles traveled (VMT) regionally, to reduce air pollutant emissions, and reduce other environmental impacts. The General Plan includes substantially more development than anticipated under the Preferred Blueprint Scenario for the unincorporated County. However, technical sections of this EIR evaluate the direct effects of construction and operation of growth beyond that included for Yuba County in the Preferred Blueprint Scenario in sections organized by environmental issue areas, such as biological resources, air quality, etc., the construction of water supply facilities. The General Plan includes policies and this EIR includes mitigation measures, where necessary, that would reduce or avoid impacts, as noted throughout Chapter 4 of this EIR. There is no additional significant impact associated with growth beyond that anticipated for the County in the Preferred Blueprint Scenario beyond that considered comprehensively throughout this programmatic EIR.

The 2030 General Plan includes goals, policies, and actions that promote Blueprint principles, including the promotion of more public transportation and use of bicycles and non-motorized forms of transportation; providing many types of housing to meet the needs of all residents, rather than focusing solely on single-family, large-lot, detached residential development; promoting more compact development; redevelopment of vacant or underutilized parcels and using existing roadway systems, and public facilities; creating neighborhood and civic centers with mixed uses to provide neighborhood services to residential areas; and preserving natural features and systems. Goals and policies that promote the seven smart growth principles of the Blueprint are found throughout the 2030 General Plan. Following is a sampling of some of the more relevant policies that demonstrate consistency with the Preferred Blueprint Scenario:

- **Policy CD1.1:** Urban and suburban development in the unincorporated County not related to agriculture, mining, or some natural or cultural resource-oriented purpose is prohibited in valley areas outside the Valley Growth Boundary.

- **Policy CD2.1:** The County will encourage infill development and redevelopment of vacant and underutilized properties within existing unincorporated communities.

- **Policy CD2.2:** The County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment.

- **Policy CD2.3:** The County will support reinvestment in Linda and Olivehurst that increases local shopping, job, and housing opportunities.

- **Policy CD2.5:** The County will prioritize public spending on infrastructure within infill areas in order to induce reinvestment, remove blight, and reduce poverty.

- **Policy CD2.6:** The County will support public/private partnerships that encourage infill development consistent with the General Plan.

- **Policy CD4.1:** Employment and Commercial Centers shall be developed in coordination with local transit provider/s to ensure proper placement and design of transit stops and accommodate public transit for both employees and patrons.
- **Policy CD4.2:** Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.
- **Policy CD5.1:** Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks, and other civic uses.
- **Policy CD5.2:** Valley Neighborhoods should provide compact development patterns that conserve land and place homes in close proximity to destinations.
- **Policy CD5.3:** Valley residential development in existing and planned Valley Neighborhoods should provide for the full range of housing types and densities.
- **Policy CD5.4:** New developments within the Valley Growth Boundary shall provide a highly connected travel network that supports all local travel modes.
- **Policy CD6.1:** Valley Neighborhoods shall contain one or more Neighborhood Center, where medium- and higher-density residences, neighborhood commercial, and public services are focused.
- **Policy CD6.5:** Neighborhood Centers should provide for a pedestrian-friendly mix of uses and a range of housing types to meet the needs of the County's diverse households.
- **Policy CD6.6:** Neighborhood Centers shall be located and designed to provide convenient and safe bicycle, pedestrian, and transit access to and from surrounding neighborhoods.
- **Policy CD7.2:** The County will coordinate with local residents and business owners to identify and plan for the desired land use mix, amenities, and aesthetic improvements for Mixed-Use Corridors.
- **Policy CD7.3:** The County will encourage – through entitlement, streamlining, flexibility in development standards, fee structures, and other incentives – infill development in vacant or underutilized sections of Mixed-Use Corridors.
- **Policy CD7.4:** Developments in Mixed-Use Corridors should have pedestrian-friendly property frontages with buildings built close to the street frontage.
- **Policy CD8.1:** New developments should be designed to provide direct and convenient access to nearby parks, trails, commercial and public services, and transit stops.
- **Policy CD10.1:** The County will encourage development that improves the balance between local jobs and housing, including new commercial, industrial, home-based businesses, business incubators, and other development that generates net revenues for the County and produces local jobs.
- **Policy CD19.1:** The County will promote mixed-use, infill development and redevelopment in order to reduce dependence on the private automobile.

Metropolitan Transportation Plan (MTP)

In 2008, SACOG approved the MTP 2035 for the six-county region. The MTP is a 28-year plan for transportation improvements needed in the region to accommodate projected population and economic growth. The MTP makes connections between transportation needs, land use, and air quality on a regional level, and provides guidance for

cooperative planning between different local jurisdictions. The 2030 General Plan uses the same basic principles outlined in the MTP for regional transportation planning. The following is a sampling of policies from the 2030 General Plan that demonstrate consistency with the MTP:

- **Proposed Facilities (Circulation Element).** During buildout of the General Plan, the demand for travel will increase on many County roads and state highways… The County also coordinates with regional transportation planning efforts to improve state highways that serve Yuba County and surrounding communities. Different federal, state, and local programs are used to fund construction and maintenance of the roadway network…Recommended improvements to County roads and State facilities to serve the unincorporated County are described in Exhibits Community Development-13 and 14 and Tables Community Development-6, 7, and 8.

- **Policy CD14.3:** The County will support an orderly framework for communication with Wheatland, Marysville, Beale Air Force Base, LAFCo, service providers, SACOG, Sutter County, and other regional service providers and agencies.

- **Policy CD14.4:** The County will coordinate with special districts, cities, LAFCo, SACOG, Caltrans, joint powers authorities, and other relevant agencies to provide efficient local and regional infrastructure, public facilities, and public services.

- **Policy CD16.12:** Proposed specific plans shall identify and describe financing plans for major transportation improvements required to serve them, including railroad overcrossings, highway overcrossings, and other facilities.

- **Policy CD18.1:** The County will support regional transportation planning for roadway improvements within Yuba County identified by SACOG, Caltrans, and documented in the Metropolitan Transportation Plan and Highway Concept Reports.

- **Policy CD18.2:** County staff will seek input from Marysville and Wheatland, Sutter County, Butte County, Nevada County, Placer County, Sierra County and Yuba City during land use and transportation planning efforts that may have regional effects.

- **Policy CD18.3:** The County will pursue agreements with Sutter County, Yuba City, Caltrans, and SACOG to construct a third bridge across the Feather River.

- **Policy CD18.4:** The County will work cooperatively with Nevada County, Caltrans, and SACOG to improve capacity on State Highway 20 east of Marysville.

- **Policy CD18.5:** The County will continue to participate in the maintenance and update of the Metropolitan Transportation Plan.

- **Policy CD18.6:** The County will evaluate and consider the effects of future land use changes on regional circulation facilities as part of land use planning decisions.

- **Policy CD18.7:** New developments shall analyze impacts to Caltrans facilities and shall provide fair-share funding to address impacts to Caltrans facilities, as feasible.

- **Policy CD18.8:** The County will coordinate with Caltrans to implement context-sensitive improvements to State facilities that are keyed to local multi-modal transportation needs.

- **Action CD18.1: Regional Traffic Fee Program**. The County will coordinate with cities and surrounding counties to develop and implement a regional fee program to address non-County transportation facilities, including vehicular, bicycle, pedestrian, and public transit. The regional mitigation fee program should be

designed to address cumulative regional transportation needs on a fair-share basis for new specific plans and new developments. This program should address state highway facilities, as appropriate, and account for outside funding sources for state highway facilities, including but not limited to: State Transportation Improvement Program and State Highway Operation and Protection Plan funding.

The traffic impact fees will be used to fund improvements that will be needed in the future as development occurs. If feasible, the County will use provisions of Streets and Highways Code sections 114 and 130 to bank fees for future highway projects.

- Related Goals: Goal CD13, Goal CD16, Goal CD18, Goal CD22, Goal HS9
- Agency/Department: Community Development and Services Agency
- Funding Source: County mitigation fees, funding from aggregate sales, federal and state funds
- Time Frame: Nexus Fee Study and revised fees by 2014.

- **Policy CD19.11:** The County will support feasible opportunities to provide intra-county and inter-county passenger rail service for Yuba County residents and businesses, including support for expansion of AMTRAK passenger service and transit, along with bicycle, and pedestrian-friendly development around rail and transit stations.

Specific Plan Areas, Community Plan Areas, and Other Special Areas

Yuba County has a variety of specific plans, community plans, and other area plans that regulate land use in unincorporated Yuba County. Specific plans and other planning documents are required to be consistent with the General Plan. For the most part, the General Plan assumes development consistent with existing rural community boundary areas and existing specific plans.

However, upon adoption of the 2030 General Plan, the County would review adopted specific plans, community plans, and other plan documents, and revise these documents, where necessary, to reflect changes made in the 2030 General Plan. According to State Government Code 65359, "any specific plan or other plan of the city or county that is applicable to the same areas or matters affected by a general plan amendment shall be reviewed and amended as necessary to make the specific or other plan consistent with the general plan." The 2030 General Plan includes policies related to reviewing and revising specific plans and community plans, including the following.

- **Action CD1.1: Review of Development Capacity in Valley Growth Boundary.** The County will review the Valley Growth Boundary at least every 8 years and make amendments, if necessary, to ensure that it continues to provide enough land for development for the next 20 years. The review of the Valley Growth Boundary will correspond with regional housing needs allocations and the County's Housing Element update cycle. The County will also periodically review the Planning Reserve Area and consider removing lands from the Planning Reserve Area, assigning General Plan land use designations, and approving zoning and development standards, if needed to accommodate population and employment growth consistent with the General Plan.

  The County will use information from the Department of Finance, Employment Development Department, Sacramento Area Council of Governments (SACOG), and estimates of growth capacity provided by Yuba County cities to establish existing and future estimates of population and employment levels in the unincorporated County. General Plan land use designations, zoning, and specific plan land use designations will be used to calculate land development capacity within the Valley Growth Boundary. The County will consider adding areas to the Valley Growth Boundary based on an evaluation of 20-year forecasts of population and employment in unincorporated areas, the County's jobs-housing goals, and land needs for agriculture and other natural resource functions.

  - Related Goals: Goal CD1, Goal CD10, Goal CD13
  - Agency/Department: Community Development and Services Agency

- Funding Source: General Fund
- Time Frame: Every 8 years following adoption of the 2030 General Plan

- **Policy CD10.5:** The County will support community and specific planning efforts following General Plan adoption that identify employment-generating uses and the housing and infrastructure that is needed to support the local workforce.

- **Action CD10.2: Land Use Monitoring.** The County will monitor progress toward the jobs-housing goal and, as necessary, amend the General Plan, Zoning Ordinance, Specific Plans, Community Plans, and other relevant plans and codes, as appropriate. Any amendments shall address imbalances between job and population growth, and may include revisions to allowable land uses or development standards, financial/regulatory incentives to accelerate the development of job-generating uses, and other actions.

  - Related Goals: Goal CD1, Goal CD4, Goal CD10
  - Agency/Department: Community Development and Services Agency and Economic Development Coordinator.
  - Funding Source: General Fund
  - Time Frame: Report on jobs-housing balance at least once per year to the Board of Supervisors.

The 2030 General Plan may lead to revisions to existing community plans, specific plans, and area plans. The General Plan substantially reduces the development potential within the River Highlands Community Plan Area. It is unknown at this time what other revisions would be made to existing specific plans and community plans, and will not speculate in this EIR on such changes.

Yuba County Zoning Ordinance

The County's Zoning Ordinance describes the permitted land uses and development standards for each of the designated zoning districts in the unincorporated County on a parcel-by-parcel basis. The Zoning Ordinance is subordinate to the General Plan and will be updated to reflect the changes made to the General Plan land use designations. The 2030 General Plan contains actions requiring the County to update its Zoning Ordinance, which further ensure consistency. These actions are listed below:

- **Action CD2.1: Revise Standards.** Following the General Plan adoption, the County will review and revise zoning, development standards, impact fees for all County facilities (library, parks, jail, roads, etc.), and related plans and standards to ensure consistency with the General Plan. As a part of these amendments, the County will focus on removing constraints and creating incentives for mixed-use, infill development that is consistent with the General Plan.

  - Related Goals: Goal CD2, Goal CD3, Goal CD4, Goal CD6, Goal CD7, Goal CD8, Goal CD16, Goal CD17, Goal CD19, Goal HS5, Goal HS11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; federal and state funds, as available
  - Time Frame: Update Zoning Ordinance and development standards by 2013

- **Action CD5.1: Update Zoning Ordinance.** Following the General Plan adoption, the County will review and revise the Zoning Ordinance, consistent with the updated General Plan. As a part of the revisions, the

County will ensure the updated Zoning Ordinance accommodates compact growth patterns, consistent with the General Plan, while continuing to provide for the public health and safety. The County will consider provisions in the Zoning Ordinance that focus more on building form, function, and placement; lot design; and the relationship of buildings to the public realm (streets, plazas, public parks, etc.) and less emphasis on regulating specific land uses.

To ensure land use compatibility while also encouraging a mix of land uses, the County will base performance standards in the Zoning Ordinance on General Plan policies for such topics as noise, vibration, light, glare, air pollution, and traffic. Such performance standards could be used to ensure compatibility in situations where nonresidential uses are located close to residential uses. The ordinance will also be revised to address nuisances, such as blight, stockpiling, and other similar issues.

- Related Goals : Goal CD2, Goal CD3, Goal CD4, Goal CD6, Goal CD7, Goal CD8, Goal CD19, Goal HS5, Goal HS10, Goal HS11, Goal NR11
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; federal and state funds, as available
- Time Frame: Update Zoning Ordinance by 2013

► **Action CD10.2: Land Use Monitoring.** The County will monitor progress toward the jobs-housing goal and, as necessary, amend the General Plan, Zoning Ordinance, Specific Plans, Community Plans, and other relevant plans and codes, as appropriate. Any amendments shall address imbalances between job and population growth, and may include revisions to allowable land uses or development standards, financial/ regulatory incentives to accelerate the development of job-generating uses, and other actions.

- Related Goals: Goal CD1, Goal CD4, Goal CD10
- Agency/Department: Community Development and Services Agency and Economic Development Coordinator.
- Funding Source: General Fund
- Time Frame: Report on jobs-housing balance at least once per year to the Board of Supervisors.

► **Action CD19.2: Revise Development Code & Improvement Standards.** Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards, where necessary, to encourage a high level of pedestrian, bicycle, and transit-friendliness in new development. In general, the County will consider revisions to its codes and standards to reduce road widths, reduce the amount of paved areas of roadways and parking lots, reduce pedestrian crossing distances, and reduce curb radii at intersections, in consideration of pedestrian and bicycle comfort and safety, while also considering turning templates needed for service and emergency vehicles. The County will consider revisions to its codes and standards that require wider sidewalks in areas where higher pedestrian and bicycle activity would be anticipated.

- Related Goals: Goal CD2, Goal CD8, Goal CD13, Goal CD15, Goal CD19, Goal CD 21, Goal HS3, Goal HS5, Goal HS9, Goal HS11, Goal NR7
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; grant funding

- Time Frame: Revise zoning, development codes, and improvement standards by 2013

- **Action CD21.1: Revise Development Code & Improvement Standards.** Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards. The County will consider reduced surface parking in areas where pedestrians and bicyclists are concentrated and where transit service is planned. The County will consider strategies to optimize parking supply through shared parking; use of on-street parking to meet demand of nearby properties; and other strategies. The County will consider establishing parking maximums, as well as minimums, as part of the development code and improvement standard revisions.

  - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD19, Goal CD21, Goal NR11, Goal HS3, Goal HS5

  - Agency/Department: Community Development and Services Agency

  - Funding Source: General Fund; grant funding

  - Time Frame: Revise zoning and development codes by 2013, revise improvement standards by 2014.

- **Action NR3.1: Agricultural Zoning.** As a part of the comprehensive Zoning Ordinance update that will follow adoption of the General Plan, the County will establish minimum parcel sizes on Cropland and Grazing Land designed to promote their long-term viability for agricultural use. In general, higher per-acre value agricultural operations could accommodate relatively smaller long-term viable parcel sizes, depending on the crop type. Lower per-acre value types of agricultural activity, such as grazing, would need larger parcel sizes in order to be viable on a long-term basis. Determining the minimum viable agricultural parcel size depends on several factors that are subject to change over time. A recent study by the UC Davis Department of Agricultural and Resource Economics does not establish minimum viable parcel size, but suggests that for walnuts in Yuba and Sutter counties, the minimum viable parcel size is more than 20 acres.[1] County staff will collaborate with local experts from UC Cooperative Extension, the Yuba-Sutter Farm Bureau, and other organizations, as well as local farmers for guidance on minimum parcel sizes required to support ongoing viable operations within the context of local crop types and grazing operations. The County's Zoning Ordinance will be revised to regulate land use and parcel size on Cropland and Grazing Lands outside the Valley Growth Boundary and Rural Communities, based on this guidance.

  - Related Goals: Goal NR3

  - Agency/Department: Community Development and Services Agency; Agricultural Commissioner

  - Funding Source: General Fund and/or permit fees

  - Time Frame: The County's zoning and development standards will be revised following the General Plan Update. The target date for approving a revised zoning code is 2013.

The County's Zoning Ordinance was used as background information in development of the 2030 General Plan. The 2030 General Plan was also informed by a comprehensive set of technical studies and analysis of existing environmental conditions, which are more up-to-date than those used to draft the current Zoning Ordinance. The 2030 General Plan addresses the County's economic and social objectives, but also comprehensively addresses environmental issues, such as those required for analysis under CEQA. Although the 2030 General Plan includes

[1] Karen Klonsky, Department of Agricultural and Resource Economics, UC Davis. Economically Viable Parcel Size. August 28, 2006.

policies and actions that would require certain changes to the Zoning Ordinance following adoption, these changes would not conflict with the Zoning Ordinance in such a way as to create any substantial environmental impact.

Other Consistency and Consultation Policies

The 2030 General Plan includes several other policies which support consultation and consistency with other jurisdictions and other state agencies.

- **Policy CD14.3:** The County will support an orderly framework for communication with Wheatland, Marysville, Beale Air Force Base, LAFCo, service providers, SACOG, Sutter County, and other regional service providers and agencies.
- **Policy CD14.4:** The County will coordinate with special districts, cities, LAFCo, SACOG, Caltrans, joint powers authorities, and other relevant agencies to provide efficient local and regional infrastructure, public facilities, and public services.
- **Policy CD14.6:** The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.
- **Policy CD17.2:** The County will coordinate approval of projects and plans with local transit providers to ensure that transit service is provided for work, shopping, school, and other types of trips within the Valley Growth Boundary.

Conclusion

There are no inconsistencies between the 2030 General Plan and other relevant plans, actions, and regulations that would result in any substantial adverse physical effects under CEQA other than those already addressed comprehensively and mitigated as appropriate throughout this EIR. The impact would be **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.10-3 **Potential Conflict with Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP).** *Implementation of the 2030 General Plan would not conflict with an adopted habitat conservation plan or natural community conservation plan. There would be no impact.*

There are no habitat conservation plans or natural community conservation plans in Yuba County currently in effect.

Yuba and Sutter counties (with city partners) are in the process of preparing the Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which will cover areas in the western portion of Yuba County and protect habitat for wildlife. The Yuba-Sutter NCCP/HCP is a cooperative planning effort initiated by the counties in connection with future development. The Yuba-Sutter Regional NCCP/HCP will provide a way to accommodate economic and community development; retain the economic vitality of the local agricultural community; maintain recreation, hunting, fishing, and other public uses of the local open space; simplify and expedite land use and conservation planning in the plan area; protect threatened and endangered species; and preserve plant and wildlife communities.

The County's Natural Resources Element will require consistency with the NCCP/HCP, once adopted:

- **Policy NR5.2:** The County will coordinate its environmental review and mitigation requirements with the Yuba-Sutter NCCP/HCP, once adopted.

Conclusion

The NCCP/HCP is expected to go into effect during the planning horizon of the 2030 General Plan. Because the Yuba-Sutter Regional NCCP/HCP has not been adopted and there is no other natural community conservation plan in effect, there is **no impact**.

Mitigation Measure

No mitigation is required.

IMPACT 4.10-4 **Induce Population Growth.** *Implementation of the 2030 General Plan could induce population growth in unincorporated Yuba County. This impact is considered* ***potentially significant****.*

Implementation of the 2030 General Plan would accommodate an increase in population, housing, and employment within unincorporated Yuba County. Increases in land availability for residential development could directly induce population growth. Additionally, increases in land designated for industrial and commercial uses could indirectly induce population growth by increasing the number of jobs in the county.

The 2030 General Plan development capacity is based on the 1996 General Plan, amendments to that Plan, approved projects, as well as the community's consensus for future land use and community design. The County approved a large amount of development under the 1996 General Plan and other plans and projects, such as the East Linda Specific Plan, Plumas Lake Specific Plan, and Spring Valley Specific Plan. These estimates for development, which has not yet occurred, are reflected in the buildout estimates for the 2030 General Plan.

SACOG estimated in 2007 that Yuba County could have as many as 139,484 people in 2035, including both incorporated and unincorporated areas of the County (SACOG 2007). As indicated in Table 4.1-8 the housing, population, and employment projections under the 2030 General Plan, if fully built out, would be significantly larger than the SACOG projections for 2035. The additional population estimated for the 2030 General Plan includes only unincorporated areas, as the County does not have jurisdiction over growth in the cities. It is possible that providing for this level of development could be growth inducing. The large amount of jobs growth accommodated under the 2030 General Plan could, if realized, induce population growth near future job centers not included under the 2030 General Plan. However, buildout estimates in general plans are different than population forecasts. Buildout estimates describe the level of development if each area with a land use designation were fully built, whereas population and employment forecasts attempt to predict how much of this development will actually occur.

Table 4.10-8
Existing and Future Population

Housing, Population, and Jobs	On-the-Ground (2008)	Approximate New Land Use under Previous (1996) General Plan	New Land Use under 2030 General Plan at Full Buildout	Total Land Use, Existing + 2030 General Plan Land Use Change at Full Buildout
Single-Family Units	23,833	31,900	25,000 – 34,000	48,900 – 58,000
Multi-Family Units	4,713	2,700	4,700 – 6,400	9,400 – 11,100
Population	69,151	88,600	74,000 – 100,000	143,100 – 169,200
Jobs	18,679	43,600	50,000 – 67,000	68,700 – 78,700

Source: AECOM and SACOG 2010.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan contains numerous policies and actions to manage growth in the unincorporated county in an orderly manner. In addition, the Community Development Element includes the following policy:

- **Policy CD13.2:** The County will not induce growth by supporting the provision of services or infrastructure in areas that are not planned for development.

Conclusion

The purpose of the 2030 General Plan is to provide a framework for development and conservation in unincorporated Yuba County. Although the 2030 General Plan contains numerous policies and actions to provide an orderly growth framework for unincorporated Yuba County, the 2030 General Plan could accommodate a substantially greater population and employment growth than is included in existing forecasts and plans. The level of population and job growth that could potentially be accommodated under the 2030 General Plan is greater than that accommodated under the existing 1996 General Plan. The level of job growth included in the 2030 General Plan is substantially more than current forecasts would indicate. If this level of job growth is realized, it is possible that population growth near future job centers could be induced, beyond that which is included under land use assumptions used for analysis under this EIR. Implementation of the 2030 General Plan could be considered growth inducing. This impact is considered **potentially significant**.

Mitigation Measure

No feasible mitigation is available to reduce this impact to a less-than-significant level other than the policies and actions already included in the 2030 General Plan.

The project's purpose is to provide a framework governing future development and conservation in unincorporated Yuba County. In particular, the County is interested in providing for employment development opportunities during this General Plan time horizon to balance job opportunities with recent growth in housing opportunities. This impact would remain **significant and unavoidable**.

IMPACT 4.10-5 **Displacement of Existing Population and Housing.** *The 2030 General Plan provides overarching guidance for development and conservation. The 2030 General Plan does not propose to remove existing housing or displace existing population or housing units. However, it is possible that areas designated for development could involve removal of existing housing. The impact is considered* ***potentially significant****.*

The 2030 General Plan proposes policies and actions that facilitate development opportunities on vacant land, underutilized parcels, and through infill and redevelopment. Should any redevelopment of existing housing units be proposed, California Public Resources Code Section 7260(b), the California Relocation Law, establishes "a uniform policy for the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a public entity." The law would require the redevelopment agency to prepare a relocation plan, provide relocation payments, and identify substitute housing opportunities for any resident that would be displaced by an agency-proposed project.

The 2030 General Plan proposes numerous policies and actions to conserve the existing housing stock. The following is a sampling of 2030 General Plan policies and actions designed to preserve existing housing units and facilitate a variety of additional housing opportunities.

Relevant Policies and Actions of the 2030 General Plan (including 2009 Housing Element)

- **Policy CD2.3:** The County will support reinvestment in Linda and Olivehurst that increases local shopping, job, and housing opportunities.

- **Policy CD4.6:** The County will encourage development of workforce housing around Employment Centers that is ancillary to, and supportive of employment-generating land uses.

- **Policy CD5.3:** Valley residential development in existing and planned Valley Neighborhoods should provide for the full range of housing types and densities.

- **Policy CD6.5:** Neighborhood Centers should provide for a pedestrian-friendly mix of uses and a range of housing types to meet the needs of the County's diverse households.

- **Policy CD7.3:** The County will encourage – through entitlement, streamlining, flexibility in development standards, fee structures, and other incentives – infill development in vacant or underutilized sections of Mixed-Use Corridors.

- **Policy CD10.6:** The County will encourage residential development that is priced, sized, and located to serve the needs of local employers and workers.

- **Policy H-1.1:** Ensure that sufficient sites are appropriately zoned, with access to public services and facilities, between 2008 and 2013, and beyond, to accommodate the County's share of regional housing needs.

- **Policy H-1.2:** Provide for a variety of housing types to meet the housing needs of special population groups.

- **Policy H-3.1:** Reduce regulatory barriers to the development of housing and promote alternative housing types.

- **Policy H-4.2:** The County will pursue a combination of public and private actions to rehabilitate and maintain the existing stock of housing.

- **Policy H-4.3:** The County will require the abatement or demolition of substandard housing that is not economically feasible to repair and which represents a health and safety threat and will seek to mitigate the displacement of low-income household resulting from demolition.

- **Implementation Program H-4.3.1: Relocation Assistance**. Yuba County will require owners of rental dwelling units that are vacated for violation of housing and building codes to pay relocation expenses for displaced low- income residents and to provide the displace with the right of first refusal to return to the units upon its repair. If the owner refuses to pay for the relocation of low-income occupants, the County will use available funding to pay for relocation expenses and recover the relocation cost from the owner by placing a lien on the owner's property. If the property owner is unable to pay relocation expenses, the County may elect to waive the repayment requirement.

    - Responsibility: Community Development and Services Agency
    - Timeframe: Current and ongoing.
    - Funding: Permit fees; property owner contribution to tenant relocation, HOME.
    - Objective: To reduce displacement resulting from the County's code enforcement activities.

- **Policy H-5.1:** The County will seek to preserve the affordability of government-subsidized housing and other housing affordable to low- income households.

- **Implementation Program H-5.1.1:** Preservation of Multifamily Rental Housing. In the event that the County receives requests in the future for the conversion of rental apartments to condominium ownership, the County will require one year advanced notice and the payment by the owner of relocation expenses of low-income households residing in the development at the time of initial notice. The County will deny any conversion requests unless the notice and procedural requirements of state law are met. In the event 50% or more of the units have rents that are affordable to low-income households, the County will require that the right of first

refusal be given to a private, non-profit, or public agency that will maintain the development as rental housing for low- income households. Additionally, the County will consider other methods of addressing potential conversion of properties through methods like a condo-conversion ordinance.

- Responsibility: Community Development and Services Agency
- Timeframe: Current and ongoing.
- Funding: Permit fees.
- Objective: To reduce displacement of low-income tenants during condominium conversion.

- **Implementation Program H-5.1.2: Preservation of Mobile home Parks**. The County will require owners of mobile home parks requesting conversions to other uses to provide residents with at least one-year advanced notice of the owner's intent to close the park and provide relocation assistance to low income residents and their mobile homes. For parks that appear feasible to rehabilitate and/or maintain for residential use, the County will meet with the owner to determine if the County can assist in accessing state or federal funding for park improvements. If residents have expressed an interest in purchasing their mobile home parks for resident ownership, the County will provide assistance in locating a nonprofit organization that can assist in conversion to resident ownership and applying for state or federal funding to purchase the park.

  - Responsibility: Community Development and Services Agency
  - Timeframe: Current and ongoing; provide owner or resident assistance upon request.
  - Funding: Permit fees; State Mobile Home Park Assistance Program; USDA Rural Housing Services.
  - Objective: To preserve existing mobile home parks and reduce displacement of park residents.

- **Implementation Program H-5.1.3: Preservation of "At-Risk" Rental Units.** The County will seek to preserve 90 units of subsidized rental housing that are at-risk of being converted to market-rate housing within the next ten years. Yuba County will provide technical assistance and coordinate state and federal financial assistance for lower-income households whose rental units are at-risk of being converted. The County will contact owners of at-risk housing units and set up an appointment to review the different methods available to preserve the affordability of at-risk units. If the owner states their intention to convert the at-risk property, the County will:

  - Require that the owner notify tenants according to the requirements of state and federal law of the conversion request. The minimum advance notice period will be one- year, to be followed by a subsequent six- month and ninety- day notice. Notice will also be sent to the state department of housing and community development. At the time a notice is issued, the County will contact HCD to determine the status of state and/or federal programs that may be used to preserve the affordability of at-risk units.
  - Distribute to tenants a list of comparable replacement rental units by number of bedrooms and cost that are available with no waiting list at approximately the same cost as the rental unit to be converted.
  - Provide the owner of the at risk development with a list of eligible purchasers prepared by the California Department of Housing and Community Development that would continue to operate the rental development at affordable rents for low-income households. Contact nonprofit housing corporations to determine their interest in operating at-risk rental units as affordable housing. The determination of which non-profit corporations to contact would depend on their technical expertise and financial capacity.

- Review plans submitted by owners who desire to convert their projects to ensure that they are consistent with the County's requirements and state and federal laws.

- Assist any interested purchasers who will maintain the affordability of the development in applying for a loan to modernize their rental units.

- Responsibility: Community Development and Services Agency, Housing Authority.

- Timeframe: Meet with owners at least one and one-half years before potential conversion.

- Funding: California Housing Finance Agency Help Program; Multifamily Housing Program; HOME, California Housing Finance Agency (preservation acquisition financing); Mortgage insurance for purchase/refinance (HUD).

- Objective: Preserve 90 at-risk rental housing units.

Conclusion

The 2030 General Plan does not propose to displace substantial numbers of housing or people necessitating the construction of replacement housing elsewhere. The 2030 General Plan does not propose converting established residential areas to a nonresidential land use or redeveloping existing residential areas with new residences by removing existing dwelling units. The 2030 General Plan proposes policies and actions that facilitate additional residential development opportunities and a variety of housing types on undeveloped land, vacant land, underutilized parcels, and through infill and redevelopment. Compliance with 2030 General Plan policies and programs and the California Relocation Law would ensure that new development pursuant to 2030 General Plan would not displace substantial numbers of people. However, it is possible that some housing could be removed during buildout. The impact is considered **potentially significant**.

Mitigation Measure

The General Plan is intended to guide long-term land use change. The General Plan includes all feasible mitigation as policies and implementation. There is no additional feasible mitigation. The impact is **significant and unavoidable**.

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4.11 NOISE AND VIBRATION

This section includes a description of ambient noise conditions, a summary of applicable regulations related to noise and vibration, and an analysis of the potential impacts resulting from the implementation of the 2030 General Plan. Mitigation measures are recommended, as necessary, to reduce significant noise and vibration impacts.

4.11.1 SETTING

Various private and public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and other adverse physiological and social effects associated with noise and vibration. The following federal, state, and local regulations discussed below are applicable to the proposed project regarding noise and vibration standards.

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

The U.S. Environmental Protection Agency's (EPA's) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, noise control guidelines and regulations contained in EPA rulings in prior years remain in place by designated federal agencies, allowing more individualized control for specific issues by designated federal, state, and local government agencies.

Standards have also been established to address the potential for groundborne vibration to cause structural damage to buildings. These standards were developed by the Committee of Hearing, Bio Acoustics, and Bio Mechanics (CHABA) at the request of EPA (FTA 2006). For fragile structures, CHABA recommends a maximum limit of 0.25 inch per second (in/sec) peak particle velocity (PPV) (Caltrans 2004:17).

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation.

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, establishes building standards applicable to all occupancies throughout the state. The code provides acoustical regulations for both exterior-to-interior sound insulation, as well as sound and impact isolation between adjacent spaces of various occupied units. Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dB L_{dn} see Section 4.11.2.1, "Acoustic Fundamentals" for a description of dBA and L_{dn} is described in Section 4.11.2.1, "Noise Descriptors"), with windows closed, in any habitable room for general residential uses.

Though not adopted by law, the *State of California General Plan Guidelines 2003*, published by the California Governor's Office of Planning and Research (OPR), provides guidance for the compatibility of projects within areas of specific noise exposure. Table 4.11-1 presents acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. Land Use

Noise Compatibility recommendations are presented in terms of L_{dn} and CNEL. Please refer to Section 4.11.2.1, "Noise Descriptors," for a description of these and other methods of describing noise conditions.

Table 4.11-1
Land Use Noise Compatibility Guidelines

Land Use Category	Community Noise Exposure (CNEL/L_{dn}, dBA)			
	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential-Low Density Single Family, Duplex, Mobile Home	<60	55–70	70–75	75+
Residential-Multiple Family	<65	60–70	70–75	75+
Transient Lodging, Motel, Hotel	<65	60–70	70–80	80+
School, Library, Church, Hospital, Nursing Home	<70	60–70	70–80	80+
Auditorium, Concert Hall, Amphitheater		<70	65+	
Sports Arenas, Outdoor Spectator Sports		<75	70+	
Playground, Neighborhood Park	<70		67.5–75	72.5+
Golf Courses, Stable, Water Recreation, Cemetery	<75		70–80	80+
Office Building, Business Commercial and Professional	<70	67.5–77.5	75+	
Industrial, Manufacturing, Utilities, Agriculture	<75	70–80	75+	

Notes: CNEL = Community Noise Equivalent Level; dBA = A-weighted decibels; L_{dn} = day-night average noise level.

[1] Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

[2] New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

[3] New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.

[4] New construction or development should generally not be undertaken.

Source: OPR 2003:244-254

California Department of Transportation

For the protection of fragile, historic, and residential structures, Caltrans recommends for highway construction analysis a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2002). These standards are more stringent than the recommended guidelines established by the Federal Transit Authority (FTA), presented above.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES.

Airport Land Use Compatibility Plans

The Sacramento Area Council of Governments (SACOG) serves as the Airport Land Use Commission (ALUC) for Yuba County. SACOG is responsible for developing and maintaining comprehensive land use plans (CLUPs, also known as Airport Land Use Compatibility Plans or ALUCPs) to protect public health and safety and ensure compatible land uses in the areas around an airport. The ALUC also works with cities and counties to ensure consistency between local land-use plans and comprehensive land use plans for areas surrounding an airport.

Airport comprehensive land use plans were adopted by SACOG for the Yuba County Airport in 1994, the Brownsville Airport CLUP in 1992 (amended), and the Beale Air Force Base in 1992 (amended). These documents establish various land use compatibility criteria for new developments affected by aircraft noise. The

supporting policies within the Beale AFB and Yuba County Airport CLUPs are identical with respect to noise, with each stating development proposed between the 60 and 65 dBA CNEL noise contour should be evaluated for impacts of aircraft noise and consider requiring noise reduction measures, aviation noise easements, and buyer-renter notification (Policies 2b and 2c in both Beale AFB and Yuba County Airport CLUPs). The Brownsville Airport CLUP recommends that future residential development located within the 65 dBA CNEL noise contour, be required that all habitable rooms be designed to limit interior noise to 45 dBA CNEL with windows closed (Policy 2b). These CLUPs also contain noise level criteria for residential; manufacturing; transportation, communications, and utilities; wholesale trade; retail trade; business and personal services; shopping districts; public and quasi-public services; and recreation land uses. These plans are incorporated into this document by reference.

The 2005 This Air Installation Compatible Use Zone (AICUZ) Study for Beale AFB updated the original AICUZ study dated May 1982. The update addresses changes in operations at Beale AFB. The AICUZ includes an evaluation of aircraft noise and accident potential to aid in local planning to protect the public safety and health and preserve the operational capabilities of Beale AFB. According to the 2005 AICUZ, 60 dB CNEL contours associated with AFB operations are mostly within the AFB, but do extend just outside the AFB to the east and also extent north of the AFB into an area along the Yuba River with mining activity.

Yuba County Code

The County Code Chapter 8.20, Noise Regulations, includes regulations and standards aimed at controlling unnecessary, excessive, and annoying noise and vibration in the unincorporated County. In addition, a goal of the noise regulations is to maintain quiet in those areas which exhibit low noise levels and to implement programs aimed at reducing noise in those areas within the County where noise levels are above acceptable limits.

The Code provides regulations that establish the required ambient noise levels and maximum allowable noise levels based on the land use and time of the day. The Code also places restrictions on specific activities (e.g., construction, musical instruments, amplified sound). Lastly, the Code identifies exemptions for specific activities or special events to the noise regulations. The following sections of the Noise Regulations are applicable to the project.

8.20.140 Ambient Base Noise Level

Where the ambient noise level is less than designated in this section, the respective maximum noise level permitted in this section shall govern.

Table 4.11-2
Yuba County Code 8.20.140

Zone Permitted	Time	Sound Level A – in decibels Ambient Level	Maximum Noise Level
Single family Residential	10 pm to 7 am	45	55
	7 pm to 10 pm	50	60
	7 am to 7 pm	55	65
Multi-family Residential	10 pm to 7 am	50	60
	7 pm to 10 pm	55	65
Commercial - BP	10 pm to 7 am	55	65
Commercial	7 pm to 10 pm	60	70
M1	Anytime	65	75
M2	Anytime	70	80

8.20.240 Disturbing Schools, Hospitals and Churches

It shall be unlawful for any person to create any noise on any street, sidewalk, or public place adjacent to any school, institution of learning, or church while the same is in use or adjacent to any hospital, which noise unreasonably interferes with the workings of such institution or which disturbs or unduly annoys patients in any hospital, provided conspicuous signs are displayed in such street, sidewalk or public place indicating the presence of a school, church, or hospital.

8.20.260 Machinery, Equipment, Fans and Air Conditioning

It shall be unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property plane of any property to exceed the ambient base noise level by more than five (5) decibels.

8.20.310 Construction of Buildings and Projects

It shall be unlawful for any person within a residential zone, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the following day in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless a permit has been duly obtained beforehand from the Director of the Planning and Building Services Department as set forth in Section 8.20.710 of this chapter. No permit shall be required to perform emergency work as defined in article 1 of this chapter.

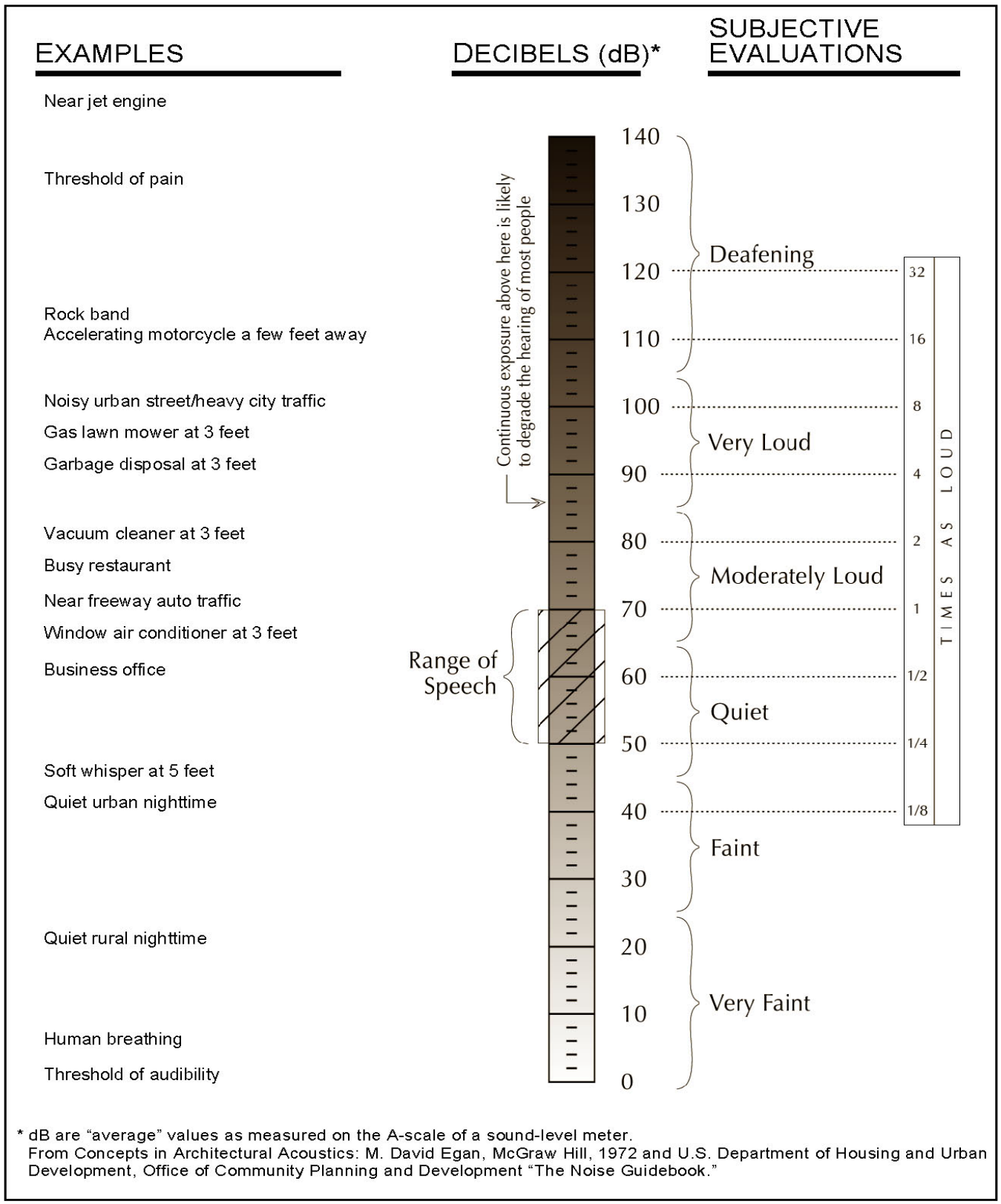
4.11.2 ENVIRONMENTAL SETTING

ACOUSTIC FUNDAMENTALS

Acoustics is the scientific study that evaluates perception, propagation, absorption, and reflection of sound waves. Sound is a mechanical form of radiant energy, transmitted by a pressure wave through a solid, liquid, or gaseous medium. Sound that is loud, disagreeable, unexpected, or unwanted is generally defined as noise; consequently, the perception of sound is subjective in nature, and can vary substantially from person to person. Common sources of environmental noise and noise levels are presented in Exhibit 4.11-1.

A sound wave is initiated in a medium by a vibrating object (e.g., vocal chords, the string of a guitar, the diaphragm of a radio speaker). The wave consists of minute variations in pressure, oscillating above and below the ambient atmospheric pressure. The number of pressure variation cycles occurring per second is referred to as the frequency of the sound wave and is expressed in hertz (Hz), which is equivalent to one complete cycle per second.

Directly measuring sound pressure fluctuations would require the use of a very large and cumbersome range of numbers. To avoid this and have a more useable numbering system, the decibel (dB) scale was introduced. A sound level expressed in decibels is the logarithmic ratio of two like pressure quantities, with one pressure quantity being a reference sound pressure. For sound pressure in air the standard reference quantity is generally considered to be 20 micropascals, which directly corresponds to the threshold of human hearing. The use of the decibel is a convenient way to handle the million-fold range of sound pressures to which the human ear is sensitive. A decibel is logarithmic; it does not follow normal algebraic methods and cannot be directly added. For example, a 65 dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). A sound level increase of 10 dB corresponds to 10 times the acoustical energy, and an increase of 20 dB equates to a 100 fold increase in acoustical energy.



Source: Data compiled by AECOM in 2010

Common Noise Sources and Levels **Exhibit 4.11-1**

The loudness of sound perceived by the human ear depends primarily on the overall sound pressure level and frequency content of the sound source. The human ear is not equally sensitive to loudness at all frequencies in the audible spectrum. To better relate overall sound levels and loudness to human perception, frequency-dependent weighting networks were developed. The standard weighting networks are identified as A through E. There is a strong correlation between the way humans perceive sound and A-weighted sound levels (dBA). For this reason the dBA can be used to predict community response to noise from the environment, including noise from transportation and stationary sources.

Noise can be generated by a number of sources, including mobile sources (transportation noise sources) such as automobiles, trucks, and airplanes and stationary sources (non-transportation noise sources) such as construction sites, machinery, and commercial and industrial operations. As acoustic energy spreads through the atmosphere from the source to the receiver, noise levels attenuate (decrease) depending on ground absorption characteristics, atmospheric conditions, and the presence of physical barriers (walls, building façades, berms). Noise generated from mobile sources generally attenuate at a rate of 3 dBA (typical for hard surfaces, such as asphalt) to 4.5 dBA (typical for soft surfaces, such as grasslands) per doubling of distance, depending on the intervening ground type. Stationary noise sources spread with more spherical dispersion patterns that attenuate at a rate of 6 dBA (hard surfaces) to 7.5 dBA (soft surfaces) per doubling of distance.

Atmospheric conditions such as wind speed, turbulence, temperature gradients, and humidity may additionally alter the propagation of noise and affect levels at a receiver. Furthermore, the presence of a large object (e.g., barrier, topographic features, and intervening building façades) between the source and the receptor can provide significant attenuation of noise levels at the receiver. The amount of noise level reduction or "shielding" provided by a barrier primarily depends on the size of the barrier, the location of the barrier in relation to the source and receivers, and the frequency spectra of the noise. Natural barriers such as berms, hills, or dense woods, and human-made features such as buildings and walls may be used as noise barriers.

Noise Descriptors

The intensity of environmental noise fluctuates over time, and several different descriptors of time-averaged noise levels are used. The selection of a proper noise descriptor for a specific source depends on the spatial and temporal distribution, duration, and fluctuation of both the noise source and the environment. The noise descriptors most often used to describe environmental noise are defined below.

- *L_{max} (Maximum Noise Level):* The maximum instantaneous noise level during a specific period of time. The L_{max} may also be referred to as the "peak (noise) level."

- *L_x (Statistical Descriptor):* The noise level exceeded X% of a specific period of time. For example, L_{50} is the median noise level, or level exceeded 50% of the time.

- *L_{eq} (Equivalent Noise Level):* The average noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value is calculated, which is then converted back to dBA to determine the L_{eq}. In noise environments determined by major noise events, such as aircraft overflights, the L_{eq} value is heavily influenced by the magnitude and number of single events that produce the high noise levels.

- *L_{dn} (Day-Night Average Noise Level):* The 24-hour L_{eq} with a 10-dBA "penalty" for noise events that occur during the noise-sensitive hours between 10 p.m. and 7 a.m. In other words, 10 dBA is "added" to noise events that occur in the nighttime hours, and this generates a higher reported noise level when determining compliance with noise standards. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.

- *CNEL (Community Noise Equivalent Level):* The CNEL is similar to the L_{dn} described above, but with an additional 5-dBA "penalty" added to noise events that occur during the noise-sensitive hours between 7 p.m.

and 10 p.m., which are typically reserved for relaxation, conversation, reading, and television. When the same 24-hour noise data are used, the reported CNEL is typically approximately 0.5 dBA higher than the L_{dn}.

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 L_{eq} 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 L_{eq} is the foundation of the composite noise descriptors such as L_{dn} and CNEL, as defined above, and shows very good correlation with community response to noise.

Negative Effects of Noise on Humans

Excessive and chronic exposure to elevated noise levels can result in auditory and non-auditory effects on humans. Auditory effects of noise on people are those related to temporary or permanent hearing loss caused by loud noises. Non-auditory effects of exposure to elevated noise levels are those related to behavioral and physiological effects. The non-auditory behavioral effects of noise on humans are associated primarily with the subjective effects of annoyance, nuisance, and dissatisfaction, which lead to interference with activities such as communications, sleep, and learning. The non-auditory physiological health effects of noise on humans have been the subject of considerable research attempting to discover correlations between exposure to elevated noise levels and health problems, such as hypertension and cardiovascular disease. The mass of research infers that noise-related health issues are predominantly the result of behavioral stressors and not a direct noise-induced response. The extent to which noise contributes to non-auditory health effects remains a subject of considerable research, with no definitive conclusions.

The degree to which noise results in annoyance and interference is highly subjective and may be influenced by several non-acoustic factors. The number and effect of these non-acoustic environmental and physical factors vary depending on individual characteristics of the noise environment such as sensitivity, level of activity, location, time of day, and length of exposure. One key aspect in the prediction of human response to new noise environments is the individual level of adaptation to an existing noise environment. The greater the change in the noise levels that are attributed to a new noise source, relative to the environment an individual has become accustomed to, the less tolerable the new noise source will be to the new noise source.

With respect to how humans perceive and react to changes in noise levels, a 1dBA increase is imperceptible, a 3 dBA increase is barely perceptible, a 6 dBA increase is clearly noticeable, and a 10-dBA increase is subjectively perceived as approximately twice as loud (Egan 1988:21). These subjective reactions to changes in noise levels was developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broad-band noise and to changes in levels of a given noise source. It is probably most applicable to noise levels in the range of 50 dBA to 70 dBA, as this is the usual range of voice and interior noise levels. For these reasons, a noise level increase of 3 dBA or more is typically considered substantial in terms of the degradation of the existing noise environment.

Vibration

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery or transient in nature, explosions). Vibration levels can be depicted in terms of amplitude and frequency, relative to displacement, velocity, or acceleration.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (Federal Transit Administration [FTA] 2006:7-1 – 7-8, California

Department of Transportation [Caltrans] 2004: 5-7). PPV and RMS vibration velocity are normally described in inches per second (in/sec).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. The response of the human body to vibration relates well to average vibration amplitude; therefore, vibration impacts on humans are evaluated in terms of RMS vibration velocity. Similar to airborne sound, vibration velocity can be expressed in decibel notation as vibration decibels (VdB). The logarithmic nature of the decibel serves to compress the broad range of numbers required to describe vibration.

Typical outdoor sources of perceptible groundborne vibration include construction equipment, steel-wheeled trains, and traffic on rough roads. Although the effects of vibration may be imperceptible at low levels, effects may result in detectable vibrations and slight damage to nearby structures at moderate and high levels, respectively. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in damage to structural components. The range of vibration that is relevant to this analysis occurs from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings (FTA 2006:8-1 – 8-8).

EXISTING NOISE CONDITIONS IN YUBA COUNTY

Overview

The major noise sources in Yuba County consist of highway traffic and local traffic, commercial and industrial uses, active recreation areas of parks, outdoor play areas of schools, railroad operations, and aircraft overflights. Each of these noise sources is discussed individually below.

Roadways

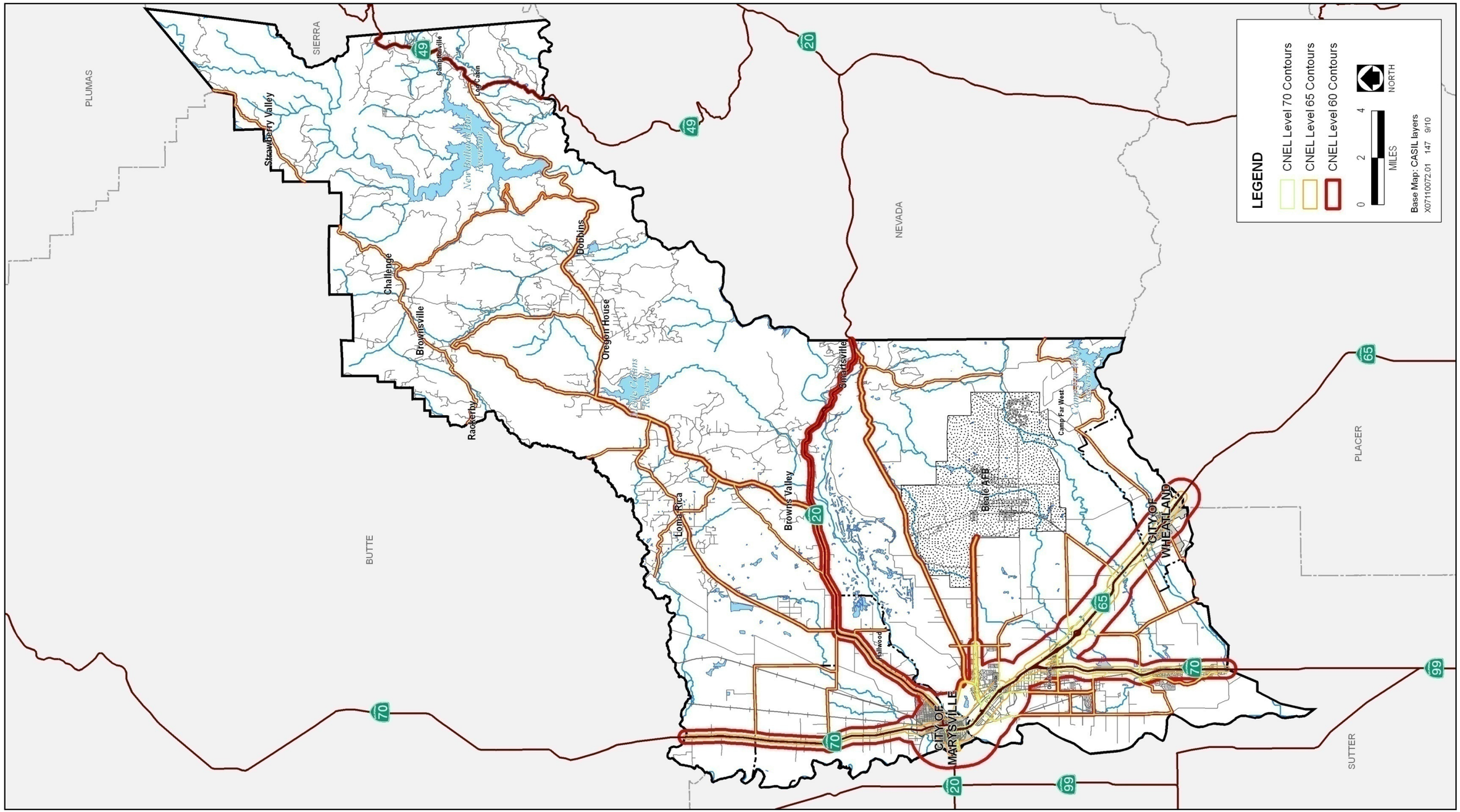
Transportation noise is a significant issue in many areas along State highways and other high volume roadways that may affect allowable land use in such areas. The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) with the California Vehicle Noise (Calveno) Emission Level vehicle noise emission curves was used to predict existing traffic noise levels within Yuba County. The FHWA Model is the traffic noise prediction model currently preferred by FHWA, Caltrans, county, and city governments for assessing traffic noise.

Table 4.11-3 shows existing traffic volumes for the major roadways in Yuba County based on the traffic data provided and Caltrans traffic counts. It also shows modeled noise levels and estimated distances to the 60 dBA, 65 dBA and 70 dBA L_{dn} traffic noise contours. Exhibit 4.11-2 illustrates the 60 dBA, 65 dBA and 70 dBA L_{dn} noise contours for Yuba County. Vehicle speeds vary in Yuba County, and noise modeling accounts for these variations. The contour distances do not account for local topographic shielding, including any walls, berms, or other existing barriers.

Railways

There are two railroad lines that operate in Yuba County. Union Pacific Railroad (UPRR) operates both, the Valley Line and the UPRR/Burlington Northern Santa Fe (BNSF) line.

The Valley Line enters Yuba County from the southeast, from Placer County, traversing the county in a northwestern direction. The UPRR/BNSF line enters Yuba County from the south, from Sutter County, traversing Yuba County in a north-south direction. The two lines are near State Route (SR) 70 and SR 65, and intersect approximately 1 mile north of downtown Marysville.



Source: Yuba County 2007

Existing Traffic Noise Levels **Exhibit 4.11-2**

Table 4.11-3
FHWA-RD-77-108 Highway Traffic Noise Prediction Model Data Inputs and Distances to 60 dBA, 65 dBA, and 70 dBA L_{dn} Contours – Existing Conditions (2007)

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
5th Street (Twin Cities Mem. Bridge)	2nd Street to I Street	33,654	45	71	119	376	1,188
Algodon Road	Feather River Boulevard to SR 70	814	35	52	2	5	16
Arboga Road	Plumas Arboga Road to McGowan Pkwy	3,689	55	63	21	67	211
Arboga Road	McGowan Pkwy to Pasado Road	3,404	55	63	19	61	194
Camp Far West Road	Spenceville Road (South) to Spenceville Road (North)	926	45	55	3	10	33
Dairy Road	Forty Mile Road to SR 65	528	45	53	2	6	19
Ella Avenue	Feather River Boulevard to Arboga Road	890	45	55	3	10	31
Erle Road	Griffith Avenue to Virginia Road	795	45	55	3	9	28
Erle Road	Lindhurst Avenue to Griffith Avenue	2,885	45	60	10	32	102
Feather River Boulevard	Algodon Road to SR 70	458	55	54	3	8	26
Feather River Boulevard	Grand Avenue to SR 70	5,006	55	65	29	90	286
Feather River Boulevard	Plumas Arboga Road to Grand Avenue	2,567	55	62	15	46	146
Feather River Boulevard	Algodon Road to Plumas Avenue	826	55	57	5	15	47
Forty Mile Road	Plumas Arboga Road to SR 65	2,194	55	61	13	40	125
Forty Mile Road	Plumas Arboga Road to Wheatland Road	1,813	55	60	10	33	103
Frenchtown Road	Marysville Road to Willow Glen Road	1,160	45	56	4	13	41
Fruitland Road	Loma Rica Road to Marysville Road	1,031	45	56	4	12	36
Fruitland Road	Huncut Road to Loma Rica Road	346	45	51	1	4	12
Griffith Avenue	Erle Road to Hammonton-Smartville Road	2,194	35	56	4	14	44
Hallwood Boulevard	SR 20 to South of Walnut Avenue	988	25	51	1	4	12
Hammonton-Smartville Road	Simpson Lane to N. Beale Road	11,502	55	68	66	208	656
Hammonton-Smartville Road	Simpson Lane to Griffith Avenue	5,876	55	65	34	106	335
Hammonton-Smartville Road	Griffith Avenue to North Erle Road	4,613	55	64	26	83	263

Table 4.11-3
FHWA-RD-77-108 Highway Traffic Noise Prediction Model Data Inputs and Distances to 60 dBA, 65 dBA, and 70 dBA L_{dn} Contours – Existing Conditions (2007)

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
Hammonton-Smartville Road	North Erle Road to Smartsville Road	5,736	55	65	33	104	327
La Porte Road	Willow Glen Road to Butte County Line	389	45	51	1	4	14
La Porte Road	Butte County Line to Plumas County Line	324	45	51	1	4	11
Lindhurst Avenue	Erle Road to Olivehurst Avenue	9,041	55	67	52	163	516
Lindhurst Avenue	Erle Road to N. Beale Road	9,895	55	68	56	179	565
Loma Rica Road	SR 20 to Fruitland Road	2,759	55	62	16	50	157
Loma Rica Road	Fruitland Road to Marysville Road	1,248	55	59	7	23	71
Los Verjeles Road	Butte County Line to Loma Rica Road	727	45	54	3	8	26
Marysville Road	SR 20 to Fruitland Road	5,520	55	65	32	100	315
Marysville Road	Fruitland Road to Willow Glen Road	4,999	55	65	29	90	285
Marysville Road	Willow Glen Road to Oregon Hill Road	2,862	55	62	16	52	163
Marysville Road	Oregon Hill Road to SR 49	663	55	55	3	9	30
Mathews Lane	Ramirez Street to Woodruff	1,468	35	58	7	21	66
McGowan Parkway	Arboga Road to SR 70	6,496	45	65	29	93	294
McGowan Parkway	SR 70 to SR 65	12,076	45	67	55	173	547
N. Beale Road	Griffith Avenue to Lindhurst Avenue	25,917	55	71	117	371	1,173
N. Beale Road	Griffith Avenue to Beale Road	7,343	55	65	33	105	332
Olivehurst Avenue	McGowan Pkwy to SR 70	2,929	45	61	13	42	133
Oregon Hill Road	La Porte Road to Marysville Road	68	45	45	0	1	3
Ostrom Road	Rancho Road to South Beale Road	1,100	35	57	5	16	50
Plumas Arboga Road	Old Marysville Road to Forty Mile Road	1,704	35	59	8	24	77
Plumas Arboga Road	Feather River Boulevard to Arboga Road	2,233	35	60	10	32	101
Plumas Arboga Road	Arboga Road to SR 70	4,122	35	63	19	59	187

Table 4.11-3
FHWA-RD-77-108 Highway Traffic Noise Prediction Model Data Inputs and Distances to 60 dBA, 65 dBA, and 70 dBA L_{dn} Contours – Existing Conditions (2007)

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
Ramirez Road	SR 70 to Mathews Lane	1,118	25	57	5	16	51
Rancho Road	McGowan Pkwy to Ostrom Road	1,550	55	59	7	22	70
Rancho Road	Ostrom Road to SR 65	227	55	50	1	3	10
River Oaks Boulevard	Algodon Road to Kinsington Drive	3,763	45	62	17	54	170
River Oaks Boulevard	Kinsington Drive to Feather River Boulevard	4,939	45	64	22	71	224
S. Beale Road	SR 65 to Ostrom Road	2,145	35	60	10	31	97
Simpson Lane	Ramirez Street to Hammonton-Smartville Road	11,629	55	67	53	167	527
Smartville Road	Hammonton-Smartville to SR 20	3,294	55	62	15	47	149
Spenceville Road	Front Street/Olive Street to Jasper Lane	2,879	35	61	13	41	130
Spenceville Road	Jasper Lane to Camp Far West Road	2,402	35	60	11	34	109
Spring Valley Road	SR 20 to Marysville Road	507	35	50	1	3	10
SR 20	I Street to E Street	38,664	55	74	267	844	2,668
SR 20	Marysville Road to Smartsville Road	6,000	55	67	48	152	480
SR 20	22nd Street to Woodruff Lane	13,076	55	71	113	359	1,135
SR 20	Ramirez Street to 22nd Street	20,859	55	73	181	572	1,810
SR 20/Feather River Bridge	Sutter Street to I Street	38,688	55	74	267	844	2,670
SR 49	Nevada County Line to Yuba County Line	1,748	50	60	9	29	92
SR 65	S Beale Road to Forty Mile Road	20,704	65	76	405	1,282	4,054
SR 65	Forty Mile Road to SR 70	19,785	65	76	387	1,225	3,874
SR 65	Main Street to Yuba County Line	20,826	65	76	408	1,290	4,078
SR 65	Main Street to First Street	18,477	65	76	362	1,144	3,618
SR 65	Second Street to South Beale Road	19,870	65	76	389	1,230	3,891
SR 70	SR 65 to Erle Road	47,816	65	76	388	1,226	3,876

Table 4.11-3
FHWA-RD-77-108 Highway Traffic Noise Prediction Model Data Inputs and Distances to 60 dBA, 65 dBA, and 70 dBA L_{dn} Contours – Existing Conditions (2007)

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
SR 70	Erle Road to 1st Street	62,918	65	76	397	1,255	3,969
SR 70	Feather River Boulevard to Yuba/Sutter Line	18,748	65	71	118	374	1,183
SR 70	SR 65 to Algodon Road	19,940	65	71	129	409	1,294
SR 70	Algodon Road to Feather River Boulevard	15,362	65	71	128	406	1,283
SR 70	Laurellen Road to Woodruff Lane	13,576	65	71	113	359	1,134
SR 70	Woodruff Lane to Yuba/Butte County Line	10,703	65	70	89	283	894
SR 70	1st Street to 10th Street	62,918	65	77	526	1,662	5,255
SR 70	12th Street to Laurellen Road	21,346	65	73	178	564	1,783
SR20 / Browns Road	Loma Rica Road to Marysville Road	10,350	55	68	69	217	687
Waldo Road/ Smartville Road	Spenceville Road to Hammonton-Smartville Road	613	45	54	3	9	28
Wheatland Road	Forty Mile Road to Olive Street	1,481	35	58	7	21	67
Willow Glen Road	Marysville Road to Frenchtown Road	1,525	55	58	7	22	69
Woodruff Lane	Matthews Lane to SR 20	1,237	35	58	6	18	56
Woodruff Lane	SR 70 to Mathews Lane	570	35	54	3	8	26

Notes: FHWA-RD-77-108 = Federal Highway Administration Highway Traffic Noise Prediction Model; dB = decibel; CNEL = community noise equivalent level; dBA = A-weighted decibel; ADT = average daily trips; SR = state route.
Medium (2 axles) and heavy trucks (3+ axles) produce significantly more noise than passenger vehicles so their percentages are taken into account with heavier weighting when computing traffic noise levels
Source: Modeling conducted by AECOM 2007

The Valley Line exits Yuba County to the west as it crosses the Feather River and the UPRR/BNSF line exits Yuba County to the north. The UPRR Valley Line operates approximately 19 daily train trips through Yuba County, which pass near Wheatland, Linda, and Olivehurst. The UPRR/BNSF rail line operates approximately 48 daily train trips through Yuba County, which pass near Wheatland, Linda, and Olivehurst (Lund, pers. comm., 2007).

Single-event train passbys were measured at 80 feet from the UPRR/BNSF track centerline.[1] Table 4.11-4 shows the distances to the 55 db L_{dn} noise contour from the railroad lines.

Table 4.11-4
Estimated Daily Operations and Distances to Railroad Noise Contours Yuba County, CA

Railroad Line	Daily Operations	L_{dn} at 100 feet	Distance to 55 dBA L_{dn} Contour (Modeled)
Valley Line – UPRR	19	74.1	1,890 ft
UPRR/BNSF	48	78.3	3,601 ft

Source: AECOM 2007.

Stationary Sources

Noise is a result of many processes and activities, even when the best available noise control technology is applied. Noise exposure within industrial facilities is controlled by federal and state employee health and safety regulations (i.e., the Mine Safety and Health Administration and the Occupational Safety and Health Administration). Exterior noise levels are judged against locally adopted standards. Commercial, recreational, and public service facility activities can also produce noise that affects adjacent noise sensitive land uses.

From a land use planning perspective, there are typically two basic goals relative to noise:

(1) preventing the introduction of new uses that will produce excessive noise in noise-sensitive areas, and
(2) preventing encroachment of noise-sensitive uses on existing facilities that produce excessive noise.

The first goal may be achieved by applying noise performance standards to proposed new uses that produce noise. The second goal may be achieved by requiring new noise-sensitive land uses to ensure compliance with noise performance standards when proposing to locate near existing facilities that produce noise.

Descriptions of existing fixed, or stationary, noise sources in Yuba County are provided below. The descriptions below are generalized. Noise levels are intended to be representative of typical operations. Site specific noise analyses should be performed as projects are proposed.

Quarries and Mining Operations

Yuba County has a large number of quarry and mining operations, the majority of which are located along the Yuba River. Noise measurements were conducted at several, but not all operations in the County. The results of these measurements are summarized in Table 4.11-5.

[1] To determine the L_{dn} value associated with the railroad operations, the following formula was used: $L_{dn} = SEL + 10 \log N_{eq} - 49.4$ dB, where: SEL is the mean measured SEL of the train events (105 dB at a distance of 80 feet), N_{eq} is the sum of the daytime (7 a.m. to 10 p.m.) train events plus 10 times the number of nighttime (10 p.m. to 7 a.m.) train events, and 49.4 is 10 times the logarithm of the number of seconds per day. The mean SEL for railroad operations (105 dBA) was used with the number of daily train operations to model the approximate distances to the 55 dB L_{dn} contours.

Table 4.11-5 Summary of Stationary Source Noise Survey				
Facility	Location[1]	Type	L_{eq} (dBA) at 100 Feet	55 dBA L_{eq} Contour[2] (ft)
Nordic Industries	ST-1	Quarry	87.3	4,124
Silica Resources Industries	ST-2	Quarry	78.5	1,887
Silica Resources Industries	ST-3	Plant	75.0	1,053
Teichert Aggregates – Hallwood	ST-4	Quarry	81.6	2,148
Teichert Aggregates – Marysville	ST-5	Quarry	83.8	2,761
Yuba River Moulding & Millwork, Inc.	ST-6	Wood working	76.6	1,197
Homewood Truss	ST-7	Wood working	69.7	543
Sierra Cedar Products	ST-8	Wood working	73.1	801

Notes: Notes: dBA = A-weighted decibel; L_{eq} = energy mean (average) noise level.
[1] Indicates the location on Exhibit N-5 of noise measurements conducted in the field.
[2] Contour distances do not take into account excess ground attenuation or intervening topography. (General Plan Background Report: Noise)
Source: EDAW (now AECOM) 2007a

Quarry sites require an extensive conveyor system, crushers, screeners, front loaders, bulldozers, draglines, water trucks, haul trucks, hot plants, ready-mix concrete plants, and other large pieces of equipment that generate elevated noise levels. Additionally, many quarries run during more noise-sensitive night and evening hours to save on electricity costs. The following is a brief description of quarries visited during the County noise survey.

Nordic Industries – Parks Bar Quarry, Smartville

Nordic Industries is located along SR 20 northwest of Smartville and adjacent to the Yuba River. Hours of operation are 7 a.m. to 3 p.m., year round. Drilling and blasting does occur at this site, however these activities are conducted during winter months only. Currently, the pit area (majority of noise producing equipment is operated in this area) is shielded by pit walls and stockpiles.

A short-term noise level measurement of overall mining operations was conducted on site at 180 feet and measured 82.2 dBA L_{eq}.

Silica Resource Industries

Silica Resource Industries operates two aggregate facilities in Yuba County. The mining operation is located at 6222 Highway 20, while the plant is located at 4553 Hammonton Road. The mining operation consists of two front loaders filling screeners with aggregate material removed from the pit. The plant operates from 6 a.m. to 3 p.m., Monday through Friday, sorting and bagging the material excavated from the mining pit.

Measurements of short-term noise levels were conducted at both locations. The overall mining operation measured 76.5 dBA L_{eq} at a distance of 126 feet and the overall plant operation measured 74.6 dBA L_{eq} at a distance of 105 feet.

Teichert Aggregates

Teichert Aggregates operates two facilities in Yuba County. The Hallwood facility is located at 3331 Walnut Avenue and presently operates from 5 a.m. to 4 p.m., Monday through Friday. A hot plant manufactures asphalt on-site along with several screeners and front loaders.

The overall mining operation measured 72.1 dBA L_{eq} at a distance of 300 feet and the hot plant measured 83.7 dBA L_{eq} at a distance of 68 feet.

The Marysville facility is located at 4249 Hammonton-Smartville Road and operates from 5 a.m. to 1 p.m., Monday through Friday. The facility can produce ready-mix concrete; however, it is not doing so presently.

The overall mining operation measured 80.3 dBA L_{eq} at a distance of 150 feet.

Yuba River Moulding & Millwork, Inc.

Yuba River Moulding & Millwork, Inc., is located at 3757 Feather River Boulevard, west of Olivehurst and Linda. The hours of operation are typically Monday through Friday, 8:00 a.m. to 4:30 p.m. and 4:30 p.m. to 3:30 a.m. for the swing shift. Yuba River Moulding & Millwork, Inc., sometimes has graveyard shifts, work on Saturdays, and a continuous 24 hours a day, 7 days a week schedule to meet market demand.

Molders, sanders, and planners are operated in on-site structures. The facility also operates big rigs, fork lifts, and chip bins for waste product removal on-site.

A measurement of short-term noise levels was conducted on-site to reflect overall noise levels attributable to Yuba River Moulding & Millwork, Inc. The noise measurement was conducted at distance of 80 feet and measured 78.5 dBA L_{eq}.

Homewood Truss

Homewood Truss is located at 5033 Feather River Boulevard, west of Olivehurst and Linda. The hours of operation are typically 5:00 a.m. to 12:00 a.m., Monday through Friday, which is split into two daily shifts. The facility may operate 24 hours a day, 7 days a week to meet market demand. The facility manufactures trusses on-site using saws, nail guns, hand nails, forklifts, and heavy trucks during the process.

A measurement of short-term noise levels was conducted on-site to reflect overall noise levels attributable to Homewood Truss. The noise measurement was conducted at a distance of 100 feet and measured 69.7 dBA L_{eq}. It should be noted that the saws were not in operation during the noise measurement.

Sierra Cedar Products

Sierra Cedar Products is located at 1401 Melody Road, north of the Yuba County Airport. The hours of operation are typically 5:00 a.m. to 2:30 a.m., which is split into two daily shifts. The facility manufactures wood products for fencing, posts, and other cedar uses on-site. The on-site equipment consists of front-end loaders, a heal boom, water trucks, saws, and a mill.

A measurement of short-term noise levels was conducted on-site to reflect overall noise levels attributable to Homewood Truss. The noise measurement was conducted at distance of 50 feet from the fencepost plant and measured 79.1 dBA L_{eq}.

Marysville Raceway Park

Marysville Raceway Park is located at 1468 Simpson Lane, north of Linda. Sprint, wingless sprint, stock cars, and extreme bombers use the track for weekend races. Noise level data have not been collected for the racetrack. However, file data for the race track at the Placer County Fairgrounds in the City of Roseville indicate a worst-case hourly noise level of 66 dBA L_{eq} at a distance of 500 feet. File data for the Nevada County fairgrounds race track indicate that maximum noise levels range between 88 dBA and 100 dBA at a distance of 100 feet (Yuba County 1994: 14).

Sleep Train Amphitheater

Sleep Train Amphitheater is located at 2677 Forty Mile Road, approximately 4 miles south of the Olivehurst. This is an open-air venue that seats up to 18,500 people. The seating is separated into 10,500 lawn seats and 8,000 reserved seats. Roughly 5 to 10 events during the spring and summer per year would be anticipated at this facility.

Noise levels associated with concerts typically range from 80 dBA to 120 dBA at 100 feet from the center of noise generation with an average noise level of 104 dBA at 100 feet (Anon 1979, cited in Berger, Neitzel, and Kladden 2006).

In support of environmental documentation for the proposed Feather Creek Specific Plan area, noise measurements were taken in the areas surrounding Sleep Train Amphitheater in the late spring and summer of 2006. Measurements were taken north, east, and northeast of the amphitheater at distances of approximately 2,200 to 5,200 feet from the center of the facility. Hourly L_{eq} measurements were roughly 80 dBA to 100 dBA, assuming a 6 dBA attenuation rate with each doubling of distance.

Ostrom Road Sanitary Landfill

Ostrom Road Sanitary Landfill is located at 5900 Ostrom Road, north of Wheatland. The hours of operation are typically 5:00 a.m. to 3:30 a.m., Monday through Friday. The landfill site includes 261 acres and provides solid waste disposal for both commercial and municipal customers.

Noise sources associated with a landfill consist of heavy trucks, loaders, bulldozers, excavators, conveyor belts, and other assorted heavy machinery.

Existing file data for the Kiefer Boulevard Landfill, located in Sacramento County, indicate that noise levels range from 45 dBA to 60 dBA at a distance of 890 feet.

Concrete Batch Plants

Livingston's Concrete Service, Inc., is located at 2575 Slaughter House Road, south of Olivehurst along SR 65. The hours of operation are 5:00 a.m. to 5:00 p.m., Monday through Friday, and 5:00 a.m. to noon on Saturdays. Noise associated with concrete batch plants are attributable to heavy truck movement, front loaders, guppies, hoppers, conveyor belts, and wash areas. Operations of this nature tend to be incompatible with residential uses with maximum noise levels from back up alarms being of particular annoyance. There is also a CEMAX concrete batch plant in Linda located on Avondale Avenue approximately 1,000 feet north of the intersection of North Beale Road and Lindhurst Avenue.

Based upon previous field measurements, noise levels associated with a batch plant may range between 68 dBA and 72 dBA L_{eq} at a distance of 120 feet.

Aeronautical Sources

Airports that are either public or serve a scheduled airline are required to have a comprehensive land use plan (CLUP) prepared by the airport land use commission (ALUC). The purpose of ALUC is to:

- Protect public health, safety, and welfare through the adoption of land use standards that minimize the public's exposure to safety hazards and excessive levels of noise.
- Prevent the encroachment of incompatible land uses around public-use airports, thereby preserving the utility of these airports into the future.

The adoption and implementation of a CLUP embodies the land use compatibility guidelines for height, noise, and safety. The Sacramento Area Council of Governments (SACOG) is the ALUC for Sacramento, Sutter, Yolo, and Yuba Counties.

Beale Air Force Base

Beale Air Force Base (AFB) is located in southern Yuba County 13 miles east of Marysville. The AFB is comprised of 22,944 acres of land with operations buildings, base housing, and one active concrete runway. Flight paths are integrated to minimize conflict with aircraft operations from neighboring airports. Scheduled missions, practice takeoffs, landings, instrument approaches, and run-up activities generally occur during daytime hours and in areas that minimize public annoyance with regard to noise.

Exhibit 4.11-3 shows the noise contours associated with Beale AFB operations (Beale AFB 2005: 21 of 60). Exhibit 4.11-4 shows draft 60-dBA contours and theoretical 60-dBA contours from the ongoing Joint Land Use Study (JLUS) of the Beale Air Force Base. Theoretical noise contours are based on possible future missions of the AFB, as opposed to the current mission. A JLUS is a collaborative study between local communities and active military installations, such as Beale. The JLUS program is meant to encourage collaborative planning between the military and local and minimize compatibility problems.

Yuba County Airport

Yuba County Airport, a general aviation airport, is owned and operated by the County. The airport is located in Olivehurst on 933 acres of land east of the Feather River, approximately 3 miles south of Marysville. The airport operates two runways 7 days per week, 24 hours per day.

According to the most recent Yuba County Airport Comprehensive Land Use Plan (May 1994), an estimated 58,000 flights per year operated from the airport. There is residential development north and east of the airport and agricultural lands west of the airport. Exhibit 4.11-5 shows the most recent noise contours associated with Yuba County Airport operations (SACOG 1994: 25).

Brownsville Aero Pines Airport

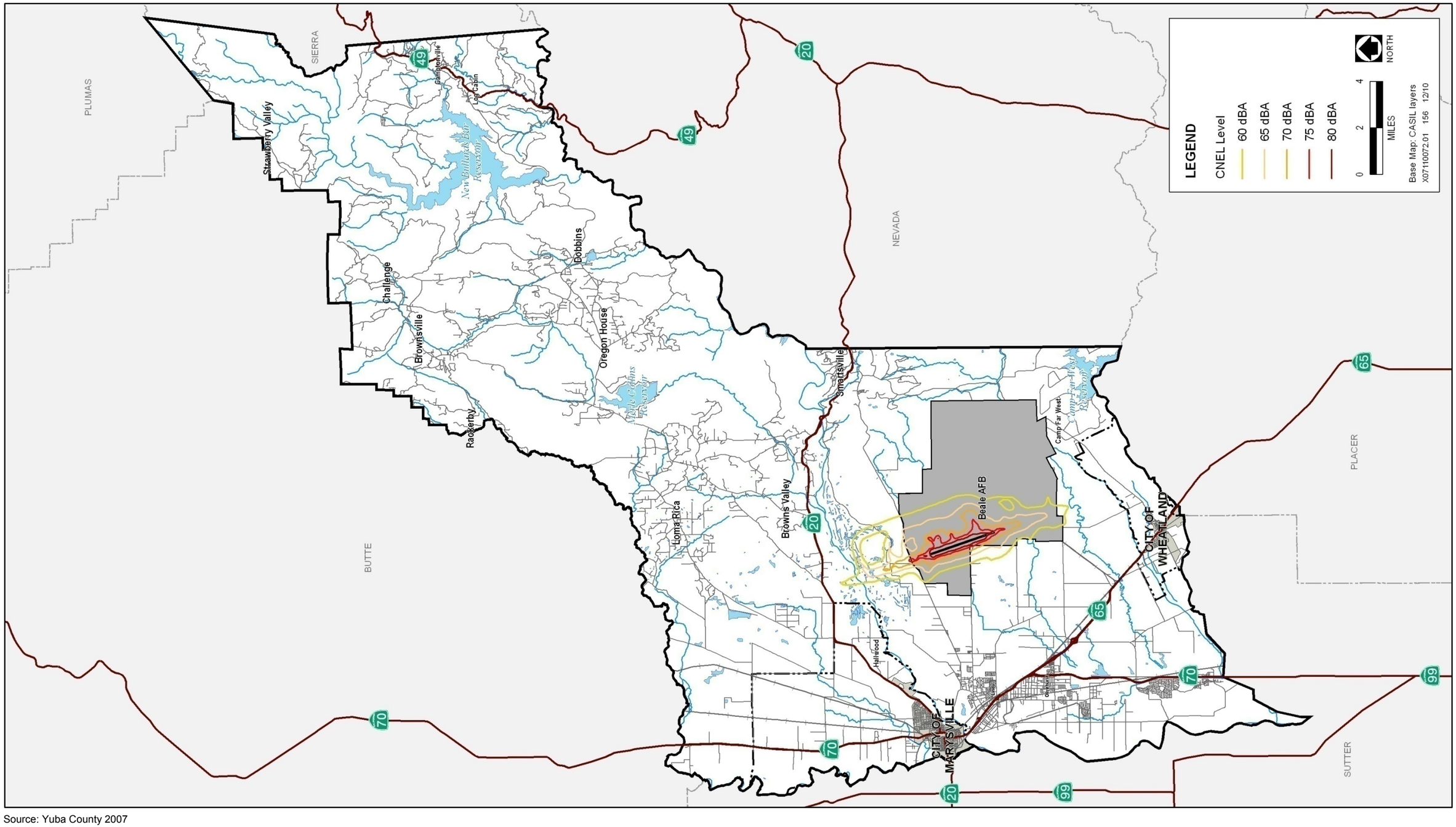
The Brownsville Aero Pines Airport is located in the northeastern portion of the County on 25 acres along La Porte Road, approximately 1.5 miles southwest of the unincorporated community of Brownsville. The majority of aircraft housed at the airport are fixed-wing aircraft; however, there are also a few ultralights and a glider. The single paved runway facilitates approximately 8,000 take-offs and landings annually.

According to the Comprehensive Land Use Plan (CLUP) for the Brownsville Aero Pines Airport, noise contours do not presently exist (SACOG 1990: 21). The CLUP recommends that, should annual takeoffs and landings exceed 15,000 for two years in a row; the County should conduct a noise study to determine the location of the 65 dB CNEL noise contour (SACOG 1990: 21).

COMMUNITY NOISE SURVEY

To quantify existing noise levels in the quieter parts of Yuba County, a community noise survey was conducted in locations distant from major noise sources. The three locations were each monitored for one 24-hour period. The measurement locations for the community noise survey are shown in Exhibit 4.11-6. The results of the community noise survey are provided in Table 4.11-6.

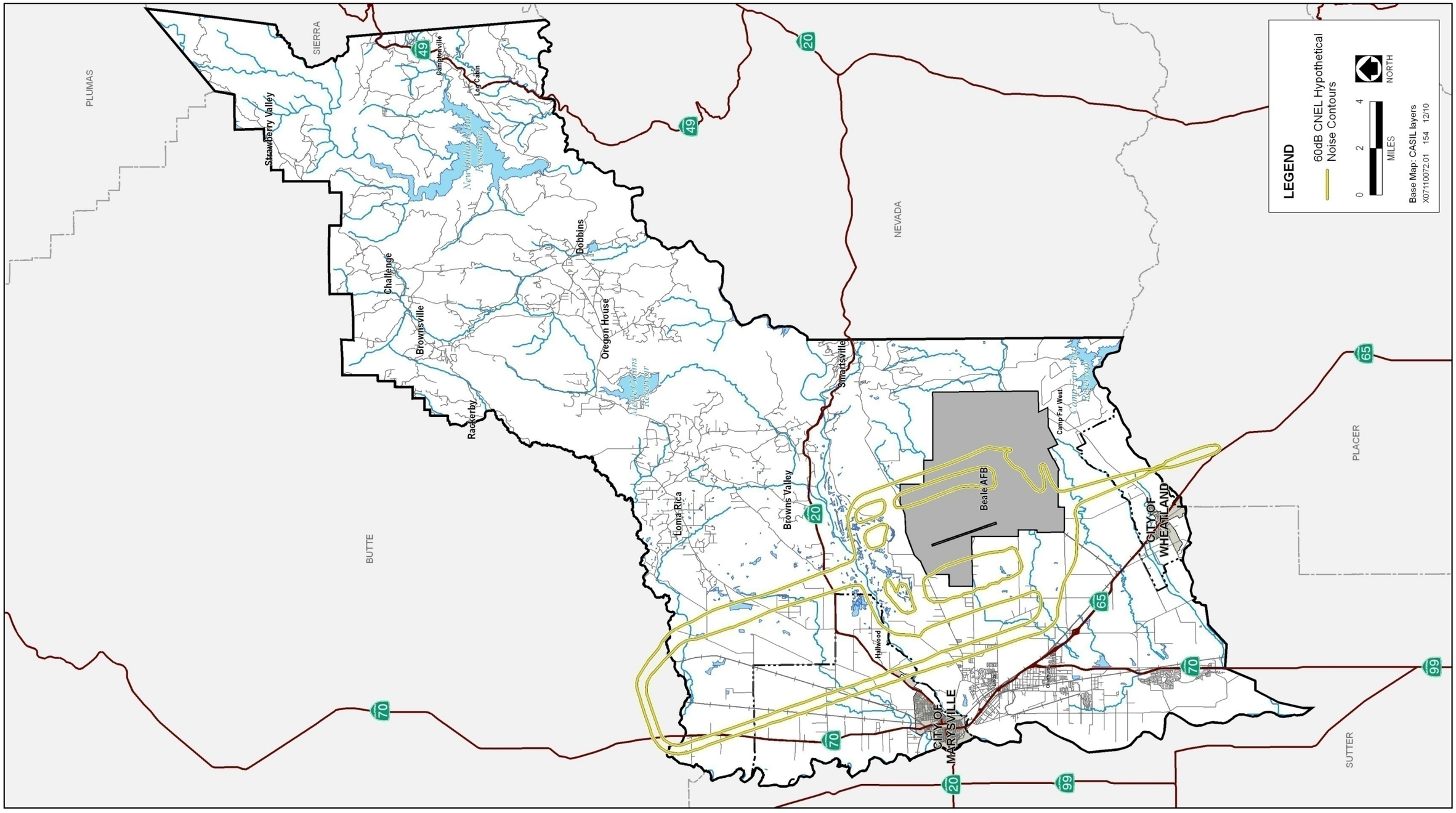
The community noise survey results show that unincorporated rural communities would generally be expected to have moderate to low noise levels. The Dobbins and Brownsville sites have typical noise levels for a rural environment. The Loma Rica site resulted in a slightly higher noise level, attributable to roadway noise and the increased agricultural activity in the area.



Source: Yuba County 2007

Beale AFB Noise Contours

Exhibit 4.11-3



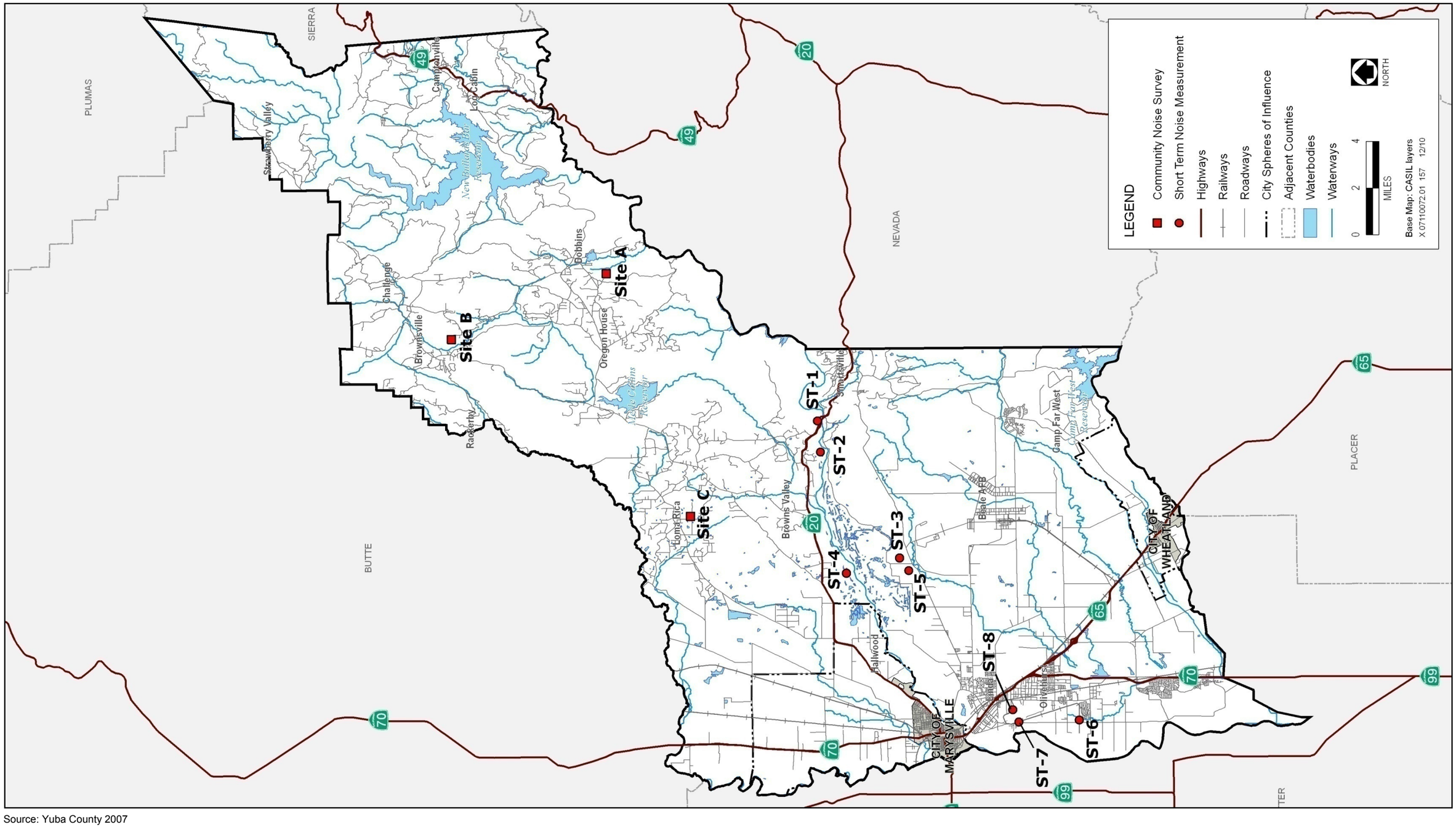
Source: Yuba County 2007

Beale AFB Hypothetical Mission Noise Contours

Exhibit 4.11-4

Source: Yuba County 2007

Yuba County Airport Noise Contours **Exhibit 4.11-5**



Source: Yuba County 2007

Community Noise Survey Locations

Exhibit 4.11-6

Table 4.11-6 Summary of Community Noise Survey									
dBA L_{dn}/CNEL	Average Hourly Daytime (7:00 a.m.–7:00 p.m.)			Average Hourly Evening (7:00 p.m.–10:00 p.m.)			Average Hourly Nighttime (10:00 p.m.–7:00 a.m.)		
	dBA L_{eq}	dBA L_{50}	dBA L_{max}	dBA L_{eq}	dBA L_{50}	dBA L_{max}	dBA L_{eq}	dBA L_{50}	dBA L_{max}
10790 Texas Hill Road – Dobbins – Site A									
48.5	47.1	40.1	66.2	45.5	66.8	39.3	39.3	31.7	56.0
9049 La Porte Road – Brownsville – Site B									
52.9	50.2	40.7	66.3	45.4	33.0	65.4	45.4	35.5	61.9
11273 Loma Rica Road – Loma Rica – Site C									
59.1	57.0	45.4	75.5	56.6	43.1	74.0	50.1	44.6	62.9

Notes: dBA = A-weighted decibels; L_{dn} = day-night average noise level; CNEL = community noise equivalent level; L_{eq} = average noise level ; L_{50} = median noise level, or level exceeded 50% of the time; L_{max} = maximum instantaneous noise level during a specific period of time or "peak (noise) level."
Source: AECOM 2007b

4.11.3 Environmental Impacts and Mitigation Measures

Methodology

This EIR considers the impacts associated with implementation of the 2030 General Plan, including new noise policies and the development of both noise-sensitive and noise-generating land uses. Noise impacts were identified for new noise-sensitive developments located within areas affected by substantial existing or future noise sources (e.g., aircraft, automobile or truck traffic, railroad lines, industrial uses). Noise impacts were also identified for noise-producing projects proposed near existing or proposed noise-sensitive areas. Finally, noise impacts were evaluated by comparing traffic noise generation associated with implementation of the 2030 General Plan relative to existing conditions. The analysis assumes that businesses, industries, and residents would comply with County noise standards identified in the 2030 Draft General Plan.

Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, a noise impact is considered significant if implementation of the proposed project under consideration would result in any of the following:

- 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;
- exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- 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 2 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; or
- 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.

IMPACT ANALYSIS

IMPACT 4.11-1 **Potential for Temporary, Short-Term Exposure of Sensitive Receptors to Construction Noise.** *Short-term construction source noise levels could exceed the applicable County standards at nearby noise-sensitive receptors. In addition, if construction activities were to occur during more noise-sensitive hours, construction source noise levels could also result in annoyance and/or sleep disruption to occupants of existing and proposed noise-sensitive land uses and create a substantial temporary increase in ambient noise levels. However, the 2030 General Plan would include policies to ensure construction noise levels do not exceed established standards. This impact would be* ***less than significant****.*

Residences and businesses located adjacent to areas of construction activity would be affected by construction noise during build-out of areas addressed under the 2030 General Plan. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time.

Major noise generating construction activities could include demolition activities, site grading and excavation, building erection, paving, and landscaping. The highest construction noise levels are typically generated during grading and excavation and lower noise levels typically occur during building construction.

Without feasible noise control, large pieces of earth-moving equipment, such as graders, excavators, and dozers, generate maximum noise levels of 85 dBA to 90 dBA at a distance of 50 feet (refer to Table 4.11-7) (EPA 1971: 11). Typical hourly average construction-generated noise levels are about 80 dBA to 85 dBA measured at a distance of 50 feet from the site during busy construction periods.

Table 4.11-7
Typical Construction Equipment Noise Levels

Type of Equipment	Noise Level in dB at 50 feet	
	Without Feasible Noise Control	With Feasible Noise Control [1]
Dozer or Tractor	80	75
Excavator	88	80
Compactor	82	75
Front-end Loader	79	75
Backhoe	85	75
Grader	85	75
Crane	83	75
Generator	78	75
Truck	91	75
Pile Driver	101	-

[1] Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds in accordance with manufacturer's specifications.

Sources: EPA 1971: 11; FTA 2006: 12-6 – 12-7

Although the County does not anticipate a large amount of multi-story development in the foreseeable future, it is possible that pile-driving could occur at some development sites. This type of construction activity could produce very high noise levels of approximately 105 dB at 50 feet. These noise levels drop off at a rate of about 6 dBA per doubling of distance between the noise source and receptor. Intervening topography and structures would provide shielding from the noise source, resulting in lower noise levels; however, these reductions would vary and are not quantifiable at the general plan level. Therefore, noise levels anticipated over temporary periods of time as a result of construction facilitated by the 2030 General Plan could expose sensitive receptors to noise levels that exceed the current (45 dBA L_{eq}) and proposed standards (45 dBA L_{eq} nighttime, 60 dBA L_{eq} daytime, 65 dBA L_{max} nighttime, 75 dBA L_{max} daytime). However, the 2030 General Plan would include policies, described below, to ensure construction noise levels do not exceed established standards and do not result in substantial disturbances to noise-sensitive receptors.

Relevant Policies and Actions of the 2030 General Plan

The Public Health and Safety chapter of the 2030 Draft General Plan includes the following policies related to construction noise:

- **Policy HS10.6:** New developments shall provide all feasible noise mitigation to reduce construction and other short-term noise and vibration impacts as a condition of approval.

- **Policy HS10.7:** New developments shall ensure that construction equipment is properly maintained and equipped with noise control components, such as mufflers, in accordance with manufacturers' specifications.

Conclusion

Policy HS10.6 of the 2030 General Plan requires new developments to provide all feasible noise mitigation to reduce construction noise impacts as a condition of approval. Policy HS10.7 requires construction equipment is properly maintained and equipped with noise control components, such as mufflers, in accordance with manufacturers' specifications. Additionally, County Ordinance 8.20.310 requires that construction does not take place between 10:00 p.m. of one day and 7:00 a.m. of the following day. Proposed policies of the 2030 General Plan and existing ordinances are sufficient to mitigate construction noise impacts and implementation of policies in the 2030 General Plan would ensure construction noise levels do not exceed established standards and do not result in substantial disturbances to noise-sensitive receptors. Therefore, this impact would be **less than significant**.

IMPACT 4.11-2 Exposure to or Generation of Noise Levels in Excess of Local Standards. *Future development of new noise-sensitive land uses would occur under the 2030 General Plan within areas that either are currently affected by noise from both transportation and non-transportation noise sources, or will be in the future. Uses allowed under the General Plan could potentially expose existing or planned noise-sensitive uses to noise levels that exceed local standards. However, the 2030 General Plan would include policies and actions to reduce the potential for noise levels to exceed established standards .Nevertheless, even with the implementation of these General Plan policies and actions, this impact is considered* ***potentially significant.***

With implementation of the 2030 General Plan, future development of noise-sensitive uses (e.g., residential dwellings, schools, hospitals, parks, hotels, places of worship, libraries) would occur in areas that either are currently exposed to or would be exposed to future traffic or railroad noise levels that exceed the current (65 dBA L_{dn} or CNEL for exterior areas) and proposed standards (45 dBA L_{dn} for interior areas).

Development would also occur within areas exposed to noise from non-transportation noise sources that exceed the current (45 dB L_{eq}) and proposed standards (45 dB L_{eq} nighttime, 60 dBA L_{eq} daytime, 65 dBA L_{max} nighttime, 75 dBA L_{max} daytime).

Specific areas in Yuba County that could be exposed to future noise levels that exceed standards include Olivehurst near the Sleeptrain Amphitheater, near quarry/mining operations, near commercial/employment uses along heavily traveled roadways (e.g., SR 65, SR 70, SR 20) and near other industrial operations.

The 2030 General Plan would accommodate a variety of land uses, including residential; commercial, office, and industrial; open space and recreation; and institutional and public facilities (e.g., electrical substations, wastewater treatment facilities and filtered water treatment facilities, and schools). The long-term operation of these uses could result in stationary and area noise from, but not limited to, the following potential sources:

- landscape and building maintenance activities (e.g., hand tools, power tools, lawn and garden equipment);
- voices;
- amplified music;
- mechanical equipment (e.g., pumps, generators heating, ventilation, and cooling systems);
- loading dock activities;
- parking lots;
- garbage collection; and
- other noise sources.

Noise levels exceeding standards established by Yuba County would represent a significant impact.

Analysis of Future Traffic Noise Levels

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108), with Calveno noise emission levels, was used to predict traffic noise levels within the Yuba County limits under existing conditions and the 2030 General Plan. Table 4.11-8 lists the predicted distances to the 60 dBA, 65 dBA and 70 dBA L_{dn} traffic noise contours under future 2030 General Plan conditions. These contour distances are used to identify areas within the county that would be considered potentially subject to noise impacts from traffic. Table 4.11-9 compares projected future traffic noise levels under the 2030 General Plan to those under existing conditions (2007). This table provides an evaluation of the cumulative changes in traffic noise levels that would result from development under the 2030 General Plan. Exhibit 4.11-7 illustrates the predicted 60 dBA, 65 dBA and 70 dBA L_{dn} noise contours for 2030 Yuba County traffic volumes. The roadway traffic noise levels shown represent conservative potential noise exposure. In reality, noise levels may vary from that represented since the calculations do not assume natural or artificial shielding or reflection from existing or proposed structures or topography. Actual noise levels would vary from day to day, depending on factors such as local traffic volumes and speed, shielding from existing and proposed structures, variations in attenuation rates resulting from changes in surface parameters, and meteorological conditions.

Vehicle speeds vary in Yuba County, and noise modeling attempted to account for such variation. The contour distances do not account for local topographic shielding, including any walls, berms, or other existing barriers.

Potential Sources of Stationary and Area Noise

Landscape and Building Maintenance Activities

Landscape maintenance activities include the use of leaf blowers, power tools, and gasoline-powered lawn mowers, could result in intermittent noise levels that range from approximately 88.3 dB at 6.5 feet, respectively. Based on an equipment noise level of 88.3 dB, the use of such equipment, assuming a noise attenuation rate of 6 dB per doubling of distance from the source, would result in exterior noise levels of approximately 70.1 dB at 50 feet. Although such activities would likely occur during the daytime hours, the exact hours and locations are unknown at this time. Such activities are anticipated to be intermittent and would occur during the daytime, which is a less noise-sensitive time of day. The use of such equipment is not so frequent that applicable daily noise standards or maximum single-event noise standards would be exceeded for noise-sensitive land uses.

Table 4.11-8
Distances to Future 2030 General Plan 60 dBA, 65 dBA and 70 dBA L_{dn} Traffic Noise Contours

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
5th St (Twin Cities Mem. Bridge)	2nd Street to I Street	115,200	45	76	407	1,286	4,065
Algodon Road	Feather River Boulevard to SR 70	1,800	35	56	4	11	36
Arboga Road	Algodon Road to Plumas Arboga Road	14,800	55	69	84	267	845
Arboga Road	Plumas Arboga Road to Ella Avenue	16,800	55	70	96	303	959
Arboga Road	Ella Ave to McGowan Parkway	23,200	55	71	132	419	1,324
Arboga Road	McGowan Parkway to Pasado Road	23,200	55	71	132	419	1,324
Arboga Road	Pasado Road to Feather River Boulevard	7,200	55	66	41	130	411
Camp Far West Road	Spenceville Road (South) to Spenceville Road (North)	1,000	45	55	4	11	35
Dairy Road	Forty Mile Road to SR 65	4,300	45	62	15	48	152
Ella Ave	Feather River Boulevard to Arboga Road	6,300	45	63	22	70	222
Erle Road	Griffith Avenue to Virginia Road	5,300	45	63	19	59	187
Erle Road	Griffith Avenue to Goldfields Parkway	9,400	45	65	33	105	332
Erle Road	Goldfields Parkway to Lindhurst Avenue	25,300	45	70	89	282	893
Erle Road	Lindhurst Avenue to Arboga Road	33,600	45	71	119	375	1,186
Feather River Boulevard	Algodon Road to SR 70	3,200	55	63	18	58	183
Feather River Boulevard	Grand Avenue to SR 70	9,500	55	67	54	171	542
Feather River Boulevard	Ella Avenue to Grand Avenue	8,400	55	67	48	152	479
Feather River Boulevard	Ella Avenue to Plumas Arboga Road	1,800	55	60	10	32	103
Feather River Boulevard	Algodon Road to Plumas Avenue	1,700	55	60	10	31	97
Forty Mile Road	Plumas Arboga Road to SR 65	13,800	55	69	79	249	788
Forty Mile Road	Plumas Arboga Road to Dairy Road	17,500	55	70	100	316	999
Forty Mile Road	Dairy Road to Wheatland Road	13,900	55	69	79	251	793
Frenchtown Road	Marysville Road to Willow Glen Road	1,500	45	57	5	17	53
Fruitland Road	Loma Rica Road to Marysville Road	1,000	45	55	4	11	35
Fruitland Road	Huncut Road to Loma Rica Road	2,300	45	59	8	26	81
Goldfield Parkway	Simpson Dantoni Road to Hammonton-Smartville Road	45,600	45	72	144	456	1,443
Goldfield Parkway	Hammonton-Smartville Road to N. Beale Road	35,500	45	71	112	355	1,123
Goldfield Parkway	N. Beale Road to Erle Road	37,800	45	71	120	378	1,196

Table 4.11-8
Distances to Future 2030 General Plan 60 dBA, 65 dBA and 70 dBA L_{dn} Traffic Noise Contours

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
Goldfield Parkway	Erle Road to SR 70	37,200	45	71	118	372	1,177
Griffith Ave	Erle Road to Hammonton-Smartville Road	11,500	35	64	23	73	231
Hallwood Boulevard	SR 20 to South of Walnut Avenue	1,200	25	52	1	5	14
Hammonton-Smartville Road	Simpson Lane to Goldfields Parkway	22,000	55	68	62	195	616
Hammonton-Smartville Road	Goldfields Parkway to North Erle Road	10,800	55	67	54	171	542
Hammonton-Smartville Road	North Erle Road to Smartsville Road	9,500	55	67	51	162	514
Hunters Creek	Ella Ave to Arboga Road	9,700	35	62	17	53	168
Hunters Creek	Plumas Arboga Road to Broadway Street	2,800	35	57	5	15	48
Hunters Creek	Broadway Street to Anderson Avenue	3,000	35	57	5	16	52
La Porte Road	Willow Glen Road to Butte County Line	9,000	55	59	8	25	78
La Porte Road	Butte County Line to Plumas County Line	2,200	45	55	4	11	35
Lindhurst Ave	Erle Road to Olivehurst Avenue	1,000	45	70	110	346	1,096
Lindhurst Ave	Erle Road to N. Beale Road	19,200	55	72	171	541	1,712
Loma Rica Road	SR 20 to Fruitland Road	30,000	55	65	30	96	302
Loma Rica Road	Fruitland Road to Marysville Road	5,300	55	60	10	31	97
Los Verjeles Road	Butte County Line to Loma Rica Road	1,700	55	57	5	15	46
Marysville Road	SR 20 to Fruitland Road	1,300	45	68	62	197	622
Marysville Road	Fruitland Road to Willow Glen Road	10,900	55	67	45	143	451
Marysville Road	Willow Glen Road to Oregon Hill Road	7,900	55	63	18	58	183
Marysville Road	Oregon Hill Road to SR 49	3,200	55	60	10	33	104
Mathews Lane	Ramirez St to Woodruff	2,300	50	66	42	133	421
McGowan Parkway	Arboga Road to SR 70	9,300	50	68	62	196	620
McGowan Parkway	SR 70 to SR 65	13,700	50	69	74	235	743
N. Beale Road	Patrol Rod to Griffith Avenue	16,400	50	63	22	70	222
N. Beale Road	Griffith Avenue to Goldfields Parkway	4,900	50	66	41	130	412
N. Beale Road	Goldfields Parkway to Linda Avenue	9,100	50	71	118	372	1,177
N. Beale Road	Linda Avenue to Hammonton-Smartville Road	26,000	50	70	92	292	924
N. Beale Road	Hammonton-Smartville Road to Lindhurst Avenue	20,400	50	71	133	421	1,331

Table 4.11-8
Distances to Future 2030 General Plan 60 dBA, 65 dBA and 70 dBA L_{dn} Traffic Noise Contours

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
N. Beale Road	Lindhurst Avenue to Feather River Boulevard	29,400	50	72	156	493	1,558
N. Beale Road	Feather River Blvd to 5th Street (Twin Cities Mem. Bridge)	34,400	50	71	126	399	1,263
Olivehurst Ave	McGowan Parkway to SR 70	27,900	50	65	29	90	285
Oregon Hill Road	La Porte Road to Marysville Road	6,300	50	47	0	1	5
Ostrom Road	Rancho Road to South Beale Road	100	50	65	30	94	299
Plumas Arboga Road	Old Marysville Road to Forty Mile Road	6,600	50	71	113	358	1,132
Plumas Arboga Road	Feather River Boulevard to Arboga Road	25,000	50	61	13	40	127
Plumas Arboga Road	Arboga Road to SR 70	2,800	50	51	1	4	14
Ramirez Road	SR 70 to Mathews Lane	300	50	66	40	126	398
Rancho Road	McGowan Parkway to Ostrom Road	8,800	50	59	8	26	81
Rancho Road	Ostrom Road to SR 65	1,800	50	50	1	3	9
River Oaks Boulevard	Algodon Road to Kinsington Dr	200	50	69	80	252	797
River Oaks Boulevard	Kinsington Drive to Feather River Boulevard	17,600	50	71	130	412	1,304
S. Beale Road	SR 65 to Ostrom Road	28,800	50	61	14	43	136
Simpson Lane	Ramirez Street to Hammonton-Smartville Road	3,000	50	70	106	336	1,064
Smartville Road	Hammonton-Smartville to SR 20	23,500	50	58	6	20	63
Spenceville Road	Front Street/Olive Street to Jasper Lane	1,400	50	65	34	106	335
Spenceville Road	Jasper Lane to Camp Far West Road	7,400	50	63	21	67	213
Spring Valley Road	SR 20 to Marysville Road	4,700	50	46	0	1	4
SR 49	Nevada County Line to Yuba County Line	200	35	61	13	40	127
SR 65	D Street to State Street	2,400	50	78	670	2,118	6,697
SR 65	S Beale Road to Forty Mile Road	34,200	65	81	1,328	4,199	13,277
SR 65	Forty Mile Road to Goldfields Parkway	67,800	65	82	1,430	4,521	14,295
SR 65	Goldfields Parkway to SR 70	73,000	65	81	1,126	3,561	11,260
SR 70	SR 65 to Olivehurst Avenue	57,500	65	79	799	2,528	7,993
SR 70	Olivehurst Avenue to Erle Road	98,600	50	78	565	1,785	5,645
SR 70	Erle Road to Grand Avenue	89,500	50	77	558	1,763	5,576
SR 70	Feather River Boulevard to Yuba/Sutter Line	88,400	50	76	404	1,276	4,035

Table 4.11-8
Distances to Future 2030 General Plan 60 dBA, 65 dBA and 70 dBA L_{dn} Traffic Noise Contours

Roadway	Roadway Segment	ADT	Speed (MPH)	dBA, L_{dn} at 100 feet	Distance to Contours		
					70 dBA L_{dn}	65 dBA L_{dn}	60 dBA L_{dn}
SR 70	SR 65 to McGowan Parkway	62,200	50	78	616	1,949	6,164
SR 70	McGowan Parkway to Algodon Road	73,800	50	77	536	1,696	5,362
SR 70	Algodon Road to Feather River Boulevard	64,200	50	77	467	1,477	4,669
SR 70	B Street to Laurellen Road	55,900	50	73	202	639	2,021
SR 70	Laurellen Road to Ramirez Road	24,200	50	72	166	525	1,659
SR 70	Ramirez Road to Yuba/Butte County Line	25,000	50	73	196	619	1,958
SR20 / Browns Road	Ramirez Street to Goldfields Parkway	29,500	50	74	227	718	2,272
SR20 / Browns Road	Goldfields Parkway to Loma Rica Road	27,200	50	74	261	824	2,606
SR20 / Browns Road	Loma Rica Road to Spring Valley Road	31,200	50	72	166	526	1,662
SR20 / Browns Road	Spring Valley Road to Marysville Road	19,900	50	72	157	497	1,570
SR20 / Browns Road	Marysville Road to Smartsville Road	18,800	50	69	85	269	852
Waldo Road/ Smartville Road	Spenceville Road to Hammonton-Smartville Road	10,200	50	58	6	20	63
Wheatland Road	Forty Mile Road to Olive Street	1,400	50	67	47	147	466
Wheatland Bypass	Placer/Yuba County Line to Spenceville Road	28,000	55	71.7	147	466	1,473
Wheatland Bypass	Spenceville Road to S. Beale Road	26,500	55	71.4	139	441	1,394
Willow Glen Road	Marysville Road to Frenchtown Road	10,300	50	62	14	46	145
Woodruff Lane	Matthews Lane to SR 20	3,200	50	68	60	189	598
Woodruff Lane	SR 70 to Mathews Lane	13,200	50	63	18	57	181

Notes: FHWA-RD-77-108 = Federal Highway Administration Highway Traffic Noise Prediction Model; dB = decibel; CNEL = community noise equivalent level; dBA = A-weighted decibel; ADT = average daily trips; SR = state route.
Medium (2 axles) and heavy trucks (3+ axles) produce significantly more noise than passenger vehicles so their percentages are taken into account with heavier weighting when computing traffic noise levels
Source: Modeling conducted by AECOM 2010

Table 4.11-9
2030 General Plan-Related Increases in Traffic Noise on Major Yuba County Roadways Relative to Existing (2007) Conditions[1]

Roadway	Roadway Segment	Existing Condition (dBA L_{dn})	2030 General Plan (dBA L_{dn})	Change
5th Street (Twin Cities Mem.Bridge)	2nd Street to I Street	71	76	+5
Algodon Road	Feather River Boulevard to SR 70	52	56	+4
Arboga Road	Algodon Road to Plumas Arboga Road	--	69	--
Arboga Road	Plumas Arboga Road to Ella Avenue	63	70	+7
Arboga Road	Ella Avenue to McGowan Parkway	63	71	+8
Arboga Road	McGowan Parkway to Pasado Road	63	71	+8
Arboga Road	Pasado Road to Feather River Boulevard	--	66	--
Camp Far West Road	Spenceville Road (South) to Spenceville Road (North)	55	55	0
Dairy Road	Forty Mile Road to SR 65	53	62	+9
Ella Avenue	Feather River Boulevard to Arboga Road	55	63	+8
Erle Road	Griffith Avenue to Virginia Road	55	63	+8
Erle Road	Griffith Avenue to Goldfields Parkway	60	65	+5
Erle Road	Goldfields Parkway to Lindhurst Avenue	60	70	+10
Erle Road	Lindhurst Avenue to Arboga Road	--	71	--
Feather River Boulevard	Algodon Road to SR 70	54	63	+9
Feather River Boulevard	Grand Avenue to SR 70	65	67	+2
Feather River Boulevard	Ella Avenue to Grand Avenue	62	67	+5
Feather River Boulevard	Ella Avenue to Plumas Arboga Road	57	60	+3
Feather River Boulevard	Algodon Road to Plumas Avenue	57	60	+3
Forty Mile Road	Plumas Arboga Road to SR 65	61	69	+9
Forty Mile Road	Plumas Arboga Road to Dairy Road	60	70	+10
Forty Mile Road	Dairy Road to Wheatland Road	60	69	+9
Frenchtown Road	Marysville Road to Willow Glen Road	56	57	+1
Fruitland Road	Loma Rica Road to Marysville Road	56	55	-1

Table 4.11-9
2030 General Plan-Related Increases in Traffic Noise on Major Yuba County Roadways Relative to Existing (2007) Conditions[1]

Roadway	Roadway Segment	Existing Condition (dBA L_{dn})	2030 General Plan (dBA L_{dn})	Change
Fruitland Road	Huncut Road to Loma Rica Road	51	59	+8
Griffith Avenue	Erle Road to Hammonton-Smartville Road	56	64	+8
Hallwood Boulevard	SR 20 to South of Walnut Avenue	51	52	+1
Hammonton-Smartville Road	Simpson Lane to Goldfields Parkway	68	68	0
Hammonton-Smartville Road	Goldfields Parkway to North Erle Road	64	67	+3
Hammonton-Smartville Road	North Erle Road to Smartsville Road	65	67	+2
La Porte Road	Willow Glen Road to Butte County Line	51	59	+8
La Porte Road	Butte County Line to Plumas County Line	51	55	+4
Lindhurst Avenue	Erle Road to Olivehurst Avenue	67	70	+3
Lindhurst Avenue	Erle Road to N. Beale Road	68	72	+4
Loma Rica Road	SR 20 to Fruitland Road	62	65	+3
Loma Rica Road	Fruitland Road to Marysville Road	59	60	+1
Los Verjeles Road	Butte County Line to Loma Rica Road	54	57	+3
Marysville Road	SR 20 to Fruitland Road	65	68	+3
Marysville Road	Fruitland Road to Willow Glen Road	65	67	+2
Marysville Road	Willow Glen Road to Oregon Hill Road	62	63	+1
Marysville Road	Oregon Hill Road to SR 49	55	60	+5
Mathews Lane	Ramirez Street to Woodruff	58	66	+8
McGowan Parkway	Arboga Road to SR 70	65	68	+3
McGowan Parkway	SR 70 to SR 65	67	69	+2
N. Beale Road	Patrol Rod to Griffith Avenue	--	63	--
N. Beale Road	Griffith Avenue to Goldfields Parkway	65	66	+1
N. Beale Road	Goldfields Parkway to Linda Avenue	65	71	+6
N. Beale Road	Linda Avenue to Hammonton-Smartville Road	65	70	+5

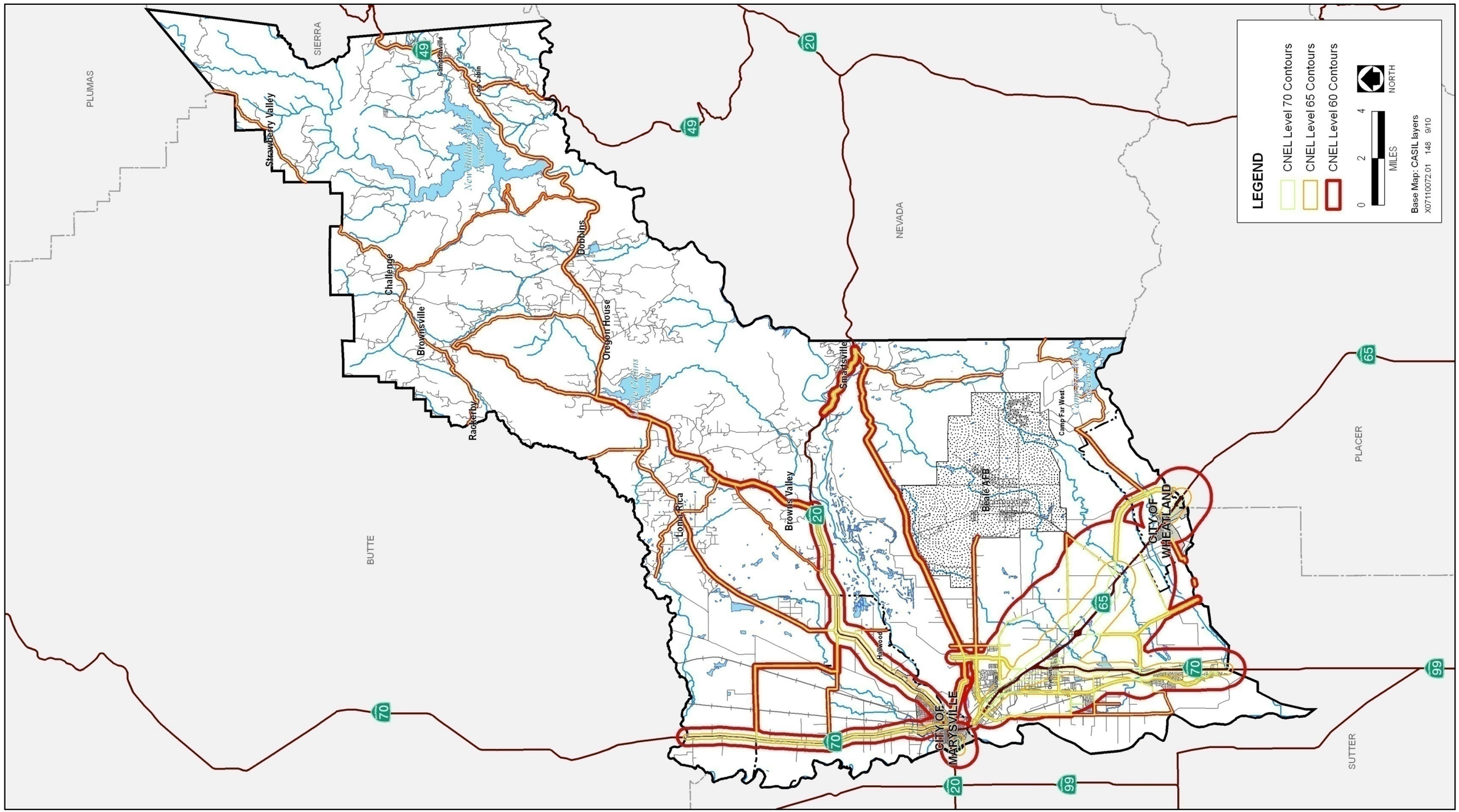
Table 4.11-9
2030 General Plan-Related Increases in Traffic Noise on Major Yuba County Roadways Relative to Existing (2007) Conditions[1]

Roadway	Roadway Segment	Existing Condition (dBA L_{dn})	2030 General Plan (dBA L_{dn})	Change
N. Beale Road	Hammonton-Smartville Road to Lindhurst Avenue	65	71	+6
N. Beale Road	Lindhurst Avenue to Feather River Boulevard	71	72	+1
N. Beale Road	Feather River Boulevard to 5th Street (Twin Cities Mem.Bridge)	71	71	0
Olivehurst Avenue	McGowan Parkway to SR 70	61	65	+4
Oregon Hill Road	La Porte Road to Marysville Road	45	47	+2
Ostrom Road	Rancho Road to South Beale Road	57	65	+8
Plumas Arboga Road	Old Marysville Road to Forty Mile Road	59	71	+12
Plumas Arboga Road	Feather River Boulevard to Arboga Road	60	61	+1
Plumas Arboga Road	Arboga Road to SR 70	63	51	-8
Ramirez Road	SR 70 to Mathews Lane	57	66	+9
Rancho Road	McGowan Parkway to Ostrom Road	59	59	0
Rancho Road	Ostrom Road to SR 65	50	50	0
River Oaks Boulevard	Algodon Road to Kinsington Drive	62	69	+7
River Oaks Boulevard	Kinsington Dr to Feather River Boulevard	64	71	+7
S. Beale Road	SR 65 to Ostrom Road	60	61	+1
Simpson Lane	Ramirez Street to Hammonton-Smartville Road	67	70	+3
Smartville Road	Hammonton-Smartville to SR 20	62	58	-4
Spenceville Road	Front Street/Olive Street to Jasper Lane	61	65	+4
Spenceville Road	Jasper Lane to Camp Far West Road	60	63	+3
Spring Valley Road	SR 20 to Marysville Road	50	46	-4
SR 49	Nevada County Line to Yuba County Line	60	61	+1
SR 65	D Street to Streetate Street	76	78	+2
SR 65	S Beale Road to Forty Mile Road	76	81	+5
SR 65	Forty Mile Road to Goldfields Parkway	76	82	+4

Table 4.11-9
2030 General Plan-Related Increases in Traffic Noise on Major Yuba County Roadways Relative to Existing (2007) Conditions[1]

Roadway	Roadway Segment	Existing Condition (dBA L_{dn})	2030 General Plan (dBA L_{dn})	Change
SR 65	Goldfields Parkway to SR 70	76	81	+5
SR 70	SR 65 to Olivehurst Avenue	71	79	+8
SR 70	Olivehurst Avenue to Erle Road	76	78	+2
SR 70	Erle Road to Grand Avenue	76	77	+1
SR 70	Feather River Boulevard to Yuba/Sutter Line	71	76	+5
SR 70	SR 65 to McGowan Parkway	76	78	+2
SR 70	McGowan Parkway to Algodon Road	71	77	+6
SR 70	Algodon Road to Feather River Boulevard	71	77	+6
SR 70	B Street to Laurellen Road	73	73	0
SR 70	Laurellen Road to Ramirez Road	71	72	+1
SR 70	Ramirez Road to Yuba/Butte County Line	71	73	+2
SR20 / Browns Road	Ramirez Street to Goldfields Parkway	73	74	+1
SR20 / Browns Road	Goldfields Parkway to Loma Rica Road	68	74	+6
SR20 / Browns Road	Loma Rica Road to Spring Valley Road	68	72	+4
SR20 / Browns Road	Spring Valley Road to Marysville Road	68	72	+4
SR20 / Browns Road	Marysville Road to Smartsville Road	67	69	+2
Waldo Road/ Smartville Road	Spenceville Road to Hammonton-Smartville Road	54	58	+4
Wheatland Road	Forty Mile Road to Olive Street	58	67	+9
Willow Glen Road	Marysville Road to Frenchtown Road	58	62	+4
Woodruff Lane	Matthews Lane to SR 20	58	68	+10
Woodruff Lane	SR 70 to Mathews Lane	54	63	+9

[1] Traffic noise level at 100 feet from roadway centerline in terms of day/night average levels
Source: Modeling conducted by EDAW 2007
Notes:
dBA = A-weighted decibels; SR 20 = State Route 20; SR 70 = State Route 70; SR 65 = State Route 65; L_{dn} = day-night average noise level
Sources: Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108



Source: Yuba County 2007

Future Traffic Noise Levels **Exhibit 4.11-7**

Mechanical Equipment

The operation of mechanical equipment at residential, commercial, office, and industrial; and institutional and public facilities (e.g., electrical substations, wastewater treatment facility and filtered water treatment facility, and schools) is another stationary and area noise source. The operation of mechanical equipment (e.g., pumps, generators; heating, ventilation, and cooling systems) could result in intermittent noise levels of approximately 90 dB at 3 feet (EPA 1971). Based on this equipment noise level, the operation of such equipment, assuming a noise attenuation rate of 6 dB per doubling of distance from the source, may result in exterior noise levels of approximately 60 dB at 95 feet.

Although these types of equipment are typically shielded from direct exposure (e.g., housed on rooftops, in equipment rooms, or in exterior enclosures), the actual placement of such equipment on future land uses within the unincorporated County is not known at this time. It is possible that noise levels could exceed the applicable standards at existing and proposed noise-sensitive receptors and create a substantial permanent increase in ambient noise levels at existing noise-sensitive receptors if measures are not taken to reduce such noise exposure.

Garbage Collection Activities

Garbage collection activities (e.g., emptying large refuse dumpsters, possible multiple times per week, and the shaking of containers with a hydraulic lift), could result in instantaneous maximum noise levels of approximately 89 dB L_{max} at 50 feet. Such activities are anticipated to be very brief, intermittent, and would occur during daytime hours, which are considered to be less noise-sensitive times of day. Garbage collection activities are infrequent, and therefore would not be expected to exceed daily noise standards. Noises would typically emanate from public rights-of-way, which would normally be separated from outdoor gathering spaces associated with residential uses. Noise associated with garbage collection would not be expected to create single-event noise that would be substantially disruptive to daily activities or cause sleep disturbance.

Parking Lots

Parking lots and parking structures include noise sources such as vehicles entering/exiting the lot, alarms/radios, and doors slamming. Neither the size (i.e., capacity) or location of parking lots that could be constructed under the 2030 General Plan is known at this time. However, according to the FHWA, parking lots with a maximum hourly traffic volume of approximately 1,000 vehicles per hour either entering or exiting the lot could result in a peak hour and daily noise levels of approximately 56 dB L_{eq} and 63 dB L_{dn} at 50 feet.

Commercial, Office, and Industrial Activities

Commercial, office, and industrial noise sources include loading dock activities, air circulation systems, delivery areas, and the operation of trash compactors and air compressors. Such activities could result in intermittent noise levels of approximately 91 dB L_{max} at 50 feet (EPA 1971) and high single-event noise levels from backup alarms from delivery trucks during the more noise-sensitive hours of the day. Neither the exact hours of operation nor the location of such potential noise sources are known at this time. Thus, land use related noise levels could exceed the applicable standards at existing and proposed noise-sensitive receptors, especially if such activities were to occur during the more noise-sensitive hours (e.g., evening, nighttime, and early morning) and create a substantial increase in ambient noise levels at existing noise-sensitive receptors. In addition, if such activities were to occur during these more noise-sensitive hours, project-generated noise levels may result in annoyance and/or sleep disruption to occupants of the on-site (e.g., existing and proposed) noise-sensitive land uses. Marysville Raceway Park may generate noise of approximately 66 dBA L_{eq} at a distance of 500 feet.

Other Residential, School, and Recreation Activities and Events

Noise sources typical of residential, school, recreation, and event uses could include voices and amplified music/speaker systems. Such sources could result in noise levels of approximately 60–75 dB L_{eq} at 50 feet.

Although such activities would likely occur primarily during the daytime hours, neither the hours of operation nor location of such sources are known at this time. It is possible that noise levels could exceed the applicable standards at existing and proposed noise-sensitive receptors, especially if such activities were to occur during the more noise-sensitive hours (e.g., evening, nighttime, and early morning) and create a substantial increase in ambient noise levels at existing noise-sensitive receptors. In addition, if such activities were to occur during these more noise-sensitive hours, project-generated noise levels may result in annoyance and/or sleep disruption to occupants of the existing and proposed noise-sensitive land uses.

Agricultural Activities

Agricultural activities within the County involve the use of various types of heavy-duty equipment. Agricultural operations within the County involve crop and orchard operations, which can occur during noise sensitive times of the day and involve substantial noise levels. The operation of heavy-duty equipment associated with agricultural activities typically results in noise levels of approximately 75 dB L_{eq} at 50 feet (EPA 1971). The closest distances between proposed noise-sensitive land uses and agricultural land uses would be approximately 50 to 200 feet in several locations. Based on the above noise levels and a typical noise-attenuation rate of 6.0 dB per doubling of distance, exterior noise levels at noise-sensitive receptors approximately 50 to 200 feet from agricultural activities could exceed 75 and 63 dB L_{eq}, respectively. It is important to note that the closest noise-sensitive receptors would not be exposed to this noise level for extended periods, given the mobile nature of agricultural activities (e.g., disking, plowing, harvesting). If, for instance, residential land uses were exposed to 75 dB L_{eq} for one entire hour during the daytime, and ambient noise levels were 50 dB L_{eq} during the rest of the daytime hours and 45 dB L_{eq} during the nighttime hours, the 24-hour noise level would be 62 dB L_{dn}.

Relevant Policies and Actions in the 2030 Draft General Plan

The goal of the Public Health and Safety chapter of the 2030 General Plan is to guide decisions concerning land use and the location of roads, industrial developments, agricultural operations, and other common sources of noise. Another goal of the Public Health and Safety chapter is to avoid land use conflicts with, and reduce exposure of people and property to risks from the County's airports. The following policies are applicable:

- **Policy HS10.1:** New developments that generate traffic or are affected by traffic noise shall provide design and mitigation, if necessary, to ensure acceptable daytime and nighttime land use/noise environment at outdoor activity areas of affected properties, as defined in Public Health & Safety – 1 Table 4.11-10.

- **Policy HS10.2:** If existing noise levels exceed the acceptable levels listed in Table 4.11-10, new developments are required to incorporate mitigation to reduce noise exposure in outdoor activity areas to the maximum extent feasible and include mitigation designed to achieve acceptable interior noise levels, as defined in Table 4.11-10.

- **Policy HS10.3:** New developments that would generate or be affected by non-transportation noise shall be located, designed, and, if necessary, mitigated below maximum levels specified in Table 4.11-11, as measured at outdoor activity areas of affected noise-sensitive land uses.

- **Policy HS10.4:** If existing noise levels exceed the maximum allowable levels listed in Table 4.11-11, projects are required to incorporate mitigation to reduce noise exposure in outdoor activity areas to the maximum extent feasible and include mitigation to achieve acceptable interior noise levels, as defined in Table 4.11-10.

Table 4.11-10
Maximum Allowable Noise Exposure from Transportation Noise Sources at Noise-Sensitive Land Uses

Land Use	Interior Spaces		Outdoor Activity Areas (dBA L_{dn}) 55 60 65 70 75 80
	dBA L_{dn}	dBA L_{eq}	
Residences	45	-	
Hotels, Motels	45	-	
Schools, Libraries, Museums, Places of Worship, Hospitals, Nursing Homes	45	45	
Theaters, Auditoriums, Concert Halls, Amphitheaters	35	-	
Outdoor Spectator Sports	-	-	
Playgrounds, Parks	-	-	
Golf Courses Riding Stables, Water Recreation, Cemeteries	-	-	
Office Buildings, Retail, and Commercial Services	45	-	
Industrial, Manufacturing, Utilities, Agriculture	-	-	

Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise requirements.

Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

Normally Unacceptable – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.

Clearly Unacceptable – New construction or development clearly should not be undertaken.

Notes: dBA = A-weighted decibels; L_{dn} = day-night average noise level; L_{eq} = energy-equivalent noise level. This table does not apply to existing transportation noise sources affecting existing land uses. Outdoor activity areas are the portion of a property where activities are normally expected. This would include portions of backyards, decks, balconies, pools, sports or game courts, and patios, but would not include front yards, spaces next to parking, roads, driveways, or vehicular loading areas. Hospitals and nursing homes use the L_{dn} interior standard, whereas schools, libraries, museums, and places of worship use a L_{eq} interior standard. Office buildings have an interior standard, but retail and commercial service uses do not have an interior standard.

Source: Governor's Office of Planning and Research 2003 General Plan Guidelines.

Source: Table Public Health & Safety-1 of 2030 General Plan

Table 4.11-11
Maximum Allowable Noise Exposure from Non-Transportation Noise Sources at Noise-Sensitive Land Uses

Noise Level Descriptor	Daytime (7 a.m.–10 p.m.)	Nighttime (10 p.m.–7 a.m.)
Hourly L_{eq}	60 dBA	45 dBA
L_{max}	75 dBA	65 dBA

Notes: dBA = A-weighted decibel; L_{eq} = energy-equivalent noise level; L_{max} = maximum noise level.
Each of the noise levels specified shall be lowered by 5 dBA for simple tone noises, noises consisting primarily of speech, music, or for recurring impulsive noises. These noise-level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). Noise-sensitive land uses include schools, hospitals, rest homes, long-term care facilities, mental care facilities, residences, and other similar land uses.
Source: Table Public Health & Safety-2 of 2030 General Plan

- **Policy HS10.5:** The maximum noise level shall not exceed the performance standards shown in Table 4.11-12, as measured at outdoor activity areas of any affected noise-sensitive land use except:

  - If the ambient noise level exceeds the standard in Table 4.11-12, the standard becomes the ambient level plus 5 dBA.

  - Reduce the applicable standards in Table 4.11-12 by 5 decibels if they exceed the existing ambient level by 10 or more dBA.

Table 4.11-12
Performance Standards for Non-Transportation Noise Sources

Cumulative Duration of a Noise Event[1] (Minutes)	Maximum Exterior Noise Level Standards[2]	
	Daytime dBA L_{max}[2, 4]	Nighttime dBA L_{max}[3, 4]
30–60	50	45
15–30	55	50
5–15	60	55
1–5	65	60
0–1	70	65

Notes: dBA = A-weighted decibel; L_{max} = maximum noise level.
1 Cumulative duration refers to time within any 1-hour period.
2 Daytime = hours between 7:00 a.m. and 10:00 p.m.
3 Nighttime = hours between 10:00p.m. and 7:00 a.m.
4 Each of the noise level standards specified may be reduced by 5 dBA for tonal noise (i.e., a signal which has a particular and unusual pitch) or for noises consisting primarily of speech of for recurring impulsive noises (i.e., sounds of short duration, usually less than one second, with an abrupt onset and rapid decay such as the discharge of firearms).
Source: Table Public Health & Safety-3 of 2030 General Plan

- **Policy HS10.6:** New developments shall provide all feasible noise mitigation to reduce construction and other short-term noise and vibration impacts as a condition of approval.

- **Policy HS10.7:** New developments shall ensure that construction equipment is properly maintained and equipped with noise control components, such as mufflers, in accordance with manufacturers' specifications.

- **Policy HS10.8:** Noise attenuation barriers are strongly discouraged, except to attenuate noise for existing developed uses, and may be used in the context of new developments only when no other approach to noise mitigation is feasible.

- **Policy HS10.9:** New developments shall disperse vehicular traffic onto a network of fully connected smaller roadways and minimize funneling of local traffic onto large-volume, high-speed roadways near existing or planned noise-sensitive land uses to the maximum extent feasible.

- **Policy HS10.10:** Proposed noise-generating industrial and other land uses shall be located away from noise-sensitive land uses, shall enclose noise sources, or shall use other site planning or mitigation techniques to ensure acceptable noise levels.

- **Policy HS10.11:** Lands within the 65 CNEL noise contour of Beale Air Force Base, Yuba County Airport, and Brownsville Airport shall be maintained in agricultural, open space, commercial, industrial, or other uses permitted by the subject airport's adopted Comprehensive Land Use Plan (CLUP) and consistent with the recommendations of the Beale Joint Land Use Study, including noise contours associated with future hypothetical missions, as appropriate.

- **Policy HS10.12:** The County supports the construction of rail crossings designed to reduce or eliminate the use of rail horn blasts in areas with existing and planned noise-sensitive land uses.

- **Policy HS10.13:** New developments that propose vibration-sensitive uses within 100 feet of a railroad or heavy industrial facility shall analyze and mitigate potential vibration impacts, to the greatest extent feasible.

- **Policy HS10.14:** Public events, such as school sporting events, festivals, and other similar community and temporary events are exempt from the noise standards outlined in this Element.

- **Policy HS10.15:** New developments that would generate substantial long-term vibration shall provide analysis and mitigation, as feasible, to achieve velocity levels, as experienced at habitable structures of vibration-sensitive land uses, of less than 78 vibration decibels.

- **Policy HS10.16:** Mining, forestry, and agricultural noise will not be considered a nuisance when generated in areas designated by the General Plan for these uses.

- **Action HS10.1: Airport Land Use Planning.** The County will coordinate development requests in areas addressed by Airport Comprehensive Land Use Plans (CLUPs) according to the land use restrictions embodied in those plans and will initiate amendments to the General Plan and revisions to zoning, if necessary, following updates to local CLUPs.

    - Related Goals: Goal HS10
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Project applicant funding
    - Time Frame: Ongoing, as projects are proposed within zones addressed by local CLUPs

- **Action HS10.2:** Noise Generating Projects. Where development projects or roadway improvement projects could potentially create noise impacts, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design. Such analysis shall be the financial responsibility of the applicant and be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics. Mitigation strategies shall emphasize site planning and design over other types of mitigation.

    - Related Goals: Goal HS10
    - Agency/Department: Community Development and Services Agency

- Funding Source: Project applicant funding
- Time Frame: Ongoing, as projects are proposed

- **Action HS10.3: Revise County Noise Standards.** The County will maintain noise control regulations consistent with the stated policies of this plan and within the capacity of the County to equitably enforce. The County's building, zoning, and subdivision, and public peace & safety codes will be revised to incorporate these policies. The County's code updates will provide construction noise guidance and will define special public events that are exempt from noise policies and standards.

  - Related Goals: Goal HS10
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund
  - Time Frame: Adopt by 2013, update as needed

- **Policy HS4.3:** New construction within the Air Installation Compatibility Use Zone 65 dB CNEL noise contours for the existing and potential future missions [at Beale AFB] shall use building materials and construction techniques to mitigate noise impacts.

- **Policy NR1.15**: Active portions of parks that may generate light and noise should be located and designed to promote compatibility with the surrounding neighborhood.

- **Policy NR3.2:** New developments adjacent to ongoing agricultural operations shall provide written notice to landowners and residents regarding potential noise, dust, odors, and other effects of adjacent agriculture.

- **Policy NR3.4:** New developments adjacent to ongoing agriculture shall incorporate design, construction, and maintenance techniques to minimize conflicts with adjacent agricultural uses, including, but not limited to the use of agricultural buffers.

- **Policy NR3.5:** Agricultural buffers are only required at the edges of Rural Community Boundary Areas and the Valley Growth Boundary where there are adjacent ongoing agricultural operations. Buffers are not required in areas adjacent to planned urban development shown on the General Plan Land Use Diagram.

- **Policy NR3.6:** Agricultural buffers are not required for portions of developments adjacent to existing rural residential development or adjacent to other types of development on parcels of primarily 5 acres or less.

- **Policy NR3.7:** Agricultural buffers should be designed to accommodate drainage, trails, roads, other facilities or infrastructure, community gardens, native landscaping, and other uses that would be compatible with ongoing agricultural operations and provide valuable services or amenities.

- **Action NR3.2: Agricultural/Urban Interface.** The County will develop and approve guidelines for the required location and design of agricultural buffers (Exhibit Natural Resources-4). Allowed land uses within buffer areas would include drainage swales, trails, roads, other facilities and infrastructure, community gardens, native landscaping, linear parkland, and other uses that are compatible with ongoing agricultural operations. Buffer guidelines will illustrate methods to avoid conflicts between ongoing agricultural uses and encroaching urban development. Buffers will be designed to avoid nuisance complaints related to dust, spraying, noise, and other relevant issues. The County's guidelines will provide guidance on the appropriate width of buffers. The width will depend on such factors as prevailing winds, crop types, agricultural practices, and other relevant factors. The width of roads, trails, drainage ways, other rights-of-way, and easements may count as part of the buffer.

  - Related Goals: Goal NR3, Goal HS1
  - Agency/Department: Community Development and Services Agency and Agricultural Commissioner
  - Funding Source: General Fund and/or fees

- Time Frame: The target date for approving guidelines for agricultural buffers is 2014

- **Policy NR8.1:** The County will strongly discourage residential developments outside Rural Community Boundary Areas in areas adjacent to ongoing mining operations.

- **Policy NR11.2:** In new development areas, service, utility, loading areas, roof-mounted equipment, and noise-generating equipment shall be screened, designed, and located to reduce visibility, odor, and noise to surrounding properties and pedestrian areas.

Conclusion

As described above, policies in the 2030 General Plan requires use of project-specific noise mitigation measures (preparation of acoustical analysis, design improvements, buffering between incompatible uses, dense roadway networks, re-location of land uses, and implementation of other noise abatement measures, as necessary) to mitigate noise impacts to sensitive land uses. Implementation of policies and actions in the 2030 General Plan, as described above, would reduce the potential for noise levels in areas of new noise-sensitive land uses to exceed the County's noise policies. The 2030 General Plan would also reduce noise generation in areas of existing and planned noise-sensitive land uses.

However, the County anticipates some development of noise-sensitive land uses in areas with unacceptable noise levels. The County anticipates a substantial increase in vehicular traffic along various County roadways, which could expose existing or planned sensitive uses to unacceptable levels of transportation noise. The County cannot demonstrate at this time that policies and actions in the 2030 General Plan would reduce impacts of each project and upon each project that could be developed under the General Plan to a less-than-significant level. The County has incorporated all feasible mitigation as General Plan policies and actions. The impact is considered **significant and unavoidable**.

IMPACT 4.11-3 Increases in Ambient Noise Levels. *Under the 2030 General Plan, future development of new noise-generating land uses could occur within areas containing noise-sensitive land uses. The impact is considered potentially significant.*

Under the 2030 General Plan, future development of noise-generating uses (e.g., industries, commercial loading docks, automotive maintenance facilities, recreational areas) in areas containing noise-sensitive land uses (e.g., residential dwellings, schools, hospitals, parks, hotels, places of worship, libraries) could cause noise levels to exceed acceptable limits as defined in Tables 4.11-10, 4.11-11, and 4.11-12 and described in Impact 4.11-2 above. Overall, an increase in population would result in increased noise from increased traffic and activities occurring at new development projects.

However, as described in Impact 4.11-2, policies and actions in the 2030 General Plan requires use of project-specific noise reduction measures (e.g., preparation of acoustical analysis, design improvements, re-location of land uses) to mitigate this impact. Implementation of policies and actions in the 2030 General Plan would reduce the potential for noise levels from new noise-generating land uses to increase ambient noise levels or exceed the noise standards contained in Tables 4.11-10, 4.11-11, and 4.11-12.

While in most locations and for most projects, compliance with General Plan policies and actions would reduce noise exposure to acceptable levels, the County cannot demonstrate at this time that no significant ambient noise exposure impacts could occur during buildout of the 2030 General Plan. The County has included all feasible mitigation as General Plan policies and actions. The impact is considered **significant and unavoidable**.

IMPACT 4.11-4 Increases in Vibration Levels. *Construction of projects accommodated under the 2030 General Plan could cause a temporary, short-term disruptive vibration if construction activities were to occur near sensitive receptors. Under the 2030 General Plan, future development of new vibration-sensitive land uses could occur*

within vibration-generating areas (e.g., railroads). However, the 2030 General Plan would also include policies and actions to reduce the potential for vibration levels to exceed established standards. This impact would be potentially significant.

Construction and demolition activities associated with future projects implemented under the 2030 General Plan have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used, the location of construction activities relative to sensitive receptors, and operations/activities involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The type and density of soil can also affect the transmission of energy. Table 4.11-13 provides vibration levels for typical construction equipment.

Table 4.11-13
Typical Vibration Levels for Construction Equipment

Equipment		PPV at 25 Feet (in/sec)	Approximate L_v at 25 Feet
Pile Driver (Impact)	Upper Range	1.518	112
	Typical	0.644	104
Pile Driver (Sonic)	Upper Range	0.734	105
	Typical	0.170	93
Large Bulldozer		0.089	87
Drill		0.089	87
Truck		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58
Significance Threshold		0.2/0.08 [1]	80

Notes: in/sec = inches per second; Lv = the velocity level in decibels referenced to 1 microinch per second and based on the root mean square velocity amplitude; PPV = peak particle velocity

[1] For normal residential buildings and for buildings more susceptible to structural damage, respectively.

Sources: Caltrans 2004: 26, FTA 2006: 12-12

The required construction equipment for future projects is not known at this time, but could include maximum generation of vibration from, pile drivers, trucks and bulldozers. According to the FTA, vibration levels associated with the use of such equipment would be approximately 0.089 in/sec PPV and 87 VdB (referenced to 1 μin/sec and based on the root mean square velocity amplitude) at 25 feet, as shown in Table 4.11-13. Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels would not exceed 0.2 in/sec PPV (Caltrans's recommended standard with respect to the prevention of structural damage for normal buildings), but would exceed 80 VdB (FTA's maximum-acceptable vibration standard with respect to human annoyance for residential uses) within 60 feet of vibration-sensitive receptors.

Depending on the nature of future projects, existing vibration-sensitive receptors could be located within 60 feet of proposed construction sites. Temporary, short-term vibration levels from project construction sources could exceed FTA's maximum-acceptable vibration standard of 80 VdB with respect to human response for residential uses (i.e., annoyance) at vibration-sensitive land uses. More importantly, if construction activities were to occur during more noise-sensitive hours, vibration from construction sources could annoy and/or disrupt the sleep of occupants of existing and proposed residences and expose persons to excessive groundborne vibration or groundborne noise levels.

Similarly, depending on the nature and location of future projects, new vibration-sensitive receptors could be located near an existing or future vibration-generating land use (e.g., railroad line, industrial facility). Vibration levels from existing or future vibration sources could exceed FTA's maximum-acceptable vibration standard of 80 VdB with respect to human response for residential uses (i.e., annoyance) at vibration-sensitive land uses. More importantly, vibration from existing or future sources could annoy and/or disrupt the sleep of occupants of existing and proposed residences and expose persons to excessive groundborne vibration or groundborne noise levels if vibration-generating activities were to occur during more noise-sensitive hours. Therefore, vibration levels exceeding standards established by Yuba County would represent a **potentially significant** impact.

Relevant Policies and Actions of the 2030 General Plan

The Public Health and Safety chapter of the 2030 Draft General Plan includes the following policies related to vibration:

- **Policy HS10.6:** New developments shall provide all feasible noise mitigation to reduce construction and other short-term noise and vibration impacts as a condition of approval.
- **Policy HS10.13:** New developments that propose vibration-sensitive uses within 100 feet of a railroad or heavy industrial facility shall analyze and mitigate potential vibration impacts, to the greatest extent feasible.
- **Policy HS10.15:** New developments that would generate substantial long-term vibration shall provide analysis and mitigation, as feasible, to achieve velocity levels, as experienced at habitable structures of vibration-sensitive land uses, of less than 78 vibration decibels.

Conclusion

As described above, policies in the 2030 General Plan requires use of project-specific vibration mitigation measures (preparation of vibration analysis and implementation of vibration abatement measures, as necessary and to the greatest extent feasible) to mitigate vibration impacts to sensitive land uses. Implementation of policies and actions in the 2030 General Plan, as described above, would reduce the potential for vibration levels in areas of new vibration-sensitive land uses to exceed the standards contained in Policy HS10.15 (78 VdB). Therefore, this impact is considered **less than significant**.

IMPACT 4.11-5 Noise Levels Near Airports. *Future development of noise-sensitive land uses would occur under the 2030 General Plan within areas that are affected by noise from airport operations. However, the 2030 General Plan would also include policies and actions to reduce the potential for noise levels to exceed established standards at noise-sensitive receptors. This impact would be* ***potentially significant****.*

With implementation of the 2030 General Plan, future development of noise-sensitive uses (e.g., residential dwellings, schools, hospitals, parks, hotels, places of worship, libraries) would occur in areas that are currently exposed to aircraft noise levels that exceed the current (65 dBA L_{dn} or CNEL for exterior areas) and proposed standards (45 dBA L_{dn} for interior areas). Specific areas in Yuba County that are exposed to airport operational noise levels that exceed standards include land uses near Beale Air Force Base, near Yuba County Airport, and near Brownsville Airport.

As described previously, each airport has an associated CLUP that shows noise contours for the airport and identifies allowable land uses within each noise contour. Policies in the Beale AFB and Yuba County Airport CLUPs are identical with respect to noise, with each stating development proposed between the 60 dBA and 65 dBA CNEL noise contour should be evaluated for impacts of aircraft noise and consider requiring noise reduction measures, aviation noise easements, and buyer-renter notification. Policies in the Brownsville Airport CLUP recommend future residential development, located within the established 65 dBA CNEL noise contour, is designed so that all habitable rooms limit interior noise to 45 dBA CNEL with windows closed. These CLUPs

also contain noise level criteria specifically for residential; manufacturing; transportation, communications, and utilities; wholesale trade; retail trade; business and personal services; shopping districts; public and quasi-public services; and recreation land uses. Noise levels exceeding standards established by Yuba County (refer to Tables 4.11-10, 4.11-11, and 4.11-12) or development of land uses incompatible with policies in CLUPs (Policies 2b and 2c in both Beale AFB and Yuba County Airport CLUPs and Policy 2b in the Brownsville Airport CLUP) would represent a **potentially significant** impact.

Relevant Policies and Actions of the 2030 General Plan

The Public Health & Safety Element of the 2030 General Plan includes the following policies related to noise generated at airports:

- **Policy HS4.3:** New construction within the Air Installation Compatibility Use Zone 65 dBA CNEL noise contours for the existing and potential future missions [at Beale AFB] shall use building materials and construction techniques to mitigate noise impacts.

- **Policy HS10.2:** If existing noise levels exceed the acceptable levels listed in Table 4.11-10, new developments are required to incorporate mitigation to reduce noise exposure in outdoor activity areas to the maximum extent feasible and include mitigation designed to achieve acceptable interior noise levels, as defined in Table 4.11-10.

- **Policy HS10.4:** If existing noise levels exceed the maximum allowable levels listed in Table 4.11-11, projects are required to incorporate mitigation to reduce noise exposure in outdoor activity areas to the maximum extent feasible and include mitigation to achieve acceptable interior noise levels, as defined in Table 4.11-10.

- **Policy HS10.11:** Lands within the 65 dBA CNEL noise contour of Beale Air Force Base, Yuba County Airport, and Brownsville Airport shall be maintained in agricultural, open space, commercial, industrial, or other uses permitted by the subject airport's adopted Comprehensive Land Use Plan (CLUP) and consistent with the recommendations of the Beale Joint Land Use Study, including noise contours associated with future hypothetical missions, as appropriate.

- **Action HS10.1: Airport Land Use Planning.** The County will coordinate development requests in areas addressed by Airport Comprehensive Land Use Plans (CLUPs) according to the land use restrictions embodied in those plans and will initiate amendments to the General Plan and revisions to zoning, if necessary, following updates to local CLUPs.

    - Related Goals: Goal HS10
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Project applicant funding
    - Time Frame: Ongoing, as projects are proposed within zones addressed by local CLUPs

Conclusion

As described above, policies in the 2030 General Plan requires use of project-specific noise mitigation measures (building design improvements, and implementation of other noise abatement measures, as necessary) and requires development of land uses be consistent with CLUPs to mitigate noise impacts to sensitive land uses. Implementation of policies and actions in the 2030 General Plan, as described above, would reduce the potential for noise levels in areas of new noise-sensitive land uses to exceed the standards contained in Tables 4.11-10, 4.11-11, and 4.11-12 or new noise-sensitive land uses be affected by noise from airport operations. Therefore, this impact is considered **less than significant**.

4.12 PUBLIC SERVICES AND FACILITIES

This section provides information on existing public services and facilities within Yuba County. Buildout of the 2030 General Plan is analyzed relative to public service provision. This section discusses environmental impacts related to service expansions or extensions that may be required to serve development accommodated under the 2030 General Plan. This section is organized according to type of community service, with each service analyzed individually. The following public service types are addressed in this section:

- fire protection;
- law enforcement;
- schools;
- parks and recreation services; and
- libraries.

Water services, wastewater, stormwater and drainage infrastructure, private utilities, and solid waste are addressed in section 4.14, "Utilities and Service Systems." This section incorporates information that was originally assembled on behalf of Yuba LAFCo to support the 2008 Countywide Municipal Service Review. For additional detail, please also consult the 2030 General Plan Background Report entitled, "Infrastructure, Public Facilities, and Public Services," available for review at the Yuba County Planning Department or online at: www.yubavision2030.org.

4.12.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

There are no relevant federal policies, regulations, or laws related to public services, as addressed in this EIR.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Fire Code

The California Fire Code includes specialized regulations related to construction, maintenance, and the use of buildings in relation to fire and safety. The extent of the code coverage pertains to fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to aid fire responders, industrial processes, and other fire safety requirements for new and existing buildings.

California Health and Safety Code

State fire regulations, set forth in Section 13000 et seq. of the California Health and Safety Code, include regulations for building standards, fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and child care facility standards, and fire suppression training.

State School Funding

California Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any development project for the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees. California Government Code Section 65995 limits the fee to be collected to the statutory fee unless a school district conducts a School Facility Needs Assessment (California Government Code Section 65995.6) and meets certain conditions.

Senate Bill 50 (Chapter 407, Statutes of 1998) instituted a new school facility program by which school districts can apply for state construction and modernization funds. This legislation imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development. It also provided the authority for school districts to levy fees at three different levels:

- **Level I fees** are the current statutory fees allowed under Education Code Section 17620. As mentioned above, this code section authorizes school districts to levy a fee against residential and commercial construction to fund school construction or reconstruction. These fees are adjusted every 2 years in accordance with the statewide cost index for Class B construction as determined by the State Allocation Board. As of January 2008 (when the fees were last adjusted), the maximum Level I fees are $2.97 per square foot for residential construction and $0.47 per square foot for commercial/industrial construction.

- **Level II developer fees** are outlined in Government Code Section 65995.5. This code section allows a school district to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multitrack year-round scheduling, having an assumed debt equal to 15–30% of the district's bonding capacity (the percentage is based on revenue sources for repayment), having at least 20% of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past 4 years that received at least 50% plus one of the votes cast. A facility needs assessment must demonstrate that the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next 5 years.

- **Level III developer fees** are outlined in Government Code Section 65995.7. This code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction if state funding becomes unavailable. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives state funding, this excess fee may be reimbursed to the developers or subtracted from the amount of state funding.

School Site Selection

The California Department of Education (CDE) School Facilities Planning Division (SFPD) has prepared the *Guide to School Site Analysis and Development* (CDE 2000), which provides criteria for locating appropriate school sites in California. CDE's authority for approving proposed sites is contained in Education Code Section 17251 and in Title 5, Section 14010 of the California Code of Regulations (CCR). CDE's approval is a condition for school districts to receive state funds for the acquisition of sites under the state's School Facilities Program administered by the State Allocation Board. Districts using only local funds are still encouraged to seek CDE approval for the benefits that such outside review can provide.

School site and size recommendations were changed by CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

CDE provides specific recommendations for school size in the publication *Guide to School Site Analysis and Development* (CDE 2000). This document suggests a ratio of 1:2 between buildings area and development grounds area. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, CDE's SFPD may approve an amount of acreage less than the recommended gross site size and building-to-grounds ratio.

Certain health and safety requirements for school site selection are governed by state regulations. The policies of the SFPD relating to the school siting criteria are discussed in detail below.

School Siting Criteria

The California Education Code contains various provisions governing the siting of new public schools (e.g., Education Code Sections 17211, 17212, and 17212.5). In addition, to help focus and manage the site selection process, CDE's School Facilities and Planning Division has developed screening and ranking procedures based on criteria commonly affecting school selection (Education Code Section 17251[b], 5 CCR Section 14001[c]). The highest priority on the criteria list is safety. Other site selection criteria require an analysis of the specific environmental constraints and land use concerns.

The foremost consideration in the selection of school sites is safety. Certain health and safety requirements are governed by state statute and CDE regulations. In selecting a school site, a school district should consider the following factors: proximity to airports, proximity to high-voltage power transmission lines, presence of toxic and hazardous substances, high-pressure gas lines, hazardous air emissions and facilities within one-quarter mile, and proximity to railroads.

CEQA Section 21151.8, the State CEQA Guidelines (CCR Section 15186[c]), and Education Code Section 17213(b) identify environmental requirements for school projects in addition to the standard environmental analysis requirements of CEQA. These additional requirements are intended to ensure that, before a school district approves a school project at a given site, the site is evaluated to identify potential health effects that could result from exposure to hazardous materials, wastes, emissions, and substances. The school district as lead agency is required to consult with other agencies in this regard, before a school project is considered for approval.

CEQA Section 21151.2 also requires that a school district give notice, in writing, to the appropriate planning commission of its intent to acquire title to property for a new school site or an addition to an existing school site. The planning commission is requested to investigate the proposed site and submit its recommendations concerning acquisition of the site to the governing board of the school district within 30 days of receiving notice. Following the required consultation, the school district's governing board must make written findings when taking action on the proposed school project.

These requirements are set forth here because the project applicant(s) and the County, in identifying school sites on the project site, have tried to be cognizant of school siting requirements and criteria to streamline future CEQA requirements to the extent feasible.

CEQA allows school districts to construct schools in areas where they would have certain hazard exposure, with construction subject to certain designs, mitigation, and findings. Even in an instance where certain hazards cannot be avoided or fully mitigated, districts can still approve construction of a school that would be subject to certain hazard exposure if alternative sites are similarly constrained or not available.

Quimby Act (California Code 66477)

The Quimby Act governs requirements for dedication of land and/or fees for park and recreational purposes as a condition of approval of a tentative map or parcel map. The Quimby Act provides two standards for the dedication of land for use as parkland. If the existing area of parkland in a community is greater than 3 acres per 1,000 persons, then the community may require dedication based on a standard of up to 5 acres per 1,000 persons residing in the subdivision. If the existing amount of parkland in a community is less than 3 acres per 1,000 persons, then the community may require dedication based on a standard of only 3 acres per 1,000 persons residing in the subdivision. The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance.

4.12.2 ENVIRONMENTAL SETTING

Below is a summary of existing conditions related to public facilities and services. For more detailed information, please refer to the General Plan Update Background Report – Infrastructure, Public Facilities, and Public Services – available online at: http://www.yubavision2030.org/Library.aspx and also available at the County Planning Department. Please also refer to the Countywide Municipal Service Review, which is available online at: http://www.burrconsulting.com/Yuba_LAFCO_MSR.htm or at the offices of the Yuba County Local Agency Formation Commission, 529 C Street, Marysville, CA 95901.

FIRE PROTECTION

In the unincorporated County, fire protection services are provided by the California Department of Forestry and Fire Protection (CAL FIRE), the US Forest Service (USFS), and several fire protection agencies, including:

- Camptonville Community Services District (CSD),
- Dobbins-Oregon House Fire Protection District (FPD),
- Foothill FPD,
- District 10-Hallwood CSD,
- Linda FPD,
- Loma Rica/Browns Valley CSD,
- Olivehurst Public Utilities District (OPUD),
- Plumas-Brophy FPD, and
- Smartsville FPD.

Fire protection services for Beale Air Force Base (AFB) are provided internally by the U.S. Air Force. Several of the fire protection districts contract with CAL FIRE and other fire agencies for services. For example, District 10-Hallwood CSD contracts with the Marysville Fire Department (MFD) for fire protection services, but owns and provides its own equipment and has an additional two on-call firefighters in addition to MFD firefighters. The Plumas-Brophy FPD entered into a joint powers agreement with the City of Wheatland to create the Wheatland Fire Authority (WFA)in which the District owns the equipment, but services are provided by WFA. The Loma Rica/Browns Valley CSD contracts with CAL FIRE for fire protection services.

The rural fire protection agencies are primarily volunteer departments. Camptonville CSD, Dobbins-Oregon House FPD, Foothill FPD, and Smartsville FPD are all volunteer departments, whereas the Valley fire protection agencies employ paid firefighters. The Linda FPD has both paid and volunteer firefighters, and OPUD employs some full time staff and on-call firefighters, who are paid for their time during incidents. Additional details regarding specific locations, service levels, staff, and equipment can be found in the Background Report prepared to support the 2030 General Plan.

Overall, the rural fire protection agencies do not serve areas with high levels of growth, and therefore did not identify substantial needs for new or expanded facilities and/or staff during preparation of the 2008 Yuba LAFCo Municipal Service Review.[1] However, the valley fire protection districts, particularly OPUD and Linda FPD, have experienced extensive growth over the past decade, and have expanded their facilities and staff as a result of development in Olivehurst-Plumas Lake and Linda areas. The General Plan Background Report reported that these fire protection agencies had already identified needs for new facilities, staff, and equipment to maintain and improve currently inadequate levels of service.

In the Yuba County foothills, the local fire protection agencies mentioned above are the lead agencies in emergency response and vehicle fires. For most structure fires and all wildfires, the fire becomes the jurisdiction of CALFIRE in State Responsibility Areas (SRA) and/or USFS in Federal Responsibility Areas (FRA). Although

[1] For more information, please refer to LAFCo's MSR website: http://www.burrconsulting.com/Yuba_LAFCO_MSR.htm.

CAL FIRE and the USFS's service areas are generally limited to SRAs and FRAs, respectively, they will provide assistance to the other fire protection agencies during a major incident, particularly wildfires.

LAW ENFORCEMENT

In Yuba County, the Yuba County Sheriff's Department (YCSD) and California Highway Patrol (CHP) provide law enforcement services in the unincorporated portions of the County, with the exception of Beale AFB, which provides its own law enforcement services.

In addition, the Marysville Police Department and Wheatland Police Department provide law enforcement services in the incorporated area of each city. Although the Marysville Police Department and Wheatland Police Departments may provide mutual aid during some incidents in the unincorporated portions of the County, those departments are not further addressed here because they primarily serve the incorporated areas, which are not addressed by the 2030 General Plan.

Yuba County Sheriff's Department

The YCSD provides police services, operates the Yuba County Jail, acts as the County Coroner, and administers various programs and operations aimed at providing public safety, including, but not limited to: patrol, search and rescue, field training, marine and aerial enforcement, narcotics unit, investigations units, an auto theft program, crisis negotiation, reserve officer and cadet programs, animal care services, and others.

The YCSD operates several facilities, including the Sheriff's Office and Jail, located at the County Courthouse in Marysville; the West Linda Substation; Olivehurst Substation; Plumas Lake Substation; and the Brownsville Substation. The YCSD also operates the County's animal care services office. The YCSD determined that the existing headquarters is not adequately sized to continue to provide these services and is in the process of planning a new facility. The Background Report prepared in 2007 stated that the YCSD anticipated that a new facility could be operational in 2010, but this has been postponed.

According to the General Plan Background Report, as of 2007, the YCSD had staff of 185 personnel, including 72 sworn staff, 52 of whom are Sheriff's deputies assigned to patrol responsibilities on four patrol beats throughout the County. In addition, the YCSD employs on-call reserve officers, who provide support to full time patrol staff when necessary. There are a minimum of seven Sheriff's deputies on duty at any given time.

Equipment owned by the YCSD includes 78 patrol cars, three patrol boats, and four quad runners. All patrol cars are equipped with Mobile Data Browsers, mapping software, and global positioning system (GPS) locaters to provide efficient patrol services. The YCSD also co-owns the Yuba County Command Post along with the Marysville Police Department, Wheatland Police Department, Office of Emergency Services, all Yuba County fire districts, and the Office of Health Services.

In 2008, the YCSD received a total of 35,201 calls for service, 13,457 of which were 911 calls (YCSD 2008).

California Highway Patrol

The California Highway Patrol (CHP) provides traffic control, investigation, and law enforcement services related to vehicles on state highways, freeways, and roads in the unincorporated County. In addition, the CHP has primary jurisdiction over roads used for major hazardous materials transport. There are eight CHP patrol beats in Yuba County, which operate out of an office located in Yuba City. The office serves both Yuba and Sutter Counties.

SCHOOLS

There are more than 14,000 K–12 students in Yuba County, who are served by five school districts in addition to the Yuba County Office of Education:

- Marysville Joint Unified School District,
- Plumas Lake Elementary School District,
- Wheatland Elementary School District,
- Wheatland Union High School District, and
- Camptonville Union School District.

In total, there are 33 public schools serving Yuba County students, including 19 public elementary schools, four public junior high or intermediate schools, three public high schools, three continuation high school, three charter schools, and one community college. A listing of public schools is provided in Table 4.12-1. This table was included in the 2007.

Table 4.12-1
Yuba County Schools

School	Location	Grades Served	Enrolled	Capacity
Marysville Joint Unified School District				
Elementary Schools				
Arboga	1686 Broadway, Marysville	K–6	427	267
Browns Valley	9555 Browns Valley School Road, Browns Valley	K–6	156	217
Cedar Lane	841 Cedar Lane, Marysville	K–6	615	786
Cordua	2830 Highway 20, Marysville	K–5	100	123
Covillaud	628 F Street, Marysville	K–5	460	497
Dobbins	Dobbins School Lane, Dobbins	K–6	87	144
Edgewater	5715 Oakwood Drive, Marysville	1-4 5–6 (2011–2013)	n/a	n/a
Ella	4850 Olivehurst Avenue, Olivehurst	K–6	528	591
Johnson Park	4364 Lever Avenue, Marysville	K–6	495	402
Kynoch	1905 Ahern Street, Marysville	K–5	637	861
Linda	6180 Dunning Avenue, Marysville	K–6	827	771
Loma Rica	5150 Fruitland Road, Marysville	K–5	154	214
Olivehurst	1778 McGowan Parkway, Olivehurst	K–6	522	635
Yuba Feather	18008 Oregon Hill Road, Challenge	K–8	178	387
Intermediate Schools				
Anna McKenney	1904 Huston Street, Marysville	6–8	551	648
Foothill	5351 Fruitland Road, Marysville	6–8	231	354
Yuba Gardens	1964 11th Avenue, Olivehurst	7–8	776	817

Table 4.12-1 Yuba County Schools				
School	Location	Grades Served	Enrolled	Capacity
High Schools				
Lindhurst	4446 Olive Avenue	9–12	1,367	1,458
Marysville	12 E. 18th Street, Marysville	9–12	957	1,296
Marysville Charter Academy for the Arts	1917 B Street, Marysville	9-12	361	n/a
Abraham Lincoln Independent Studies	1917 B Street, Marysville	n/a	395	n/a
North Marysville	1949 B Street, Marysville	9-12	53	n/a
South Lindhurst	4446 Olive Drive, Olivehurst	9-12	79	n/a
Plumas Lake Elementary School District				
Cobblestone	1718 Churchill Way, Plumas Lake	K-5	261	n/a
Rio Del Oro	1220 Zanes Drive, Plumas Lake	K–5	406	n/a
Riverside Meadows	1751 Cimarron Drive, Plumas Lake	6–8	312	n/a
Wheatland Elementary School District				
Lone Tree	123 Beale Highway, Beale Air Force Base	K–5	409	n/a
Wheatland	111 Hooper Street, Wheatland	K–5	427	n/a
Bear River	100 Wheatland Park Drive, Wheatland	6–8	415	n/a
Wheatland Charter Academy	711 W. Olive Street, Wheatland	K–12	132	n/a
Wheatland Union High School District				
Wheatland	1010 Wheatland Road, Wheatland	9–12	748	1,000
Camptonville Union School District				
Camptonville Elementary	16585 School Street, Camptonville	K–8	51	unknown
Source: California Department of Education 2009; Wheatland Union High 2007; Marysville Joint Unified 2008				

Background Report prepared to support the 2030 General Plan, but enrollment information has been updated with the latest available information from the California Department of Education for the 2008–2009 school year.

In addition, there are several parochial schools that teach within Yuba County that are operated by religious organizations, schools for students with disabilities, and other specialized schools operated by the various school districts, and the Yuba County Office of Education.

Marysville Joint Unified School District

The Marysville Joint Unified School District (MJUSD) is the largest school district in Yuba County and provides kindergarten through 12th grade education to County residents. The MJUSD teaches a total of 10,087 students district-wide and operates 14 elementary schools, three intermediate schools, two high schools, two charter schools, and three continuing education high schools. As of 2009, three schools had student enrollments over facility capacity: Arboga Elementary, Johnson Park Elementary, and Linda Elementary. Arboga Elementary school was approximately 60% over-enrolled. The remaining schools in the MJUSD operated below capacity.

Plumas Lake Elementary School District

Plumas Lake School District (PLSD) is a K–8 school district serving 991 students in southern Yuba County, an area that experienced substantial population growth during the 1990s and 2000s. The District currently has two kindergarten through fifth grade schools (K–5): Rio Del Oro Elementary and Cobblestone Elementary.

Riverside Meadows Elementary was formerly a K–8 school, but with the opening of Cobblestone Elementary in 2007, it now serves grades 6–8.

Due to substantial growth within the District's service area, enrollment is anticipated to continue to increase and more schools are planned to accommodate growth.

Wheatland Elementary School District

Wheatland Elementary School District (WESD) provides K–12 education to 1,383 students (excluding the charter school) living in the Wheatland area and at Beale AFB. WESD operates 2 elementary schools, one middle school, and a charter school.

Student enrollment in the WESD service area is highly variable due to the enrollment of students living at Beale AFB. WESD typically has a higher number of students in October, when military families transfer in, and a lower number of students in May, when military families transfer out. Student numbers range between 1,500 and 1,550 throughout the year and substantial student growth is not anticipated.

Wheatland Union High School District

Wheatland Union High School District (WUHSD) is a 9th—12th grade school district serving the City of Wheatland and the communities of Plumas Lake, Beale AFB, and Smartsville. WUHSD currently operates one school that has an enrollment of 788 students with 40 students at charter schools and the remaining 748 students at Wheatland Union High School. Wheatland Union High School is operating below capacity.

Camptonville Union School District

Camptonville Union School District (CUSD) has one K–8 school, which has been in continuous operation since 1871. During the 2008–2009 school year, Camptonville Elementary had an enrollment of 51 students, although the average enrollment is 70 students. CUSD also sponsors the Camptonville Academy, which is a large independent study charter school serving Yuba, Butte, Nevada, Placer, and Sierra counties. Camptonville Academy had an enrollment of 434 students enrolled at all grade levels.

Yuba County Office of Education

Yuba County Office of Education (YCOE) oversees the operation of all schools in Yuba County. The CDE estimates that there were approximately 14,341 students enrolled in Yuba County schools during the 2008–2009 school year (CDE 2009). YCOE forecasts Yuba County will have approximately 25,000 students within 10 years. YCOE directly operates three schools that provide for special education needs through a partnership between all school districts in Yuba County.

PARKS AND RECREATION PROVIDERS

Several agencies provide park and recreation services in Yuba County in addition to County parks, including the Cities of Marysville and Wheatland, OPUD, River Highlands CSD, Browns Valley Irrigation District (BVID), and Yuba County Water Agency (YCWA). For more detailed information on parks and recreational facilities in Yuba County, please consult the County's Parks Master Plan, which is available online at:

http://www.co.yuba.ca.us/Departments/Community%20Development/Public%20Works/PARKS/Park_Master_Plan.aspx and at the County Public Works Department, 915 8th Street, Suite 125, Marysville, CA 95901.

Three County Service Areas (CSAs) provide funding mechanisms for some parks, but do not operate the parks. The County and OPUD are the largest park providers in the County. The other park providers have one or two facilities: River Highlands CSD owns a single 1.8-acre park, but the park is currently undeveloped; BVID owns the Collins Lake Recreation Area, but the recreational facilities are leased and operated by a concessionaire; and YCWA owns lake recreation facilities at Lake Francis and New Bullards Bar Reservoir.

Yuba County

Yuba County operates County-owned public parks and provides park services. In total, there are nine local parks, and one regional park: Hammon Grove Park-Sycamore Ranch. Each County-owned park provides various forms of recreation. For example, Star Bend Boat Launch has river access and boat launching facilities. Hammon Grove-Sycamore Ranch Park includes fishing, hiking, horseshoe pits, barbeques, camping, and stage facilities. Playground, basketball, and tennis facilities are available at Friendship Park. Fernwood Park has a children's playground and picnic tables. Both Purple Heart and Ponderosa Parks provide walking trails. Ponderosa has tennis and baseball facilities. POW-MIA Park has facilities for basketball, softball, and a water park.

Yuba County is in the process of planning for new park facilities, including a County-wide trail system, and has identified needs for improvements to existing facilities, as well as the need for recreational programming and at some of the County facilities in the Yuba County Parks Master Plan, adopted in 2008.

Olivehurst Public Utilities District

OPUD owns and maintains 13 public parks (including 12 neighborhood parks and one community park), a youth center, and a public swimming pool on a total of 41 acres of developed parkland. Most of OPUD's parks are relatively new, in particular those located in the new developing community of Plumas Lake, so any park facility deficiencies are generally limited to the parks in Olivehurst. OPUD is in the process of planning for several more parks to accommodate new growth in the Plumas Lake Specific Plan Area.

LIBRARIES

The Yuba County Library provides library services from its main facility in the City of Marysville. Services include an interlibrary loan program, programs for children of all ages, internet computers and wireless access, and multimedia resources for loan. Library resources, including Ebooks are available from the library's website http://library.yuba.org. Books by Mail and an automated library dispenser are being beta-tested as means of providing services in remote areas of the county.

The library's archival collection, housed in the California Room, is a rich resource of local history and is available to the public during regular library hours. The library is open Tuesday through Saturday.

4.12.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

Impacts related to public facilities were identified by comparing existing service capacity and facilities, staffing, and equipment against future demand associated with 2030 General Plan buildout. The County describes, at a programmatic level, the new or expanded public facilities that may be required to serve development accommodated under the 2030 General Plan. The impact analysis focuses on whether or not the construction of public facilities could result in adverse impacts on the physical environment.

Goals, policies, and actions of the 2030 General Plan that would reduce impacts related to public facility expansion and construction are identified and considered in the analyses presented throughout this EIR. As future public investments are considered, the County will review projects for environmental impacts, applying General Plan policy and required site-specific mitigation to reduce impacts, as appropriate and feasible.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact related to public services and facilities is considered significant if the proposed project would:

- 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, to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - fire protection,
    - police protection,
    - schools,
    - parks, or
    - 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.
- require or include the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

IMPACT ANALYSIS

IMPACT 4.12-1 Demand for Additional Fire Protection and Emergency Services Facilities. *Implementation of the 2030 General Plan would result in an increase in population in Yuba County and increase the demand for fire protection services, which would result in the need for additional and/or expanded fire protection facilities. This impact would be less than significant.*

The 2030 General Plan would accommodate development in new growth areas, as well as redevelopment in existing communities. Rural communities could experience development, as well. The General Plan would accommodate construction of new physical structures and population, which would create additional demand for fire protection services, over current demand levels.

Some land use change and development accommodated under the General Plan would continue to be served by existing facilities without the need for expansions or new construction. However, buildout of the General Plan would increase the demand for services that would likely require the construction of new fire protection and emergency response facilities in order for the relevant fire protection agencies to meet their level of service standards, including response times, if applicable. In the event that one of the fire protection agencies requires the development of additional fire protection facilities in order to maintain current levels of service, the construction of new facilities could have adverse effects on the physical environment.

The majority of new development under the 2030 General Plan would occur within the Valley Growth Boundary. It is expected that new fire protection facilities associated with development within the Valley Growth Boundary would be constructed within developed areas within the Valley Growth Boundary identified on the County's Land Use Diagram. Fire protection facilities, along with other public facilities, would be expected to be located within the overall footprint of development envisioned as part of the 2030 General Plan in the Valley Growth Boundary.

It is not possible at this time to describe the precise location and characteristics of fire response facilities that may be required. Land use change that occurs in Rural Communities served by foothill fire protection districts could require additional facilities. However, these facilities would be expected to be developed within Rural Community areas, the development of which is considered throughout the environmental chapters of this EIR. The impacts of construction and operation of facilities serving the Valley Growth Boundary and Rural Communities are included in the programmatic analyses described throughout this EIR. Both direct and reasonably foreseeable indirect adverse effects are analyzed at a programmatic level in each of the individual subject area sections of this EIR.

Fire protection services would be especially important in development areas with higher risk of wildfire, which includes the Rural Communities located in the foothills. Many of Yuba County's residential communities—Smartsville, Dobbins, Browns Valley, Loma Rica, Brownsville, and Challenge, for example—are located in areas of high or very high fire hazard (see Exhibit 4.12-1).In these areas, more rugged topography, development intermixed with dense vegetation, and more limited access to properties and roads increase the potential for wildfires. In addition, most of the fire protection agencies serving such areas are small, volunteer departments with limited manpower and equipment resources. Although major growth is not anticipated in the Rural Communities, some new development, particularly of service uses for rural residences, could occur. Any such development would need to conform to existing fire codes and regulations associated with defensible space, fire-resistant building materials, fire sprinkler systems, fire flow requirements, etc.

The 2030 General Plan describes the County's updated policy approach to many of these issues. The General Plan provides an overall guide for development and conservation in the County over the long-term, including ensuring adequate access to the full range of public services, facilities, and infrastructure. To support the County's goal for fire protection, the 2030 General Plan includes policies intended to maintain adequate levels of service for fire protection for both existing and new residents.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan provides a number of policies and actions to The 2030 General Plan contains the following policies and actions designed to "Protect people and property from wildland and urban fire risk and create more fire-resilient communities" (Goal HS2 of the Public Health & Safety Element). These policies and actions related to the provision of fire response and suppression services in the County, but also have the effect of reducing fire risk and the need for response. Following are relevant policies and actions from the 2030 General Plan:

- **Policy CD15.2:** New developments shall provide for their fair-share cost of providing infrastructure, facilities, and services to serve such development.

- **Policy CD15.3:** New developments will be required to designate lands in appropriate locations, sizes, and free of constraints to accommodate public facilities and infrastructure needed to serve such development and/or pay a fair-share fee for land acquisition.

- **Policy CD15.4:** The County's impact fees will be revised to consider cost efficiencies associated with compact, mixed-use, age- or income-restricted, and infill development.

- **Policy HS2.1:** Prior to approval, new developments proposed in areas of very high, high, or moderate fire hazard, as designated on maps maintained by Cal Fire, shall demonstrate compliance with Fire Safety Regulations and local regulations for defensible space, ignition-resistant construction materials, property maintenance to reduce fuels, natural hazards disclosure requirements, emergency access and multiple access points, availability of water for fire suppression, and other relevant building and development standards.

- **Policy HS2.2:** The County will communicate with appropriate local, state, and federal fire protection personnel during the development review process and will condition projects considering input from these

agencies to require defensible space, fire-wise landscaping, fuel breaks, emergency access, fire flow, hydrants, sprinkler systems, fire stations and other improvements and conditions, as appropriate.

- **Policy HS2.3:** New development projects shall pay on a fair-share basis for fire stations, equipment, and other fire suppression improvements necessary to provide adequate fire protection services.

- **Policy HS2.4:** All community water systems serving new development projects are required to meet or exceed County minimum standards for provision of water for fire flows.

- **Policy HS2.5:** Road and building construction on slopes of more than 15%is strongly discouraged and will only be approved if consistent with County standards and the Yuba County Wildfire Safety Plan. **Policy HS2.6:** The County will seek funding for, and cooperate with efforts to protect watersheds, reforest areas, and restore ecosystems affected by wildfire.

- **Policy HS2.7:** The County will use the best available science t**o evaluate an**d protect people and property from changes in fire risk attributable to climate change, insects, and disease.

- **Policy HS2.8:** Communication and electricity infrastructure in areas prone to wildfire should be located and designed to avoid interruptions during periods of fire activity.

- **Policy HS2.9:** Public trails and unimproved roads should be maintained, where feasible, to provide emergency access, including evacuation and wildfire response. These rights-of-way are not considered primary evacuation or emergency access routes and vehicles that cannot successfully navigate these routes shall not make use of them.

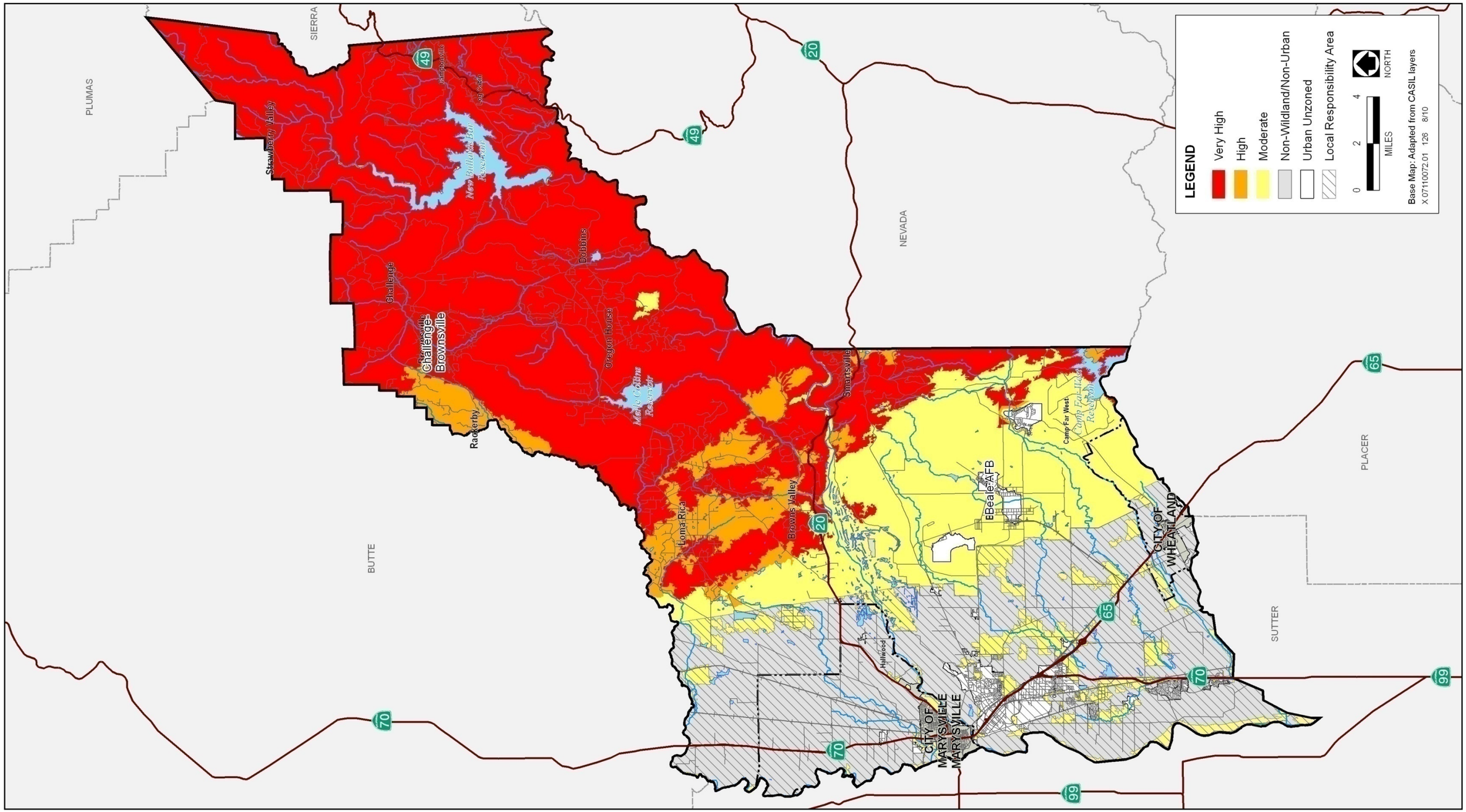
- **Policy HS2.10:** New developments shall provide access that will allow safe evacuation and movement of firefighting equipment during a wildfire. . Evacuation routes shall have the capacity to accommodate traffic in relation to the population served. **Policy HS2.12:** Property owners may manage fuel load on County road easements and rights-of-way adjacent to their properties with prior approval **of the County** and in compliance with applicable County standards.

- **Policy HS2.13:** Clustered developments in Rural Community portions of the foothills are encouraged to take advantage of natural and manmade fire breaks, provide defensible space for clusters of buildings (rather than individual buildings), locate and orient buildings and pervious areas to reduce fire risk, avoid areas of steep topography and dense vegetation, and otherwise use a site plan review process in coordination with County staff to ensure that wildfire risk is minimized.

- **Policy HS2.14:** The County will encourage the retrofitting of older buildings to current safety standards in coordination with proposed major remodeling or additions.

- **Policy HS2.15:** Developments in the Valley Growth Boundary shall be planned and constructed to resist the encroachment of uncontrolled fire.

- **Action HS2.1:** Fire Standards. The County will maintain a planning and entitlement review process that documents compliance with state and local standards for fire safety. The County will update zoning, development, improvement standards, and building standards, as necessary, to maintain compliance with relevant fire codes, including those maintained by Cal-Fire. County codes would be anticipated to address such topics as landscaping standards and fire-resistant plant materials, fire resistant building materials for exterior walls and other exterior features of structures, defensible space standards for different topographic conditions, sprinklers, emergency access, water supply and pressure for firefighting, building and road construction in areas prone to fire risk and greater slopes, and other relevant topics.



Source: California Department of Forestry and Fire Protection 2008.

Fire Risk Severity Zones **Exhibit 4.12-1**

- Related Goals: Goal HS2
- Agency/Department: Community Development and Services Agency; Office of Emergency Services; Yuba Watershed Protection and Fire Safe Council
- Funding Source: Grants, development fees, and other funding sources, and if necessary, General Fund
- Time Frame: Ongoing, as necessary to maintain consistency with relevant fire codes.

► **Action HS2.2:** Yuba County Wildfire Safety Plan. The County will prepare, adopt, and implement a comprehensive wildfire safety plan for foothills portions of the County with high and very high wildfire risk. This plan will be designed to reduce fuel loads, ensure emergency access and evacuation routes, and provide incentives for property owners to improve properties in order to reduce wildfire risk and improve fire resiliency for existing developed areas.

As a part of this planning effort, the County will collaborate with other public agencies and nonprofits to implement fire breaks and fuel reduction projects in areas of high and very high fire risk, including removal of invasive species that increase understory fuel loads. Areas of particular focus could include County roads, ridges surrounding rural communities, and defensible space around existing structures. The County will seek funding from sources, such as the Bureau of Land Management and the U.S. Department of Agriculture, for fire fuel reduction projects. The County, will collaborate with land owners in fire prone areas without adequate secondary access to improve access, add water tanks, or otherwise improve fire safety conditions.

The County will seek funding to provide incentives for property owners to retrofit existing structures in high and very high fire risk areas to reduce combustibility.

Planning for emergency access and evacuation routes will take into account records of historic fire activities affecting foothills portions of the County. Emergency access and evacuation will also take into account fire behavior modeling, including consideration of wildfire driven by winds that could limit the use of existing evacuation routes. The County will analyze and consider planning and fair-share funding of improvements needed to provide for emergency access and evacuation routes generally leading away from the head of a wildfire that has the characteristics of the worst-case predicted wildfire and secondary access allowing egress oriented in a direction of approximately 180 degrees from the previously described route.

The County would examine fair-share funding approaches and grant funding approaches for improvements needed to provide adequate emergency access and evacuation.

Related Goals: Goal HS2

- Agency/Department: Community Development and Services Agency; Office of Emergency Services; Yuba Watershed Protection and Fire Safe Council
- Funding Source: State and federal grants, other State or federal funding, and private funding from landowners of affected properties.
- Time Frame: As funding is available.

► **Policy HS7.1:** The County will assess risks associated with public investments and other County-initiated actions, and new private developments shall assess and mitigate hazardous materials risks and ensure safe handling, storage, and movement in compliance with local, state, and federal safety standards.

- **Policy HS9.1:** The County will review development projects, plans, and public investment decisions to ensure consistency with the Multi-Jurisdictional Multi-Hazard Mitigation Plan.

- **Policy HS9.3:** The County will coordinate with Caltrans to maintain Highways 20, 70, 49, and 65 in the lower half of the County and the County will maintain Marysville Road, Frenchtown Road, and La Porte–Quincy Road in the upper half of the County as primary emergency access and evacuation routes and improve other roads, as necessary, such as Plumas Arboga Road, to create additional evacuation routes (Exhibit Public Health & Safety-11).

- **Policy HS9.4:** The County's development and improvement standards will require a circulation system with multiple access points, adequate provision for emergency equipment access, and evacuation egress.

- **Action HS9.1: Emergency Access and Evacuation Routes.** The County will seek funding to implement Action Items listed in the Multi-Hazard Mitigation Plan and future revisions to this Plan, including those actions intended to avoid flooding over emergency access routes. The County will consider, as a part of future revisions to the Multi-Hazard Mitigation Plan, whether new growth accommodated under the General Plan will require improvements to circulation or drainage in order to ensure adequate emergency access and evacuation egress, even in the event of a flood. As noted in Action HS1.2, the County will collaborate with Wheatland and Marysville on development of a flood emergency plan.

    - Related Goals: Goal HS9
    - Agency/Department: County Office of Emergency Services
    - Funding Source: Grant funding
    - Time Frame: Ongoing, as funding is available

- **Policy CD12.5:** New developments shall demonstrate the availability of adequate fire flow pressure, storage, system gridding, hydrant spacing, and sprinkler systems prior to approval.

- **Policy CD12.6:** The County will condition new developments and collaborate with local fire districts to locate stations so that first fire response can be provided within 6 minutes in 95% or more of cases within the Valley Growth Boundary.

- **Policy CD12.7:** The County's target for fire protection is an ISO (Insurance Service Organization) rating of no greater than 5 within the Valley Growth Boundary and no greater than 8 for Rural Communities.

- **Policy CD20.1:** New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided, wherever feasible.

- **Policy CD20.2:** New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.

- **Policy CD20.3:** New developments shall connect with adjacent roadways and stubbed roads and shall provide frequent stubbed roadways in coordination with future planned development areas. Plans and projects shall connect to adjacent planned development areas and adjacent roadways at a minimum of 600-foot intervals. This minimum interval does not apply to development areas that are adjacent to existing or planned future limited-access highways, freeways, or expressways, or other areas where physical constraints would make this level of connectivity infeasible.

- **Policy CD20.5:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be

significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.

- **Policy CD20.6:** The maximum allowable length of a cul-de-sac within the Valley Growth Boundary is 400 feet unless an exception is approved by the Community Development Director in consultation with local emergency service providers. Where cul-de-sacs are allowed, they should incorporate bicycle/pedestrian through access, where feasible.

- **Policy CD20.8:** Speed bumps, which can inhibit connectivity and emergency access, are discouraged as a method of traffic calming.

Conclusion

Implementation of these policies and actions from the 2030 General Plan listed above would ensure that new development, including potential development that could occur in higher wildfire risk areas in the foothills, is in compliance with fire codes and regulations designed to reduce the risk of a catastrophic wildfire. The County's proposed policies and actions also address fire response and the provision of fire protection. The 2030 General Plan addresses funding and construction of fire protection service facilities to serve new development. The 2030 General Plan also addresses the wide range of public health and safety problems that could lead to the need for emergency response, reducing the potential for such problems and ensuring the effectiveness of response, if needed.

Land use change accommodated under the 2030 General Plan was analyzed and is reported in throughout Section 4.0 of this EIR. The EIR analysis includes development of housing, businesses, and civic uses, including fire stations that may be needed to serve development at buildout of the General Plan. Although the number, location, and design of fire stations needed to serve development in the unincorporated County is unknowable at this time, the EIR has used generalized assumptions for the overall amount of acreage that could be disturbed by development under the General Plan and the overall amount of land use change and development that could occur at buildout. These assumptions include acreage and building construction for fire stations, as well as the full range of complementary uses. The 2030 General Plan also includes policies and actions that would reduce or avoid impacts, as noted throughout Section 4.0 of this EIR.

There is no additional significant impact related to construction of these facilities beyond that which is comprehensively analyzed throughout this EIR. As appropriate, future facility construction plans would be subject to project-level CEQA analysis and mitigation, further ensuring compliance with regulations and allowing additional opportunities for mitigation, if necessary. The impact is **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.12-2 Demand for Additional Law Enforcement Facilities. *Implementation of the 2030 General Plan would accommodate an increase in population and commerce in Yuba County, thereby increasing the demand for police protection and law enforcement services, which could result in the need for additional and/or expanded police protection facilities. This impact would be less than significant.*

The 2030 General Plan would accommodate development in new growth areas, as well as redevelopment in existing communities. Rural communities could experience development, as well. The General Plan would accommodate construction of new physical structures and population, which would create additional demand for law enforcement, over current demand levels.

Some land use change and development accommodated under the General Plan would continue to be served by existing Sheriff's facilities without the need for expansions or new construction. However, buildout of the General Plan would increase the demand for services that would likely require the construction of new law enforcement facilities.

It is not possible at this time to describe the precise location and characteristics of law enforcement facilities that may be required to serve the unincorporated County at buildout of the General Plan. However, most new development under the 2030 General Plan would occur within the Valley Growth Boundary and the County anticipates that any additional Sheriff stations or substations that are needed to serve development within the Valley Growth Boundary would be constructed in development areas identified on the County's Land Use Diagram. Although new facilities would not be expected in Rural Communities, if there is such a need, the County anticipates that new stations or substations would be located within Rural Community areas, the development of which is considered throughout the environmental chapters of this EIR.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan describes the County's updated policy approach to public services and facilities provision, including law enforcement. The General Plan provides an overall guide for development and conservation in the County over the long-term. The updated General Plan also provides policy guidance related to casual surveillance within communities. These policies are designed to increase community awareness of issues related to criminal activity and to make law enforcement surveillance and response more effective. The 2030 General Plan contains the following policies related to law enforcement:

- **Policy CD12.9:** The County's targets for law enforcement is to provide one officer per 1,000 persons within the unincorporated area and to provide an average response time of 5 minutes or less for Priority 1 emergency calls within the Valley Growth Boundary.
- **Policy CD15.2:** New developments shall provide for their fair-share cost of providing infrastructure, facilities, and services to serve such development.
- **Policy CD15.3:** New developments will be required to designate lands in appropriate locations, sizes, and free of constraints to accommodate public facilities and infrastructure needed to serve such development and/or pay a fair-share fee for land acquisition.
- **Policy CD15.4:** The County's impact fees will be revised to consider cost efficiencies associated with compact, mixed-use, age- or income-restricted, and infill development.
- **Policy CD8.8:** New developments shall use porches, stoops, windows, and other elements that provide "eyes on the street" onto yards, entrances, streets, and other public and semi-public places.
- **Policy CD8.9:** Fences and walls are discouraged along public travelways where they would present substantial barriers to casual surveillance or multi-modal travel.
- **Policy CD20.1:** New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided, wherever feasible.
- **Policy CD20.2:** New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.

- **Policy CD20.3:** New developments shall connect with adjacent roadways and stubbed roads and shall provide frequent stubbed roadways in coordination with future planned development areas. Plans and projects shall connect to adjacent planned development areas and adjacent roadways at a minimum of 600-foot intervals. This minimum interval does not apply to development areas that are adjacent to existing or planned future limited-access highways, freeways, or expressways, or other areas where physical constraints would make this level of connectivity infeasible.

- **Policy CD20.4:** The County discourages the use of sound walls within neighborhoods. Traffic dispersal on a finely connected network of smaller roadways and other planning and site design solutions should be used instead of sound walls to address noise issues, to the greatest extent feasible.

- **Policy CD20.5:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.

- **Policy CD20.6:** The maximum allowable length of a cul-de-sac within the Valley Growth Boundary is 400 feet unless an exception is approved by the Community Development Director in consultation with local emergency service providers. Where cul-de-sacs are allowed, they should incorporate bicycle/pedestrian through access, where feasible.

- **Policy CD20.8:** Speed bumps, which can inhibit connectivity and emergency access, are discouraged as a method of traffic calming.

- **Policy HS9.3:** The County will coordinate with Caltrans to maintain Highways 20, 70, 49, and 65 in the lower half of the County and the County will maintain Marysville Road, Frenchtown Road, and La Porte–Quincy Road in the upper half of the County as primary emergency access and evacuation routes (Exhibit Public Health & Safety-12).

- **Policy HS9.4:** The County's development and improvement standards will require a circulation system with multiple access points, adequate provision for emergency equipment access, and evacuation egress.

Conclusion

Implementation of the proposed 2030 General Plan policies would ensure that police facilities and services would be funded and constructed, as needed, to serve new development. The 2030 General Plan also includes policies that will better allow citizens to monitor their communities for criminal activity, and that will allow law enforcement provide more effective surveillance. The General Plan also requires connected roadway systems designed to improve emergency access and allow increase route choices to reach any given destination.

The County has developed buildout assumptions that encompass land use change that could be accommodated under the 2030 General Plan. These buildout assumptions were used in the analyses that are reported in throughout Section 4.0 of this EIR. The EIR analysis includes development of housing, businesses, and civic uses, including fire stations that may be needed to serve development at buildout of the General Plan. Although the number, location, and design of law enforcement facilities needed to serve development in the unincorporated County is unknowable at this time, the EIR has used generalized assumptions for the overall amount of acreage that could be disturbed by development under the General Plan and the overall amount of land use change and development that could occur at buildout. These assumptions include acreage and building construction for law enforcement facilities along with the full range of complementary uses. The 2030 General Plan also includes policies and actions that are specifically designed to reduce or avoid environmental impacts of construction, including construction of public facilities. The policies and actions related to each environmental topic area are noted throughout Section 4.0 of this EIR.

There is no additional significant impact related to construction of law enforcement facilities beyond that which is comprehensively analyzed and reported throughout this EIR. As appropriate, future facility construction plans would be subject to project-level CEQA analysis and mitigation, further ensuring compliance with regulations and allowing additional opportunities for mitigation, if necessary. The impact is **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.12-3 **Demand for Additional School Facilities.** *Implementation of the 2030 General Plan would accommodate a population increase in the unincorporated areas of Yuba County, which also increase the number of school-aged children requiring educational services. The increased demand for services could result in the need for new or expanded school facilities. However, the environmental effects of such facilities expansion are analyzed throughout the environmental subsections of Section 4.0 of this EIR and there are no additional significant impacts beyond that which is already fully addressed. In addition, school impact fees will be required to address increased demand for educational services. This impact is considered* ***less than significant****.*

Implementation of the 2030 General Plan would accommodate new residential development in unincorporated Yuba County, which would increase population, including school-aged children requiring educational services. Considerable population growth could occur within all of the County's school districts if the General Plan is fully built out, with the exception of Camptonville School District, which would likely not experience substantial growth. School districts that could experience substantial population increase include:

- Marysville Joint Unified School District (MJUSD),
- Plumas Lake Elementary School District,
- Wheatland Elementary School District, and
- Wheatland Union High School District.

MJUSD was the only school district that reported any overcrowded facilities during the interviews and analysis that supported the 2008 LAFCo Municipal Services Review. MJUSD serves many areas that could experience substantial population growth under buildout of the 2030 General Plan. With crowded conditions in some of the District's schools, additional population growth could lead to the need for school expansions or new facility construction. In other areas of the County served by other school districts, population growth accommodated under the General Plan could potentially lead to the need for additional school expansions or new facility construction.

The construction of school facilities could have a wide range of aesthetic, air quality, biological resources, cultural resources, geologic, hydrology and water quality, hazards, transportation, and other types of impacts. However, land use assumptions were derived in order to characterize the overall level of land use change that could occur under the 2030 General Plan. These generalized land use assumptions include assumptions for school facilities. The transportation analysis that supports the General Plan and this EIR includes assumptions on growth in enrollment among the assumptions for land use change. The environmental subsections included in Section 4.0 of this EIR present programmatic analysis of total land use change with buildout of the 2030 General Plan, including construction of school facilities.

Although the 2030 General Plan does not identify specific school sites, the County's policies are intended to ensure that new schools are located near the development they serve. The County's 2030 General Plan calls for coordination with school districts in planning efforts to ensure adequate facilities and appropriate school site locations. But, the County does not control the location, design, construction, or operation of the schools. The actual location, number, and design of new schools that may be needed over the course of General Plan implementation is not knowable at this time. This will depend on the pace, location, and character of residential

development, future regulations and standards of the California Department of Education, and changes in the County's demographics, among other factors. New development is required by state law to pay school impact fees to school districts and provide sites for new schools. As new development occurs, new schools will be developed to accommodate the growth.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes the following policies to address schools:

- **Policy CD5.1:** Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks, and other civic uses.
- **Policy CD11.1:** The County will encourage provision of high-quality parks and recreational areas, schools and other public services, retail, housing options, cultural attractions, walkability, and other amenities, in order to attract future employers.
- **Policy CD12.10:** The County will ensure that new development projects provide impact fees, land dedication, school construction, or other measures acceptable to local school districts to ensure adequate educational facilities.
- **Policy CD12.13:** The County shall take advantage of opportunities to develop, enhance, and maintain library services in coordination with local school districts, Yuba College, and other interested agencies.
- **Policy CD14.5:** The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.
- **Policy CD14.7:** The County will support joint-use facilities, shared maintenance, and projects with other local service agencies and districts that are coordinated to provide enhanced public levels of service and/or long-term cost savings.
- **Policy CD14.8:** The County will support and encourage joint-use parks for school and community use, joint-use parks for recreational and drainage conveyance and detention, joint-use libraries for school and community use, and other appropriate joint-use facilities. The County will encourage the use of schools as community centers to provide a range of services.
- **Policy CD15.8:** The County will encourage the joint use of parks for school and public use, as well as stormwater detention, as appropriate.
- **Policy CD17.2:** The County will coordinate approval of projects and plans with local transit providers to ensure that transit service is provided for work, shopping, school, and other types of trips within the Valley Growth Boundary.
- **Policy CD17.3:** The County will coordinate with Yuba College to provide housing and commercial services within walking and bicycling distance of the Linda campus and plan for convenient and safe pedestrian, bicycle, and transit options for students attending Yuba College.
- **Policy CD19.13:** Secure bicycle parking shall be provided at or near public buildings, business districts, parks, playgrounds, shopping centers, schools, transit terminals, bus stops, and other bicycle traffic generators.
- **Policy HS7.5:** The County will support compliance with state law regarding the location of school sites and sources of hazardous air emissions to ensure against endangerment of public health.

- **Policy HS9.2:** The County will provide public access to emergency response procedures in such locations as the Government Center, the County library, and public schools and will otherwise promote awareness of emergency response and evacuation plans.

- **Policy NR1.8:** Local parks should be located central to the neighborhood they serve and designed to encourage pedestrian and bicycle access.

Conclusion

Policies identified in the 2030 General Plan are intended to ensure that new neighborhoods include conveniently-located schools to serve new population and that there is funding available via impact fees on new development to expand or construct new school facilities. The General Plan also presents various strategies designed to make more efficient use of land in public and private development and take advantage of opportunities to make joint use of public facilities for multiple purposes.

Buildout of the 2030 General Plan could accommodate an increase in enrollment within most of the County's school districts. If increased enrollment leads to the need to expand or construct new facilities, there could be environmental impacts associated with such expansion and construction. However, the construction of school facilities is considered along with other types of land use change and development in the environmental subsections of Section 4.0 of this EIR. There is no additional significant impact related to construction of school facilities beyond that which is comprehensively analyzed and addressed throughout this EIR.

As appropriate, subsequent environmental analysis may be required once specific locations of schools are determined. Site-specific approaches to mitigating impacts may apply. School impact fees would be collected in accordance with SB 50 (1998) to ensure the development of adequate school facilities, and State law dictates that payment of these fees is considered to be adequate mitigation under CEQA. Therefore, this impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

IMPACT 4.12-4 Need for New or Expanded Parks and/or Recreation Facilities and Potential for Accelerated Deterioration of Existing Parks. *Implementation of the 2030 General Plan would result in an increase in population in Yuba County, which would result in an increase in demand for parks and recreation services and require the construction of additional and/or expanded parks and recreation facilities. The construction of facilities could potentially have adverse impacts on the physical environment. Increased population in the unincorporated County could result in heavier use of existing parks within and outside of the unincorporated County, which could lead to accelerated deterioration of such facilities. The General Plan provides the policy direction necessary to fund and construct parks and recreational facilities needed to respond to increased demand. However, this would depend on the cooperation of agencies outside the County's direct control. Therefore, the impact is considered* ***potentially significant****.*

Implementation of the 2030 General Plan would result in the development of new residences in Yuba County, which would add new population and increase demands for services and public facilities, including parks and recreation services. This would require the development of new parks to accommodate this increased need. In addition, this additional population would be likely to use existing park facilities. It is likely that, for local and community-serving parks, residents would use park facilities closest to their homes. Regional serving park facilities would be anticipated to have a broader draw. If new parks are not developed to meet new demand or if existing park facilities are not properly maintained, it is possible that population growth in the unincorporated County could accelerate the physical deterioration of existing facilities. To ensure a high level of service, provide adequate parks and recreation services to County residents, and prevent the overuse of existing park facilities, the

proposed 2030 General Plan includes policies that would encourage the development of new high-quality park facilities and the placement of parks within walking distance of all new development. In addition, in-lieu fees provided by new development could be used by the County to improve, expand, and maintain existing County parks to ensure that accelerated deterioration does not occur.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan includes a Recreational Open Space Diagram, which depicts the general location of existing and future parks, trails, and other types of recreational open space needed to serve County residents and visitors during this General Plan time horizon. The County's Parks Master Plan presents similar information, but at a higher level of detail. The General Plan identifies conceptual locations for regional and local parks. Parks will be sized, located, designed, and developed with amenities suited to local needs and preferences. Realization of the Recreational Open Space Diagram will involve coordination among other entities, such as levee districts, reclamation districts, the Central Valley Flood Protection Board, Olivehurst Public Utilities District, private utilities, and the cities of Marysville and Wheatland.

The 2030 General Plan also contains the following policies and actions to address potential impacts related to parks and recreation services:

- **Policy NR1.1:** The County will collaborate with other agencies to ensure a quality park, recreation, natural open space, and trail system that is efficient to administer and cost-effective to maintain.
- **Policy NR1.2:** Local parks should be developed according to local needs, including those identified in the County's Parks Master Plan and the Olivehurst Public Utilities District Park Master Plan.
- **Policy NR1.3:** New developments shall contribute in-lieu fees and/or set aside land and dedicate improved, publicly accessible parkland and trails in locations and amounts dictated by applicable park standards, the County's Parks Master Plan, and the County Code.
- **Policy NR1.4:** The County's requirements for parkland provision may allow parkland credit for passive recreational open space, but at a reduced rate, compared to improved active parkland.
- **Policy NR1.5:** New developments shall provide for open space corridors consistent with the County's Parks Master Plan, and as needed to provide naturalized drainage and bike/pedestrian connections to nearby neighborhoods and destinations.
- **Policy NR1.6:** Specific Plans and Community Plans shall provide for publicly accessible parkland and trails, consistent with the General Plan and applicable standards.
- **Policy NR1.7:** Valley Neighborhoods should provide a diversity of park types at a ratio of at least 5 acres for every 1,000 residents.
- **Policy NR1.8:** Local parks should be located central to the neighborhood they serve and designed to encourage pedestrian and bicycle access.
- **Policy NR1.9:** The County will encourage collaboration among recreation providers and local school districts on planning, financing, and development of joint-use parkspace and recreational facilities.
- **Policy NR1.10:** The County's recreational open space should be designed to provide multiple benefits, including recreational, circulation, and stormwater drainage conveyance and detention. Applicable impact and in-lieu-fees will be reduced to reflect these overlapping uses for developments that include multi-use open space.

- **Policy NR1.11:** Recreational open space along rivers and streams should incorporate flood control objectives, habitat preservation, and habitat restoration.

- **Policy NR1.12:** The County will incorporate trails along canals, transmission lines, and other easements and rights-of-way, where feasible, including trail development atop levees, so long as flood protection facilities are not adversely affected.

- **Policy NR1.13:** The County will communicate with neighboring counties and cities to explore connections with Yuba County's planned regional trail system.

- **Policy NR1.14:** Recreational facilities and open space should be designed to use recycled materials and green building techniques, minimize surface runoff, reduce water demand, provide habitat for native species, reduce the need for ongoing maintenance, and incorporate universal access principles to facilitate use by people of all ages and abilities. Active portions of parks that may generate light and noise should be located and designed to promote compatibility with the surrounding neighborhood.

- **Policy NR1.15:** The County will support the establishment and expansion of ecological and agricultural tourism and recreation activities, consistent with the General Plan.

- **Policy NR1.16:** Natural and recreational open space areas should be provided along the Feather River, the Yuba River and Gold Fields, federal- and state-owned lands, and other river channels, river corridors, and reservoirs in collaboration with relevant agencies and willing property owners.

- **Policy NR1.17:** The County will collaborate with other service providers and/or a future regional parks and recreation authority to provide youth and adult recreation programming.

- **Action NR1.1: Regional Park Authority or District.** In order to address regional parks and recreation demand, the communities of Yuba County should take a leadership role in forming a new regional parks and recreation authority and managing recreational programming. This effort will involve close cooperation and coordination among local park authorities, City of Marysville, Olivehurst Public Utilities District, City of Wheatland, Yuba Feather Community Services Districts, school districts, levee districts, and community service groups. The County will initiate the process for forming the regional authority/district in collaboration with partner agencies and the Yuba Local Agency Formation Commission. There are a variety of organizational and legal forms that this new authority could assume, although an independent park district with its own board of directors may be the best fit for Yuba County. The new park and recreation authority should take on regional-scale projects within Yuba County. The regional authority should provide assistance to community groups, county and city staff, and any other interested parties regarding how to improve their local and regional parks. The regional authority should circulate information about potential park funding sources to these interested parties. It is anticipated that the regional authority's staff would be an important resource for connecting local parks and recreation projects to available funding sources. Following the creation of the regional authority, Yuba County could continue to plan for local parks in unincorporated areas, consistent with the General Plan and Parks Master Plan, using in-lieu fees and other funding approaches. Maintenance and operation would be funded using county service areas, landscape and lighting districts, or other local funding mechanisms. The two cities and the Olivehurst Public Utility District (along with any future utility districts or incorporated cities) could continue to be responsible for planning, development, maintenance, and funding for local parks within their boundaries. Each agency should also be a part of the preliminary cooperative efforts leading up to the creation of a regional park authority/district. A park district can secure funding for capital and operations in a variety of ways. A park district has taxation and bonding authority, subject to voter approval, and can create benefit assessment districts. Regional funding will need to be clearly differentiated from local funding.

    - Related Goals: Goal NR1, Goal NR2
    - Agency/Department: Community Development and Services Agency

- Funding Source: General Fund, grant funding, fees, and other funding sources, as available
- Time Frame: Initiate regional discussions regarding feasibility of regional authority by 2013.

Conclusion

Development and operation of new parks that may be needed to serve additional population accommodated under the General Plan could result in adverse impacts on the physical environment. Developed park facilities would be located within the Valley Growth Boundary and the Rural Community boundaries. Natural and recreational open space may be provided in areas outside the Valley Growth Boundary and Rural Community Boundary Areas. Regional park and bike trail facilities could potentially be developed in more rural areas of the County. The General Plan includes policies and actions that will reduce impacts of park development both within and outside of the Valley Growth Boundary and Rural Community Boundary Areas. The impacts of park development were considered along with the impact analysis of all land use change that could be accommodated under the General Plan. Potential environmental impacts that could result from the construction of facilities, such as parks, are analyzed at a program level in each of the individual subject area sections of this EIR. As appropriate, facilities construction plans would be subject to project-level CEQA analysis and mitigation, once details are available and projects are proposed. There is no additional significant impact related to construction of these facilities beyond that which is comprehensively analyzed throughout this EIR.

In addition, the General Plan identifies the County's policy approach to ensuring adequate provision of parkland as the County grows. This will ensure against overuse of existing facilities that may cause their deterioration. The 2030 General Plan establishes the overall parkland standard as "a diversity of park types at a ratio of at least 5 acres for every 1,000 residents." Implementation of this standard will require land dedication and/or fees and planning for parkland of different types that is integrated into new growth areas, as well as redevelopment areas. The County, however, is not the primary provider of developed park facilities or recreational programming for all unincorporated areas. Providing a diversity of parkland at ratios that are adequate to avoid overuse of existing facilities will require the cooperation of, and action by other agencies beyond the County's direct control. The General Plan provides the complete framework for providing parkland and recreational programming (see Action NR1.1), but the County cannot unilaterally implement this policy and implantation framework. Because the County cannot guarantee the full implementation of parkland and recreational policies and actions, and because it is possible that parkland and recreational facilities may not be provided at an adequate rate to avoid overuse of existing facilities, this impact is considered **potentially significant**.

Mitigation Measure

The County has provided policies and an action in the General Plan that would guide the provision of parkland and recreational programming to ensure adequate facilities and avoid the overuse of existing facilities. There is no feasible mitigation available to the County beyond that which is provided in policy and action statements in the General Plan. The impact is considered **significant and unavoidable**.

IMPACT 4.12-5 Demand for Additional Library Facilities. *Implementation of the 2030 General Plan would generate new population in Yuba County, which would create an increase in demand for library services, which could potentially result in the need for new or expanded library facilities. This impact would be less than significant.*

The Yuba County Library provides library services from its main facility in the City of Marysville. Services include an interlibrary loan program, programs for children of all ages, internet computers and wireless access, and multimedia resources for loan. Library resources, including Ebooks are available from the library's website http://library.yuba.org. Books by Mail and an automated library dispenser are being beta-tested as means of providing services in remote areas of the county. Since library services are currently limited, there may be an existing need for additional library facilities, whether or not the proposed 2030 General Plan is adopted. Some additional population growth could be served by the existing library facilities. With additional development and

an increasing population, it is likely that demand for library services would increase. The addition of new residents that would occur under the proposed 2030 General Plan and other regional growth would create additional demand for new or expanded library facilities and potentially for extended hours at existing facilities. There could eventually be the need for new library branches in the County, the construction of which could result in some impacts on the environment.

It is not possible at this time to describe the precise location and characteristics of library facilities that may be required to serve the County at buildout of the General Plan. However, most new development under the 2030 General Plan would occur within the Valley Growth Boundary and the County anticipates that any additional library facilities that are needed to serve development within the Valley Growth Boundary would be constructed in development areas identified on the County's Land Use Diagram. Although new facilities would not be expected in Rural Communities, if there is such a need, the County anticipates that any facilities would be located within Rural Community Boundary Areas, the development of which is considered throughout the environmental chapters of this EIR. Construction of library facilities would be guided by the policies and actions included in the 2030 General Plan. As noted in the environmental subsections throughout Section 4.0 of this EIR, the 2030 General Plan includes policies and actions to address each environmental topic area and reduce or avoid impacts of projects that could be implemented under the General Plan.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan contains the following policies and action to address library services:

- **Policy CD12.11:** The County will seek funding to improve and extend hours at the existing library in Marysville, while expanding library services to other urban and rural areas in the unincorporated County and Wheatland.

- **Policy CD12.12:** The County will support library service enhancements through online services, electronic media, tying into computer labs, virtual branches, library service in existing community buildings, and other decentralized approaches, as well as traditional libraries.

- **Policy CD12.13:** The County will take advantage of opportunities to develop, enhance, and maintain library services in coordination with local school districts, Yuba College, and other interested agencies.

- **Action CD12.1: Facility Planning.** Following adoption of the General Plan, as funding allows, the County will seek to draft and/or update long range facility plans for relevant County departments. The Community Development and Services Agency will provide detail on population growth assumptions for different parts of the County to assist with the facility planning effort. It is anticipated that joint-use and operation opportunities would arise from a coordinated facility planning process that involves multiple County departments. The County should identify and prioritize discrete projects in the facilities master plan. Facility master plan projects would be a part of the County's ongoing capital improvements programming and the subject of grant applications. For example, the County should coordinate facility master plan updates with applications for the US Department of Agriculture's Rural Development low-interest loan and grant programs for rural parts of the County.

    - Related Goals: Goal CD12
    - Agency/Department: Community Development and Services Agency; Administrative Services Department; Library Department
    - Funding Source: Impact fees; federal and state funds; General Fund
    - Time Frame: Update facility master plans by 2015

- **Policy CD14.8:** The County will support and encourage joint-use parks for school and community use, joint-use parks for recreational and drainage conveyance and detention, joint-use libraries for school and community use, and other appropriate joint-use facilities. The County will encourage the use of schools as community centers to provide a range of services.

Conclusion

The policies and actions of the 2030 General Plan would guide the provision of library services, ensuring that future needs are met and encouraging joint-use provisions of service that could result in efficiencies and reduced environmental impacts associated with constructing facilities. Although population growth accommodated under the General Plan would increase demand for library services, it is not possible at this time to specifically assess impacts of any library expansions or new library facilities that may be needed during buildout. Although specific impacts cannot be assessed in this EIR, this EIR does address overall impacts on the physical environment for development within the Valley Growth Boundary and the Rural Community boundaries, including possible construction of public facilities. There is no additional significant impact related to construction of these facilities beyond that which is comprehensively analyzed throughout this EIR. The impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

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4.13 TRANSPORTATION AND TRAFFIC

This section describes the potential impacts of the 2030 Yuba County General Plan related to traffic and transportation. The impact analysis presented here addresses the roadway, transit, bicycle, pedestrian, rail, and aviation components of the transportation system. To provide a context for the impact analysis, this section begins with a discussion of the regulatory setting, followed by a description of the environmental setting. The setting describes the existing physical and operational conditions for the transportation system components. The section concludes with the significance criteria, impact analysis findings, and consideration of the effect of the 2030 General Plan policies and actions.

4.13.1 REGULATORY SETTING

This section presents a summary of transportation policies, laws, and regulations that would apply to the 2030 General Plan. This information provides a context for the impact discussion related to the 2030 General Plan's consistency with applicable regulatory conditions.

FEDERAL AND STATE PLANS, POLICIES, REGULATIONS, AND LAWS

There are no federal policies relating to transportation that are directly applicable to the 2030 General Plan.

In 2009, Caltrans completed transportation corridor concept reports (TCCRs) or Corridor System Management Plans (CSMPs) for all state facilities in Yuba County (i.e., State Routes 20, 49, 65, and 70). TCCRs and CSMPs identify long-range improvements for specific state freeway and highway corridors and establish the "concept," or desired level of service (LOS), for specific corridor segments. These reports did not necessarily consider the amount, type, and location of development within Yuba County contemplated as part of the 2030 General Plan. Each TCCR or CSMP is described in detail later in this chapter, and includes the following overarching theme regarding improvements to the state system:

"Improvements to the state highway system are the responsibility of both Caltrans and partner agencies. Developments affecting the State Highway System may necessitate that local jurisdictions provide nexus based proportional fair-share funding for future state highway improvements and other transportation system improvements."

REGIONAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

The Sacramento Area Council of Governments (SACOG) is responsible for regional transportation planning in Yuba County. The Metropolitan Transportation Plan for 2035 (MTP2035) adopted by SACOG, in March 2008, is a federally mandated, long-range, fiscally constrained transportation plan for the six-county area that includes El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba counties and 22 cities.

Most of the SACOG area is designated a federal non-attainment area for ozone, indicating that the transportation system is required to meet stringent air quality emissions budgets to reduce pollutant levels that contribute to ozone formation. To receive federal funding, transportation projects nominated by cities, counties, and agencies must be consistent with the MTP. A project is considered consistent if it is contained in the MTP and is included in the computer modeling of transportation and air quality impacts by SACOG. In addition, the MTP must include any regionally significant transportation projects planned for a city or county because of the project's potential effect on travel demand and air pollution. The SACOG Board of Directors approved the MTP 2035 on March 20, 2008. A number of infrastructure projects within Yuba County are listed in the MTP including:

- Goldfields Parkway;
- Wheatland Bypass;

- new or upgraded interchanges at SR 70/Feather River Boulevard, SR 70/Plumas Lake Boulevard, SR 70/ McGowan Parkway, and SR 65/South Beale Road;
- passing lanes on SR 20 east of Marysville and SR 70 north of Marysville; and
- roadway extensions and widenings including Arboga Road, Plumas-Arboga Road, Erle Road, Links Parkway, McGowan Parkway, North Beale Road, and River Oaks Boulevard.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Yuba County has adopted a County Public Facilities Fee (CPFF) to mitigate impacts attributable to development within the County. The fees fund County public facilities needed as a result of development and assure that development pays its fair share for those public facilities. The program collects fees for social services, transportation, drainage, law enforcement, libraries, parks and recreation, courts and criminal justice, general government, and other needs. The traffic impact component of the CPFF program covers various County-wide transportation improvements. Specific transportation projects included in the program are listed in the *Yuba County Impact Fee Update Report* (Maximus 2004). In addition to the County-wide program, the County has also adopted road fees for specific plan areas including Plumas Lake and North Arboga (*Plumas Lake Specific Plan/North Arboga Study Area (PLSP/NASA) Road Fee Nexus Study,* Economic Planning Systems, 2004) and the East Linda Specific Plan.

Unlike some other counties, Yuba County does not have a Congestion Management Program (CMP) whose circulation policies must be followed.

4.13.2 ENVIRONMENTAL SETTING

Land use patterns play a very important role in the modes of transportation available for the County's residents and businesses. Much of the County is rural, with rice crops, orchards, and cattle ranches. Much of Yuba County's development has occurred in the area south of the City of Marysville in the Linda and Olivehurst-Plumas Lake communities. Developed areas are generally low-density. Low-density (4–5 units per acre) development patterns often limit the extent to which residents are able to use other modes of travel than automobiles for meeting daily needs.

The automobile is the most widely used form of transportation in and through Yuba County. Both residents and commuters from the surrounding six counties, who travel through the County to employment destinations, generate automobile travel in Yuba County. The 2000 U.S. Census "journey to work" data demonstrates where residents of the County work, which helps to estimate peak-hour traffic patterns and determine popular peak-hour travel routes. Approximately 35% of employed Yuba County residents traveled to Sutter, Placer, and Sacramento Counties for work in 2000, and the average work journey took 26 minutes.

Data from the 2000 U.S. Census illustrates the modes of transportation that Yuba County residents use to travel to work. Approximately 91% of working County residents travel from home to work by automobile, of which 18% travel in a carpool of two or more people. Approximately 5% of Yuba County residents walk, bicycle, or take public transit to work, and 4% work from home.

State Routes (SR) 70, 65, and 20 comprise the backbone of Yuba County's regional roadway network and serve the majority of the County's population in Marysville, Wheatland, and unincorporated Yuba County. Arterials and collectors form the remainder of the County's major roadway system.

Exhibit 4.13-1 illustrates the major routes in Yuba County's roadway system, including the functional classification and number of lanes along each roadway. Functional classifications include:

- **Freeway**: a multilane, divided highway with a minimum of two lanes in each direction and access provided at interchanges.

- **Conventional Highway**: a roadway with limited access and few cross streets generally along high-volume corridors that connect cities or unincorporated communities.

- **Arterial**: a road that accommodates longer distance travel, but also provides access to adjacent residential, commercial, and industrial properties.

- **Collector Road**: a two-lane roadway that collects traffic from adjacent developments and delivers that traffic to freeways, highways, and arterials. These roads have limited to moderate access control.

- **Local Road**: a road that provides direct access to abutting land and allows traffic movement within a single-neighborhood or part of a neighborhood. Local roads are designed for low traffic volumes and speeds.

STATE HIGHWAYS

State highways in Yuba County include freeways and conventional highways, as described below. Caltrans operates and maintains these facilities, which, according to Caltrans, are intended to serve regional and interregional travel.[1] The following describes each of the state highways in Yuba County.

- **SR 20** (Conventional Highway) serves commuter, commercial, agricultural, and recreational travel in Yuba County. It extends from west of Marysville through the Yuba County foothills and into Nevada County. East of Marysville, it is a two-lane conventional highway through both flat and rolling terrain, serving communities such as Browns Valley, Smartsville, and Oregon House.

- **SR 49** (Conventional Highway) serves regional north-south traffic in the northeastern area of the County. Within Yuba County, it is a two-lane conventional highway through rolling and mountainous terrain, serving the Camptonville and Log Cabin communities, as well as communities in adjacent Nevada County.

- **SR 65** (Freeway/Conventional Highway) serves both local and regional travel within Yuba County. It begins at Interstate 80 in South Placer County and extends in a northern direction through downtown Wheatland, terminating at SR 70. SR 65 is a two-lane conventional highway from Wheatland to South Beale Road, and a four-lane freeway north of South Beale Road to its terminus at SR 70. Within Yuba County, SR 65 has interchanges at Forty Mile Road/Ostrom Road and McGowan Parkway.

- **SR 70** (Freeway/Conventional Highway) serves both local and regional travel within Yuba County. It begins at SR 99 in Sutter County and extends northerly through Yuba County and into Butte County. SR 70 is currently being widened to four lanes at the Sutter/Yuba County line. To the north, it is four lanes and has interchanges at Plumas Lake Boulevard, McGowan Parkway, SR 65, Olivehurst Avenue, Erle Road, Feather River Boulevard, and North Beale Road. Within Marysville, it is generally a four-lane arterial. It is a two-lane conventional highway between Marysville and the Yuba/Butte County line. Arterials and Collectors Roads.

Arterials include portions of McGowan Parkway, Olivehurst Avenue, River Oaks Boulevard, Erle Road, North Beale Road, Simpson Lane, and Marysville Road. Collectors include Feather River Boulevard, Olivehurst Avenue, Plumas Arboga Road, Lindhurst Avenue, Arboga Road, Forty Mile Road, South Beale Road, Spenceville Road, Wheatland Road, Hammonton-Smartville Road, Loma Rica Road, and others.

1 California Department of Transportation letter to Dan Cucchi dated January 20, 2011.

ANALYSIS METHODS

Level of Service (LOS) is a general measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving, as well as speed, travel time, traffic interruptions, and freedom to maneuver. This EIR section provides analysis both with respect to daily LOS along roadway segments and peak period LOS at roadway intersections, as discussed in the material that follows. The LOS grades are generally defined as follows:

- **LOS A** represents free-flow travel with an excellent level of comfort and convenience and freedom to maneuver.
- **LOS B** has stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.
- **LOS C** has stable operating conditions, but the operation of individual users is noticeably affected by the interaction with others in the traffic stream.
- **LOS D** represents high-density, but stable flow. Speeds decline slightly and the freedom to maneuver within the traffic stream is more noticeably limited. The driver experiences reduced physical and psychological comfort.
- **LOS E** represents operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.
- **LOS F** is used to define forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points, with queued traffic traveling in a stop-and-go fashion.

The LOS was calculated for each roadway segment in Yuba County's regional roadway system to evaluate existing traffic conditions. Peak-hour LOS capacity thresholds were developed for the functional classifications of Yuba County's roadways. Roadway service levels were then determined by comparing traffic volumes for selected roadway segments with the peak-hour LOS capacity thresholds. These thresholds are shown in Appendix E and were calculated based on the methodology contained in the *Highway Capacity Manual*, Transportation Research Board, 2000 (HCM 2000). The HCM 2000 methodology is the prevailing measurement standard used throughout the United States.

Intersections were analyzed using the methodology contained in the HCM 2000. The LOS for signalized and all-way stop-controlled intersections is based on the average control delay for all vehicles passing through the intersection. At side-street stop-controlled intersections, the LOS is based on the side-street movement with the highest delay. Table 4.13-1 summarizes the relationship between delay and LOS for signalized and unsignalized intersections.

- The analysis on existing County roadways and intersections is presented for PM peak-hour conditions because this hour generally represents the highest hourly volume during a typical weekday. For freeways and highways, both AM and PM peak-hour conditions are presented because these roadways serve a high volume of commuter traffic during both the AM and PM peak hours. In some locations, the AM peak-hour volumes are regularly higher than PM peak-hour volumes. Further, the freeway and highway system is often divided such that needed improvements can be made to only one direction. Therefore, analyzing the AM peak hour was considered necessary to identify potential deficiencies that may occur only during this period.

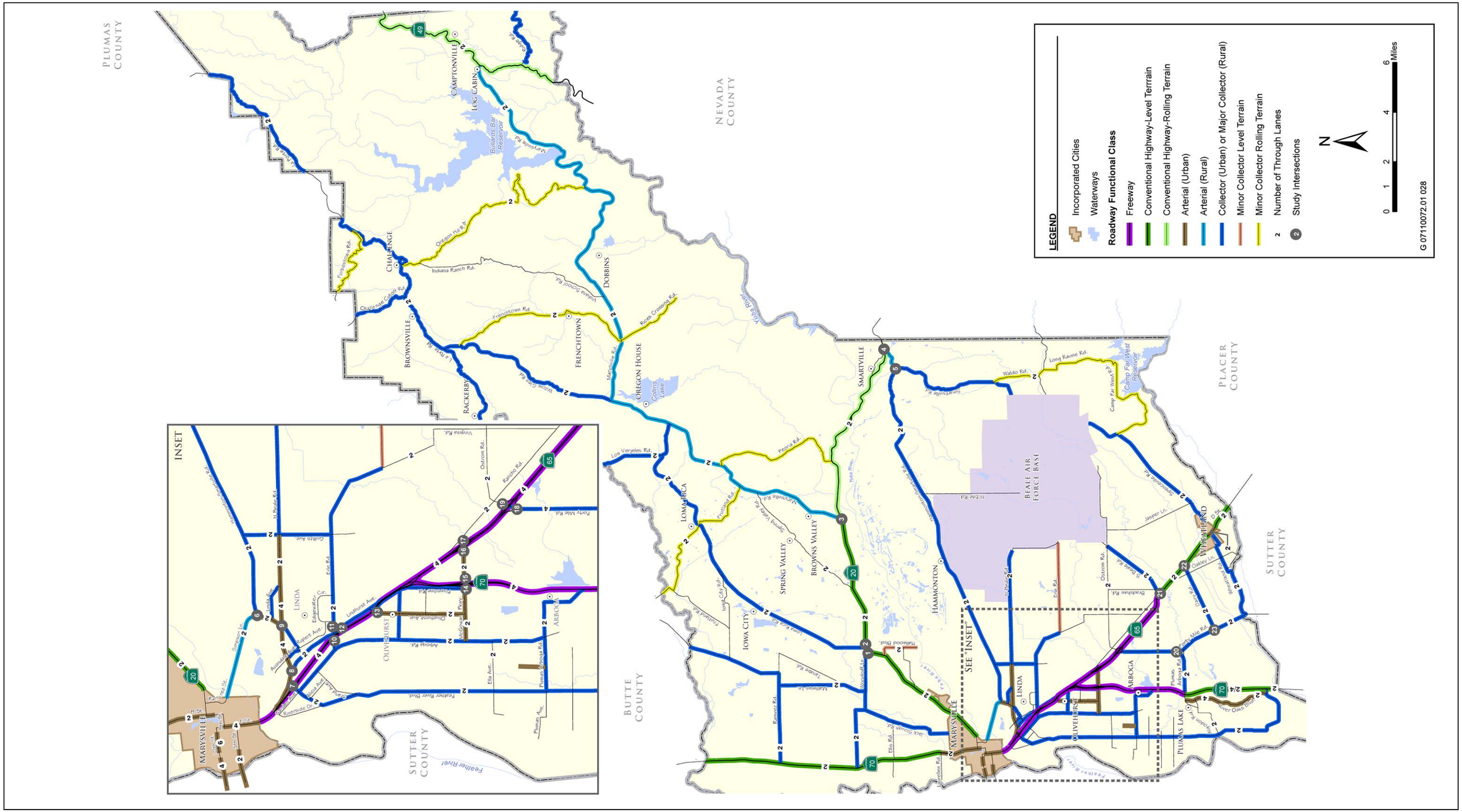

LEGEND
Incorporated Cities
Waterways
Roadway Functional Class
Freeway
Conventional Highway-Level Terrrain
Conventional Highway-Rolling Terrain
Arterial (Urban)
Arterial (Rural)
Collector (Urban) or Major Collector (Rural)
Minor Collector Level Terrain
Minor Collector Rolling Terrain
Number of Through Lanes
Study Intersections
N
0 1 2 4 6 Miles
G 07110072.01 028
PLUMAS COUNTY
NEVADA COUNTY
PLACER COUNTY
BUTTE COUNTY
SUTTER COUNTY
CAMPTONVILLE
LOG CABIN
Bullards Bar Reservoir
CHALLENGE
BROWNSVILLE
RACKERBY
DOBBINS
FRENCHTOWN
OREGON HOUSE
Collins Lake
SMARTVILLE
Camp Far West Reservoir
BEALE AIR FORCE BASE
LOMA RICA
SPRING VALLEY
BROWNS VALLEY
IOWA CITY
HAMMONTON
MARYSVILLE
LINDA
OLIVEHURST
ARBOGA
PLUMAS LAKE
WHEATLAND
SEE "INSET"
INSET
Yuba River
Feather River
Oregon Hill Rd.
Indiana Ranch Rd.
Frenchtown Rd.
Rices Crossing Rd.
Marysville Rd.
Long Ravine Rd.
Waldo Rd.
Loma Rica Dr.
Pennington Rd.
Ramirez Rd.
Forty Mile Rd.
Ellis Rd.
Feather River Blvd.
Plumas Arboga Rd.
Olivehurst Ave.
Lindhurst Ave.
Ave.
Ave.

Table 4.13-1 Intersection Level of Service Definitions		
LOS	Average Control Delay (seconds/vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10.0	≤10.0
B	10.1 – 20.0	10.1 – 15.0
C	20.1 – 35.0	15.1 – 25.0
D	35.1 – 55.0	25.1 – 35.0
E	55.1 – 80.0	35.1 – 50.0
F	> 80.0	> 50.0
Source: Highway Capacity Manual, Transportation Research Board, 2000.		

For the future year scenarios, roadway segments were analyzed using the average daily volume LOS thresholds shown in Table 4.13-2. These thresholds were derived from the HCM 2000 based on the characteristics of each functional class.

Table 4.13-2 Daily Level of Service Traffic Volume Thresholds			
Roadway Capacity Class	Maximum Peak-Hour Volume at		
	LOS C	LOS D	LOS E
Freeway – 4 Lanes	63,600	77,400	86,400
Conventional Highway – 6 Lanes	48,000	54,000	60,000
Conventional Highway – 4 Lanes	32,000	36,000	40,000
Conventional Highway – 2 Lanes (Level Terrain)	7,900	13,500	22,900
Conventional Highway – 2 Lanes (Rolling Terrain)	7,100	12,400	20,500
Arterial (Urban) – 2 Lanes	14,400	16,200	18,000
Arterial (Urban) – 4 Lanes	28,800	32,400	36,000
Arterial (Urban) – 6 Lanes	43,200	48,600	54,000
Arterial (Rural) – 2 Lanes	7,100	12,200	20,000
Collector (Urban) or Major Collector (Rural)	7,000	10,000	13,000
Minor Collector	6,700	7,800	8,900
Source: Fehr & Peers 2010			

The acceptability of operations at roadways and intersections was analyzed based on the applicable agency's LOS thresholds. All study intersections lie within the County's or Caltrans' jurisdiction. State highway facilities were analyzed based on Caltrans LOS thresholds contained in the TCCR or CSMP for each facility.

ROADWAY OPERATIONS

Exhibit 4.13-2 displays the existing AM peak-hour traffic volumes and LOS on the study freeways and highways. Exhibit 4.13-3 displays existing PM peak-hour traffic volumes and LOS on County roads, freeways, and highways. The LOS is based primarily on traffic counts collected in 2007. However, some counts from 2005 and 2006 were used in areas that experienced little growth. The AM peak hour generally occurred from 7:30 to 8:30 AM, while the PM peak hour occurred from 4:30 to 5:30 PM. Appendix E lists the detailed operations for each roadway segment for AM and PM peak-hour conditions.

SR 70 through downtown Marysville currently operates at LOS F during AM and PM peak hours, which is consistent with findings from the *SR 70 TCCR*. Segments of SR 20 through Marysville and to the east, SR 65 through Wheatland, and SR 70 north of Marysville operate at LOS D, which is considered acceptable for those facilities. The segment of SR 65 in the Wheatland area is nearing LOS E during the PM peak hour.

Exhibit 4.13-3 shows that all County study roads currently operate at LOS C or better during the PM peak hour, with the exception of the Simpson Lane Bridge across the Yuba River, which operates at LOS D. The volume on this segment exceeds the maximum LOS C volume by only 40 PM peak-hour vehicles, indicating that it currently operates near the boundary between LOS C and D. The 5th Street Bridge across the Feather River in Yuba City/Marysville currently operates at LOS F. Considerable congestion occurs on North Beale Road between Lindhurst Avenue and Feather River Boulevard.

Truck traffic represents a considerable proportion of total traffic on certain state facilities and County roads. Trucks haul a variety of goods, including aggregate, timber, and agricultural products. Trucks generally have greater acceleration and deceleration requirements and can impede a motorist's ability to pass on two-lane highways. The following summarizes the percentage of trucks (defined as having three or more axles) observed in 2007 on selected state and County facilities:

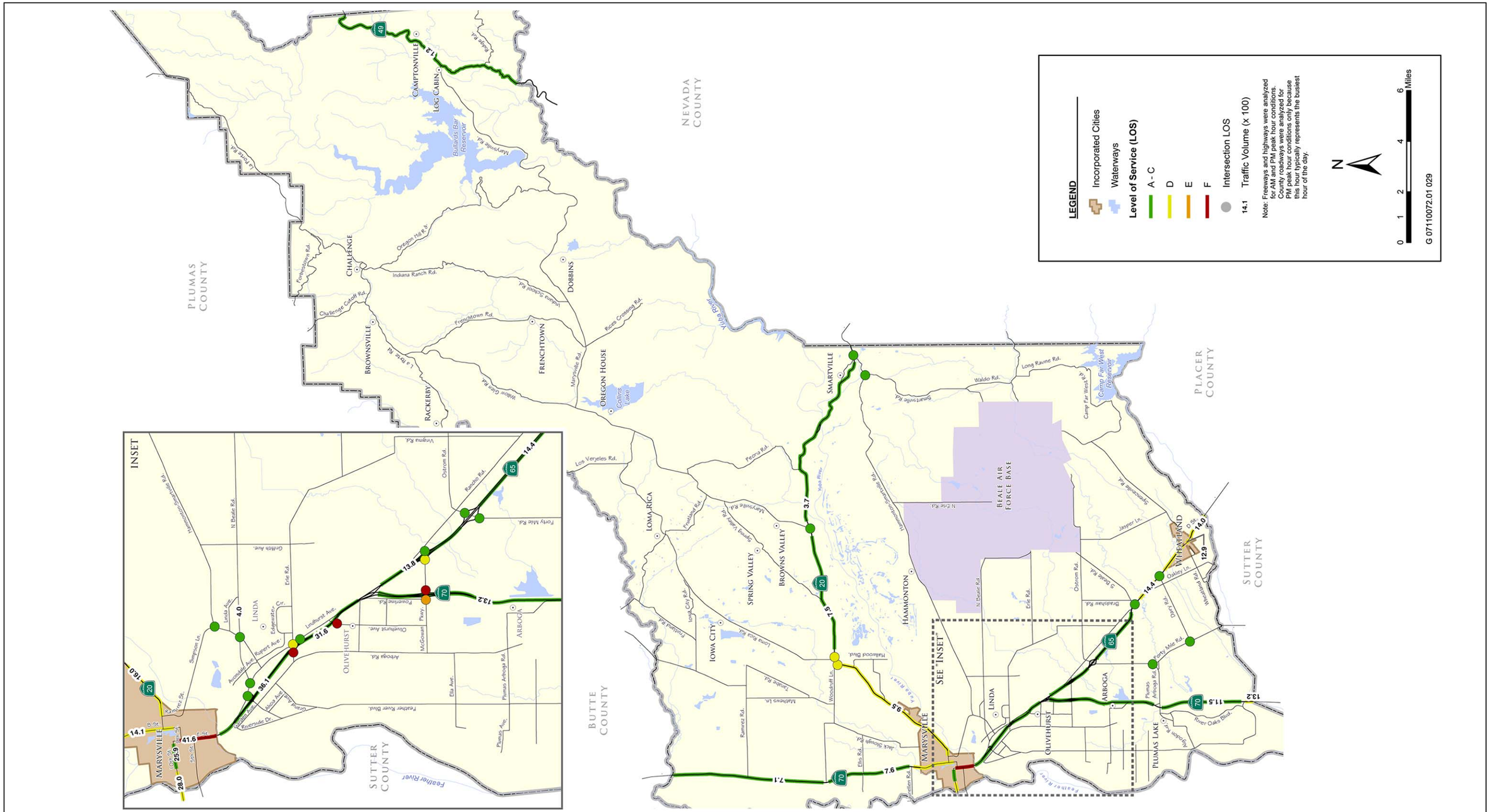
- SR 70 across Yuba River – 8% trucks during AM peak period and 2% trucks during PM peak period;
- Simpson Lane across Yuba River – 7.5% trucks over a 24-hour period;
- North Beale Road east of Lindhurst Avenue – 6% trucks over a 24-hour period;
- Hammonton-Smartsville Road east of Simpson Lane – 17% trucks over a 24-hour period; and
- Lindhurst Avenue at Erle Road – 21% trucks during AM peak period and 2% trucks during PM peak period.

INTERSECTION OPERATIONS

Exhibit 4.13-1 displays the 23 study intersections selected for analysis during the AM and PM peak hours. Four of these intersections are controlled by traffic signals, while the other 19 have stop-sign control. These facilities are located on county roads, state highways, and freeway interchange ramps. Exhibits 4.13-2 and 4.13-3 display the LOS at each intersection for AM and PM peak-hour conditions, respectively. Refer to Appendix E for LOS calculations.

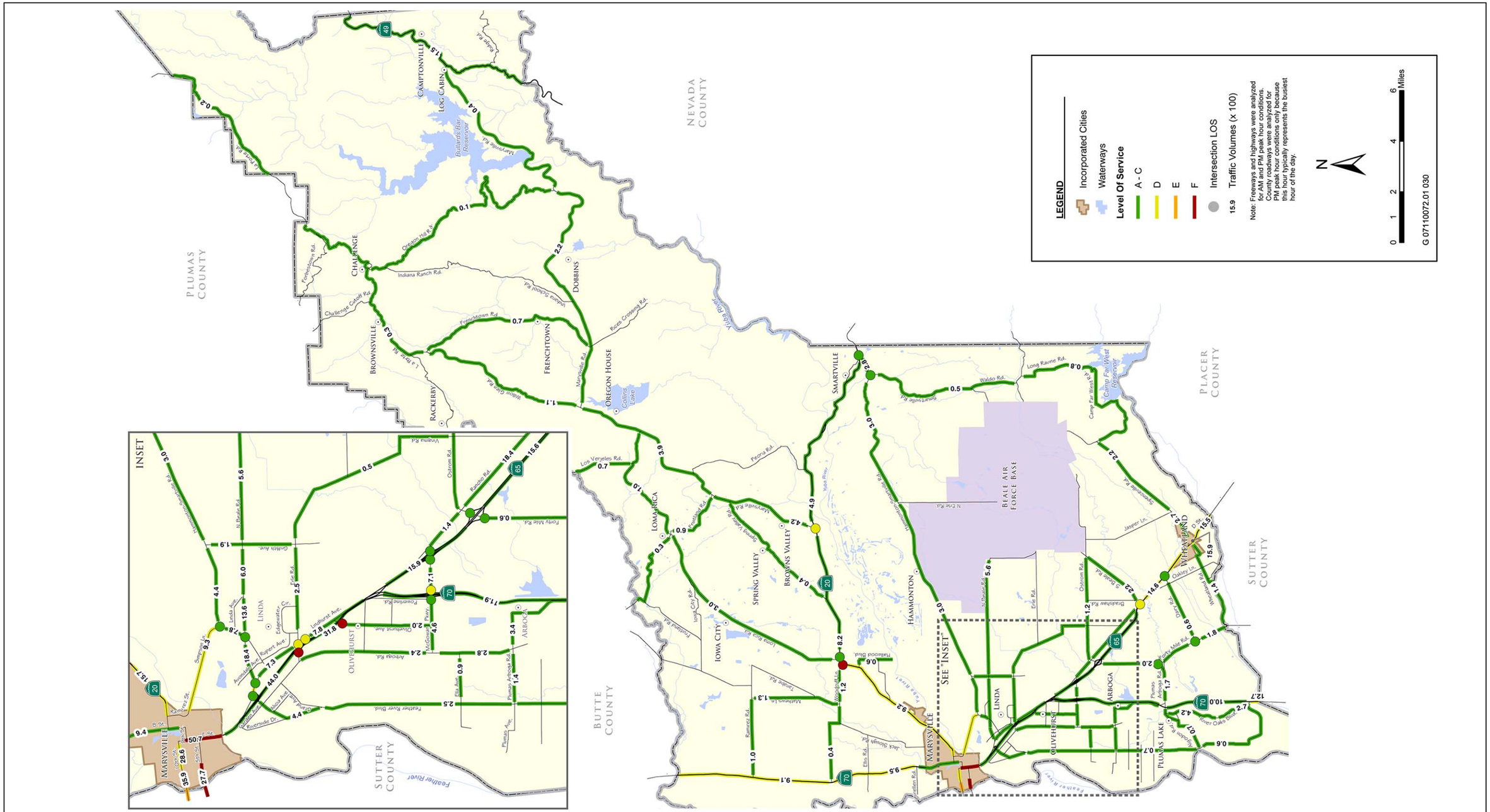
The following study intersections currently operate below their established LOS threshold:

- SR 20/Woodruff Lane (LOS F during PM peak hour);
- SR 70 SB Ramps/Erle Road (LOS F during AM and PM peak hours);
- Erle Road/Lindhurst Avenue (LOS D during AM and PM peak hours);
- Olivehurst Avenue/Chestnut Road (LOS F during AM and PM peak hours);
- SR 70 SB Ramps/McGowan Parkway (LOS E during AM peak hour);
- SR 70 NB Ramps/McGowan Parkway (LOS F during AM peak hour);
- SR 65 SB Ramps/McGowan Parkway (LOS D during AM peak hour); and
- SR 65/South Beale Road (LOS D during PM peak hour).



Source: Fehr & Peers 2010

AM Peak-Hour Traffic Volumes and LOS **Exhibit 4.13-2**



Source: Fehr & Peers 2010

PM Peak-Hour Traffic Volumes and LOS **Exhibit 4.13-3**

Each of the above intersections operates with minor-street stop-sign control, with the exception of the Erle Road/Lindhurst Avenue intersection, which is signalized. The reported LOS D to F operations at these intersections relate to minor-street movements, and traffic on the major street experiences little or no delay. At many of these unsignalized locations, operations could be enhanced by installing a traffic signal, adding additional approach lanes, restricting certain turning movements, or providing a median refuge lane.

The majority of Yuba County roadways and intersections currently operate at acceptable levels. Most of the identified deficiencies can be restored to acceptable levels with "spot improvements," some of which are included in the County's Public Facilities Fee program or road fee programs for individual specific plans.

PUBLIC TRANSPORTATION SYSTEM

Public transportation in Yuba County consists of fixed-route and demand-responsive bus service, park-and-ride lots, taxis, commercial buses, and vanpools/carpools. Exhibit 4.13-4 displays existing bus routes, park and ride lots, and bus transfer centers. Each is described briefly below:

- Bus Routes: Yuba-Sutter Transit operates four local fixed routes within Yuba County. In addition, commuter express service to Sacramento is provided. Rural routes to the foothills and Wheatland are also offered. Most routes operate Monday through Saturday. Dial-A-Ride is Yuba-Sutter Transit's complimentary paratransit service under the Americans with Disabilities Act (ADA). Commercial bus service in Yuba County is provided by Greyhound and Amtrak, with service stops in Marysville.

- Park and Ride Lots: Park-and-ride lots exist at the Yuba County Government Center in Marysville and at the North Beale Transit Center adjacent to Yuba College. Park and Ride lots were also recently constructed adjacent to SR 70 at McGowan Parkway and Feather River Boulevard (South).

BICYCLE AND PEDESTRIAN SYSTEM

While the overall bicycle and pedestrian network within Yuba County is intermittent, current and planned development presents opportunities to expand the network in parts of the County. The *Yuba-Sutter Bikeway Master Plan* (1995) identifies existing and planned bikeway facilities within Yuba County. The facilities identified in the Master Plan are defined as follows (see Exhibit 4.13-5 for standards for each facility type):

- Class I Bikeway – Separate off-street facility for exclusive use of bicycles and pedestrians.
- Class II Bike Lane – On-street lane with appropriate striping and signing for bicycle use.
- Class II Bike Route – Signed bike route that shares the traveled way with vehicles.

Exhibit 4.13-6 shows existing and planned bicycle facilities within Yuba County. The Yuba County foothills generally do not have bicycle and pedestrian facilities since the rolling terrain and considerable distance between major destinations are better suited to automobile travel. However, southern Yuba County's flat terrain and more populous characteristics generate more bicycling and walking trips; consequently, this area has more sidewalks and bicycle facilities on major roadways such as North Beale Road, Plumas Arboga Road, Olivehurst Avenue, and McGowan Parkway. Caltrans allows bicycle access on SR 20, SR 49, SR 65, and SR 70, except for the following locations:

- SR 65 between South Beale Road and the SR 70 junction SR 70 between the SR 65 junction and the north end of the Yuba River Bridge.

Class I bike paths within the City of Marysville connect to SR 20 via the levee to the eastern side of Marysville and to SR 20 bordering the western side of the City. A Class I facility also connects to SR 70 on the north side of the Yuba River Bridge. While Class I, Class II, and Class III facilities connect to SR 70 to the northern and southern ends of the Yuba River Bridge, bicyclists and pedestrians must share a narrow sidewalk at this location.

SACOG has listed a Class I bike path in its *Regional Bicycle, Pedestrian, and Trails Master Plan* (amended August 20, 2009) that would extend through southern Yuba County near the railroad tracks, over the Yuba River, and connect to Sutter County via the Twin Cities Memorial Bridge. SACOG has also listed Class II bike lanes along Arboga Road between Erle Road and McGowan Parkway, and Lindhurst Avenue between Scales Avenue and Olivehurst Avenue.

AVIATION SYSTEM

Yuba County airports are shown in Exhibit 4.13-7. Beale Air Force Base is a military facility owned by the United States Air Force and operated by the Air Combat Command. The Yuba County Airport is owned and operated by the County. While the Brownsville-Aero Pines Airport (Brownsville Airport) is for public use, it is privately owned by Second Golden Feather Nest LP. Following is a brief summary of physical and operational conditions at each airport:

- Beale Air Force Base is located east of Marysville and accessed from Hammonton-Smartsville Road, Smartsville Road, Spenceville Road, and North and South Beale Roads. This military facility was established in 1942 and has a single runway.

- The Yuba County Airport is located south of Marysville between Feather River Boulevard and Arboga Road. It opened in 1943 and has two runways.

- The Brownsville Airport is located in the foothills between the communities of Brownsville and Rackerby. It opened in 1965 and has a single runway.

Caltrans' Division of Aeronautics identifies improvements in its *California Aviation System Plan: Capital Improvement Plan* (August 2005) that increase capacity and enhance safety – changes that affect the overall safety and effectiveness of the California Aviation Transportation System. For the Yuba County Airport, improvements include constructing a T-hanger taxilane and performing pavement maintenance. Long-term drainage improvement investments are also planned.

WATERWAY SYSTEM

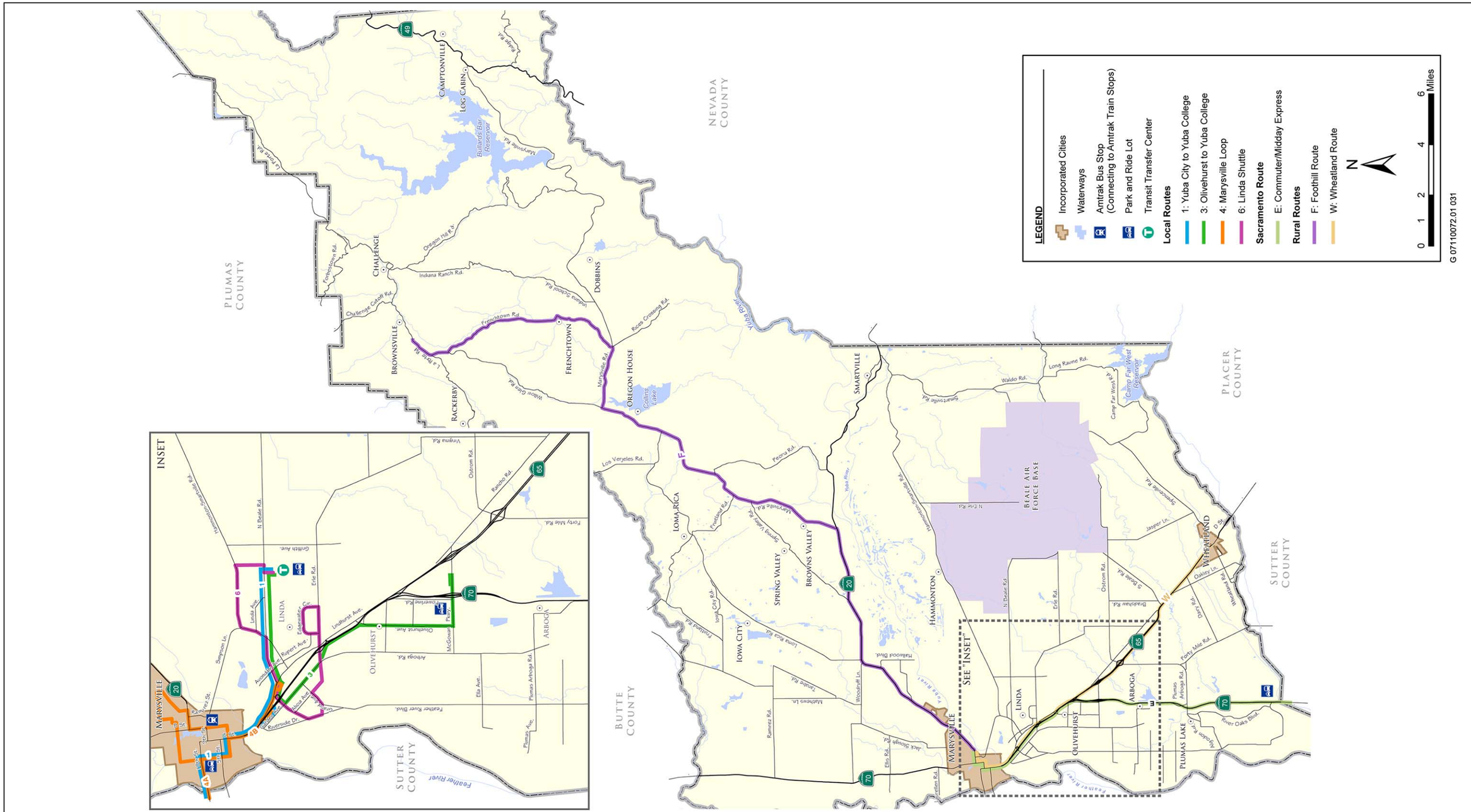
Depicted in Exhibit 4.13-7 are three major rivers that cross Yuba County, two recreational reservoirs, and one recreational lake. The Yuba River runs generally east-west through the County, and joins the Feather River in the southwestern area of Marysville. The Feather River runs north-south along the western edge of the County. The Bear River parallels the Yuba/Sutter County Line, although most of it is situated in Sutter and Placer counties.

Collins Reservoir is located adjacent to Marysville Road near the Oregon House community in the County foothills. Bullards Bar Reservoir is located northeast of Collins Reservoir and also accessed from Marysville Road. Camp Far West Reservoir is located in the southeastern corner of Yuba County and accessed via Spenceville Road and Camp Far West Road. During summer months, recreational vehicles frequently use Marysville Road, SR 20, Spenceville Road, and Camp Far West Road.

Goods Movement System

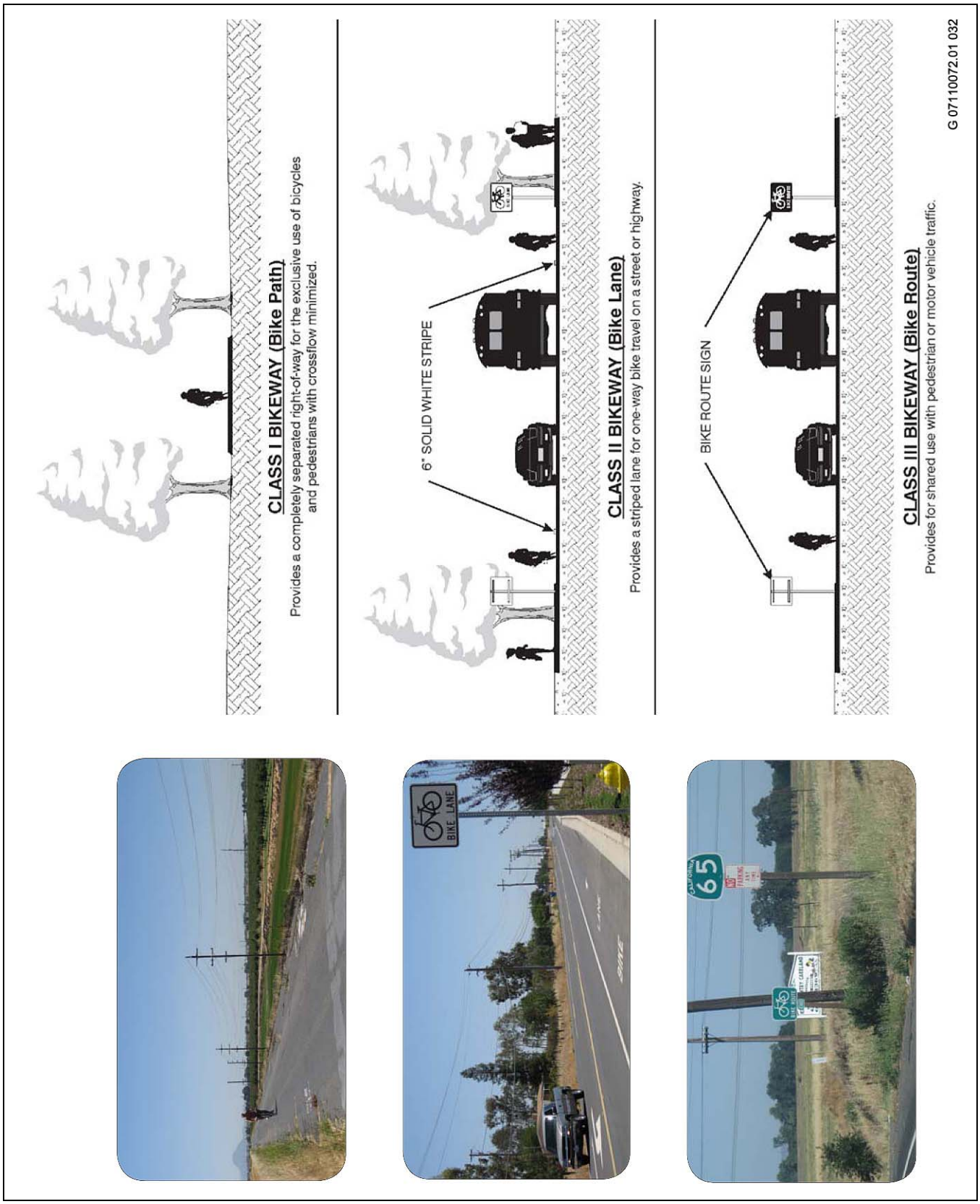
The railroad system and state highway system provide the major transportation network for goods movement within Yuba County. Each system is discussed below as it relates to freight transportation. Exhibit 4.13-7 shows the rail and highway network and identifies at-grade and grade-separated railroad crossings.

Two freight railroads serve Yuba County, both owned and operated by Union Pacific Railroad. Transported commodities include chemicals, coal, food and food products, truck trailers and containers, forest products, grain and grain products, metals and minerals, and automobiles and parts.



Source: Fehr & Peers 2010

Transit Service **Exhibit 4.13-4**



Source: Fehr & Peers 2010

Bikeways Master Plan Facility Types **Exhibit 4.13-5**

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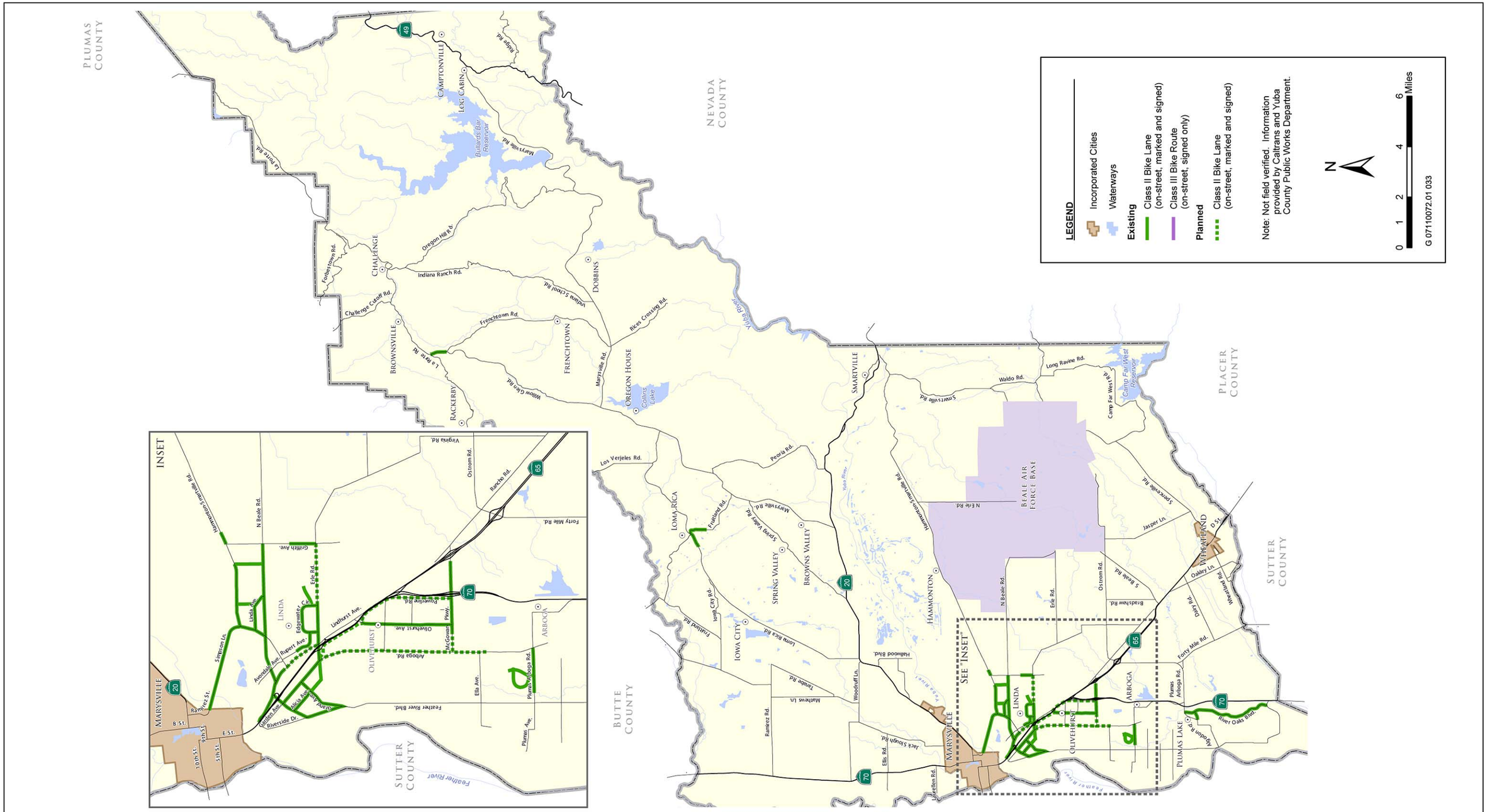
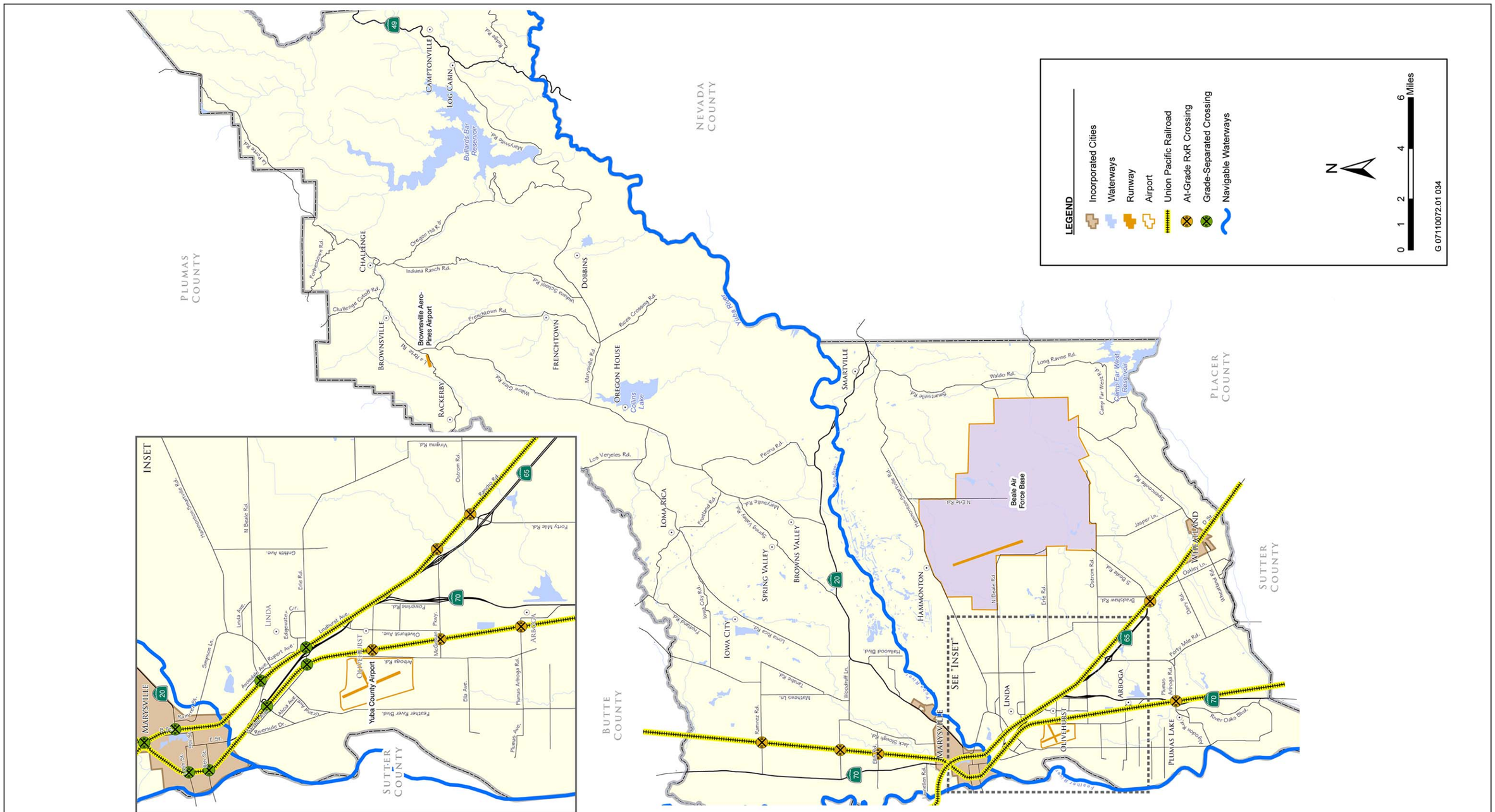


Source: Fehr & Peers 2010

Existing and Planned Bicycle Facilities **Exhibit 4.13-6**



Source: Fehr & Peers 2010

Aviation and Goods Movement Facilities **Exhibit 4.13-7**

One of the railroad lines parallels SR 70 through Yuba County, while the other line parallels SR 65 (and then SR 70) from Placer County into Marysville and then northwesterly into Sutter and Butte Counties. The line parallel to SR 70 has seven at-grade crossings with surface streets in the unincorporated County. The line that parallels SR 65 and then SR 70 from Placer County into Marysville has three at-grade crossings with surface streets in the unincorporated County.

Caltrans has designated all state routes within Yuba County as truck routes. All interstates and some roadway segments of the state highways are included in the National Network for Service Transportation Assistance Act of 1982 (STAA). STAA trucks are longer than California legal trucks. As a result, STAA trucks have a larger turning radius than most local roads can accommodate. STAA truck routes exist along portions of Lindhurst Avenue, Erle Road, Furneaux Road, Melody Road, and Arboga Road to provide access to the Yuba County Airport and Industrial Zone. STAA routes also exist on South Beale Road from SR 65 to Beale AFB.

4.13.3 Environmental Impacts and Mitigation Measures

This section describes the transportation analysis of the 2030 General Plan and identifies potential impacts and mitigation measures that would be associated with its adoption. The proposed Circulation Plan is first presented followed by the analysis methodology, significance criteria, impact statements, and mitigation measures.

Scenarios Analyzed

Although not required under CEQA, in order to provide planning intelligence throughout buildout of the 2030 General Plan, the following scenarios were analyzed and are reported in this section:

- **2030 General Plan Growth Scenario 1 (Alternative 2).** The 2030 General Plan provides more development capacity than is likely to be absorbed between present and 2030. Therefore, in order to be able to plan for the location of future growth in the near term and mid-term, the County has developed this scenario to support public infrastructure and facilities planning and financing. This scenario describes land use change that would be anticipated for unincorporated areas if the county grew at a very high, unprecedented, and sustained rate. The County has identified areas that are more likely to develop between present and 2030, based on the availability of existing infrastructure. Development under this alternative would occur in areas with access to existing water, wastewater, transportation, and drainage facilities.

- **2030 General Plan Growth Scenario 2 (Alternative 4).** With this scenario, additional land for development along SR 65 is assumed to be developed, in addition to all of the areas included under 2030 General Plan Growth Scenario 1. This alternative would involve extremely high growth rates and would involve development of certain areas along the SR 65 corridor between Ostrom Road and South Beale Road.

- **Full Buildout of the 2030 General Plan.** This scenario assumes full buildout of the 2030 General Plan, as shown on the County's Land Use Diagram. This scenario would accommodate nearly 100,000 new residents within the unincorporated areas of the County. This scenario is designed to meet the County's very long-term growth needs.

Vehicular Circulation Diagram

Exhibit 4.13-8 displays the County's Vehicular Circulation Diagram included in the Community Development Element of the 2030 General Plan, including new roadways, expanded roadways, and new/upgraded interchanges. Tables 4.13-3 and 4.13-4 list the improvements to County roadways and state facilities, respectively, which are anticipated to be needed by 2030.

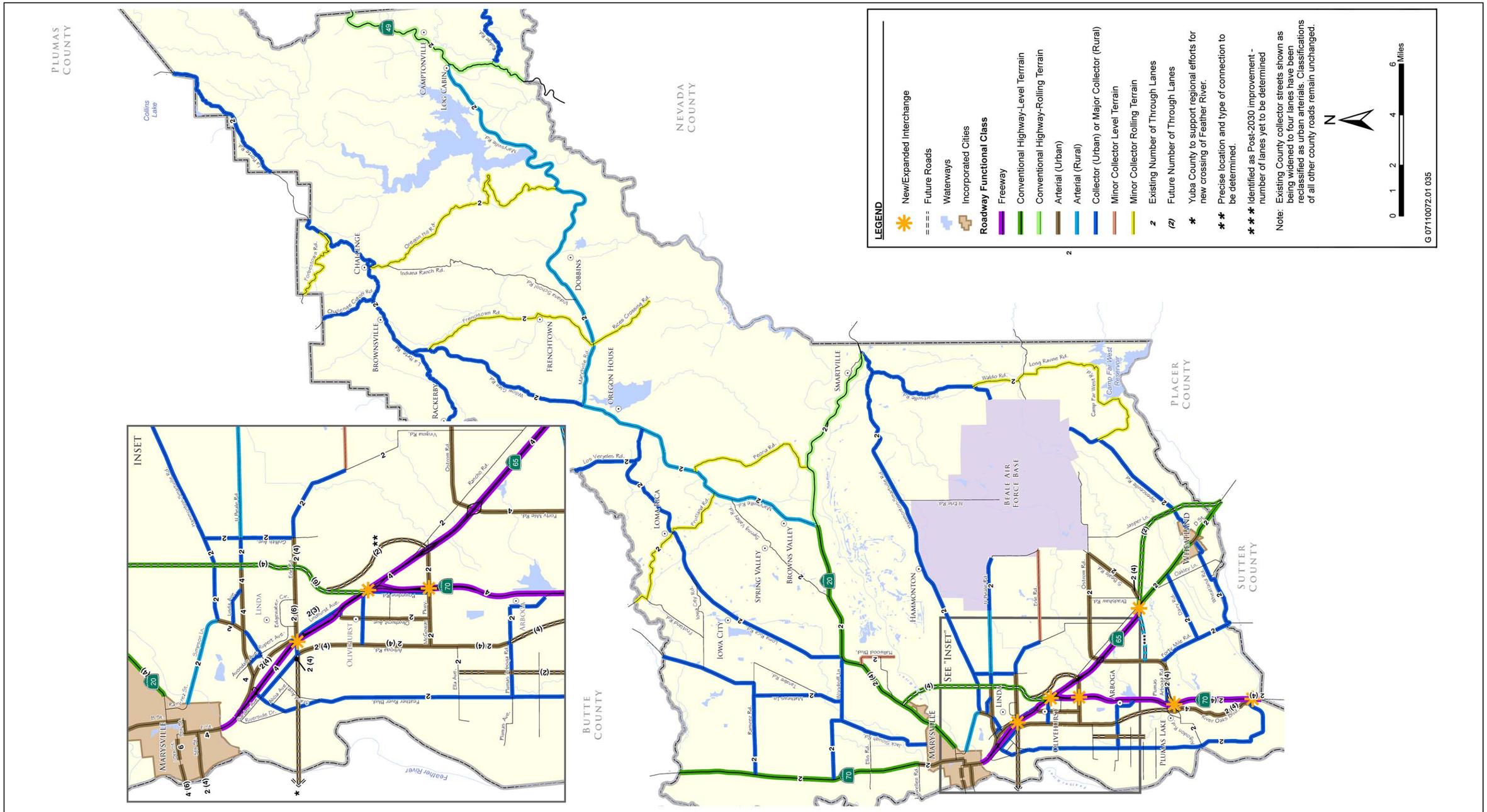
Adding growth along Highway 65, consistent with 2030 General Plan Growth Scenario 2 (Alternative 4), creates the need for an additional urban arterial designations for South Beale and Ostrom roads, which are not necessary under General Plan Growth Scenario 1 (Alternative 2).

The County's Vehicular Circulation Diagram shows several "Post-2030 circulation improvements," that are not required to serve Alternatives 2 or 4, but would be needed to serve full buildout of the 2030 General Plan. These post-2030 improvements include a third Feather River Bridge crossing and the extension of Plumas-Arboga Road easterly from Forty Mile Road to a new interchange at SR 65 near South Beale Road. Table 4.13-5 lists several roadways for which right-of-way should be reserved to accommodate development anticipated under full buildout of the 2030 General Plan.

PLANNED IMPROVEMENTS

Planned improvements on state highways in Yuba County and desired operating thresholds are described below. This information was considered in the development of the Vehicular Circulation Diagram.

- State Route 20 Transportation Corridor Concept Report - TCCR (Caltrans, 2009)
  - Concept LOS: Acknowledges that SR 20 through Marysville will degrade to LOS F. LOS E from 12th Street to Marysville Road. LOS D from Marysville Road to Nevada County line.
  - Planned Projects: Spot improvements in Marysville. Passing lanes and spot intersection improvements such as additional turn lanes and a traffic signal on SR 20 at Loma Rica Road. Shoulder widening and curve improvements east of Marysville Road.
  - Conceptual Projects: Feather River Expressway. Passing Lanes between Marysville Road and the Yuba/Nevada County line.
  - Ultimate Facility (Beyond 20-year timeframe): four-lane expressway from Marysville to the Nevada County line.
- State Route 49 Transportation Corridor Concept Report - TCCR (Caltrans, 2009)
  - Concept LOS: LOS D for this nine-mile segment within Yuba County.
  - Planned Projects: None.
  - Conceptual Projects: passing lanes, shoulder widening, and curve realignment
  - Ultimate Facility (Beyond 20-year timeframe): two-lane highway.
- State Route 65 Corridor System Management Plan – CSMP (Caltrans 2009)
  - Concept LOS: LOS E from Yuba/Placer County line to South Beale Road. LOS C from South Beale Road to SR 70.
  - Planned Projects: Wheatland Bypass, which would be an access-controlled two-lane expressway that would begin at the Lincoln Bypass north terminus and extend easterly of Wheatland to near South Beale Road.
  - Conceptual Projects: None.
  - Ultimate Facility (Beyond 20-year timeframe): six-lane freeway.



Source: Fehr & Peers 2010

Vehicular Circulation Diagram **Exhibit 4.13-8**

Table 4.13-3
2030 Yuba County General Plan – Recommended Improvements to County Facilities

Roadway	Segment		Existing Lanes	Year 2030 Lanes[1]
	From	To		
Arboga Road	Broadway Street	Erle Road	2	4
Arboga Road Extension (New Road)	Algodon Road	Broadway Street	0	4
Erle Road	Arboga Road	Chestnut Road	2	4
Erle Road	Chestnut Road	Goldfields Parkway	2	6
Erle Road	Goldfields Parkway	Griffith Avenue	2	4
Lindhurst Avenue	Olivehurst Avenue	Erle Road	2	3 (2 NB/1 SB)
Lindhurst Avenue	Erle Road	N Beale Road	2	4
Links Parkway (Partially Constructed Road)	Country Club Drive	Ella Avenue	0/2	2/4
McGowan Parkway	Arboga Road	SR 65	2	TBD[2]
McGowan Parkway Extension (New Road)	SR 65[3]	Goldfields Parkway[3]	0	2
N. Beale Road	College View Drive	Goldfields Parkway	2	4
Plumas Arboga Road	Plumas Lake Boulevard[4]	Forty Mile Road	2	4
River Oaks Boulevard	Feather River Boulevard	North of Cimerron Drive/ Colorado Drive	2	4
Goldfields Parkway (New Road)	SR 65/SR 70	Erle Road	0	6
Goldfields Parkway (New Road)	Erle Road	SR 20	0/4	4
Wheatland Bypass (New Road)	SR 65 at Placer County Line	SR 65 at S. Beale Road	0	2
5th Street (Twin Cities Memorial Bridge)	Sutter County Line	J Street	2	4
Additional Growth along Highway 65 (Alternative 4) creates need for: South Beale Road	SR 65	East of Bradshaw	2	4

Notes: This table includes major roadway improvements within the unincorporated County. Additional improvements planned within the incorporated cities of Marysville and Wheatland are not shown.

[1] Through lanes only (does not include turn pockets, acceleration/deceleration lanes, two-way left-turn lanes, etc).

[2] Potential improvements to McGowan Parkway to be studied after completion of the General Plan.

[3] Precise alignment and type of connection to be determined.

[4] Western portion of this segment will be realigned to connect with the Plumas Lake Boulevard interchange at SR 70.

Table 4.13-4
2030 Yuba County General Plan – Recommended Improvements to State Facilities

Roadway	Segment		Existing Lanes	Year 2030 Lanes[1]
	From	To		
SR 20/10th Street (Feather River Bridge)	Sutter County Line	H Street	4	6
SR 20	Ramirez Street	Loma Rica Road	2	4
SR 70[2]	Sutter County Line	North of Feather River Boulevard (South)	2	4
New/Expanded Interchanges				
SR 65/South Beale Road/Wheatland Bypass		SR 70/Plumas Lake Boulevard		
SR 65/SR 70/Goldfields Parkway		SR 70/McGowan Parkway		
SR 70/Feather River Boulevard (South)		SR 70/Erle Road		

Notes: This table includes major improvements on state-owned facilities in unincorporated Yuba County. As the General Plan builds out, smaller improvements (e.g., passing lanes, new signals, spot widening, etc.) may also be necessary.

[1] Through lanes only (does not include turn pockets, acceleration/deceleration lanes, two-way left-turn lanes, etc).

[2] Currently under construction.

Table 4.13-5
2030 Yuba County General Plan – Recommended Right-of-Way Reservation

Roadway	Segment		2030 Lanes	Buildout Lanes[1]
	From	To		
Erle Road Extension (New Road)	New Feather River Crossing at Sutter County Line	Arboga Road	0/2[2]	4
Feather River Boulevard	River Oaks Boulevard	SR 70 (North)	2	4
Hammonton-Smartsville Road	N Beale Road	Simpson Lane	2	4
N. Beale Road	Goldfields Parkway	Griffith Avenue	2	4
Plumas Arboga Extension (New Road)	Forty Mile Road	SR 65	0	2/4[3]
Goldfields Parkway	Erle Road	Hammonton-Smartsville Road	4	6
SR 20	Loma Rica Road	Marysville Road	2	4

Notes:

[1] Through lanes only (does not include turn pockets, acceleration/deceleration lanes, two-way-left-turn lanes, etc).

[2] A portion of the roadway extension will be constructed along the existing alignment of Pasado Road

[3] Final design and number of lanes yet to be determined

- State Route 70 Transportation Corridor Concept Report - TCCR (Caltrans 2009)
    - Concept LOS: LOS D from the Yuba/Sutter County line to McGowan Parkway. LOS E from McGowan Parkway to 1st Street in Marysville. LOS D from north of Marysville to the Yuba/Butte County line.
    - Planned Projects: new interchanges at Feather River Boulevard, Plumas Lake Boulevard. Expanded interchanges at McGowan Parkway, SR 65/70, and Erle Road. Construction of Goldfields Parkway. Passing lanes on SR 70 north of Marysville. Four-lane freeway from the Sutter County line to McGowan Parkway.
    - Conceptual Projects: widening of SR 70 to six lanes across the Yuba River, and the Feather River Expressway, which would be a local bypass of Marysville that would extend around the west side of Marysville to connect with SR 20.
    - Ultimate Facility (Beyond 20-year timeframe): six-lane freeway from McGowan Parkway to 1st Street in Marysville.

4.13.4 ANALYSIS METHODOLOGY

Transportation system impacts are based on a focused travel demand model developed by Fehr & Peers for Yuba County. The following land use/transportation scenarios were analyzed using this model:

- Alternative 1 – the "No Project" Alternative – assumes land uses from the 1996 General Plan and the 2030 General Plan Circulation plan (including the post-2030 improvements)
- Full buildout of the 2030 General Plan – assumes the General Plan buildout land uses and 2030 General Plan Vehicular Circulation Diagram (including the post-2030 improvements)
- Growth Scenario 1 (Alternative 2) –developed to analyze the impacts of development of portions of the Valley Growth Boundary closest to existing infrastructure and development. This scenario assumes new population of between 28,000 and 32,000 and between 14,000 and 16,000 new jobs would be added to the unincorporated County.
- Growth Scenario 2 (Alternative 4) –developed to analyze the differential environmental impacts that would result if the County were to experience high and sustained rates of growth through 2030. Some areas along the SR 65 corridor between South Beale Road and Ostrom Road were assumed to develop. This scenario assumes new population of between 36,000 and 45,000 and between 21,000 and 25,000 new jobs would be added to the unincorporated County.

To facilitate direct comparisons between the No Project Alternative and full buildout of the 2030 General Plan, the same circulation system was assumed. The 1996 General Plan Circulation System was not assumed for the No Project Alternative since it included several large infrastructure projects that are not currently contemplated. Examples include the extension of Goldfields Parkway northerly beyond SR 20 to connect with SR 70, a new regional beltway that would extend from South Beale Road through Beale AFB to SR 20 and then to SR 70, a new connection from the Smartsville community to Marysville Road, and the extension of McGowan Parkway to Feather River Boulevard.

4.13.5 LAND USE ASSUMPTIONS

Table 4.13-6 compares land use totals for the No Project Alternative, full buildout of the 2030 General Plan, Growth Scenario 1 (Alternative 2), and Growth Scenario 2 (Alternative 4) scenarios. For ease of comparison, the commercial land use category includes neighborhood, community, and regional commercial. The industrial category includes light industrial, manufacturing, mining, and public-quasi public uses.

Table 4.13-6
Land Use Comparison

Scenario	Single-Family Residential	Multi-Family Residential	Commercial	Business Professional	Industrial
No Project	67,250 du's	8,521 du's	15,138 ksf	4,977 ksf	5,533 ksf
Full Buildout of 2030 General Plan	69,206 du's	12,053 du's	16,051 ksf	7,922 ksf	10,282 ksf
Growth Scenario 1 (Alternative 2)	38,331 du's	7,513 du's	7,149 ksf	2,132 ksf	3,196 ksf
Growth Scenario 2 (Alternative 4)	39,961 du's	8,035 du's	7,371 ksf	2,647 ksf	5,385 ksf

Notes: du's = dwelling units. ksf = thousand square feet

The totals in this table include planned development in Wheatland. Growth Scenarios 1 and 2 (Alternatives 2 and 4) assume buildout of the Wheatland General Plan with the exception of any development in the urban reserve area. The No Project Alternative and full buildout of the 2030 General Plan scenarios include development of the City's urban reserve area per its eventual planned development. A number of other trip generating land uses, which are not listed in Table 4.13-6, are included in the travel demand model, such as employment at Beale AFB, motels/hotels, parks, and schools.

The full buildout of the 2030 General Plan scenario consists of approximately 7 percent more residential and 33 percent more non-residential compared to the No Project Alternative. Although the land use totals are generally similar, the location of these uses is not. Whereas the 2030 General Plan focuses the majority of development in the southwestern part of the County, the No Project Alternative also includes significant levels of residential and non-residential development in the foothills. The Growth Scenario 1 (Alternative 2) scenario represents about 56 percent of the residential and 36 percent of the non-residential development contemplated in the full buildout of the 2030 General Plan scenario. The Growth Scenario 2 (Alternative 4) scenario represents about 59 percent of the residential and 45 percent of the non-residential development contemplated in the full buildout of the 2030 General Plan scenario, resulting in a higher ratio of jobs to housing than Alternative 2.

4.13.6 TRAFFIC FORECASTS

Initially, a base year version of the Yuba County Travel Demand Model (TDM) was developed to establish a level of confidence that the future year model would reasonably forecast traffic. The base year model was validated to 2007 conditions using the traffic counts and land use inventory from that year. The model was validated to Caltrans standards and Fehr & Peers internal validation standards.

Future year land uses were allocated into individual traffic analysis zones (TAZs) and then entered into the Yuba County TDM for each scenario along with the planned roadway system. An extensive review and evaluation of model trip rates and trip productions and attractions by trip type was conducted to determine the expected percentages of trips remaining internal to the County versus traveling externally.

Coordination with the SACOG Year 2035 SACMET TDM was performed to review anticipated traffic growth at the County gateways such as SR 70, SR 65, 5th Street, and SR 20. The model was also refined to reflect differences in residential trip rates (based on observed trip generation studies) in the valley floor and foothill areas. Whereas traditional suburban-type trip rates are expected in the southwest area of the County, residential uses in the foothills will continue to exhibit somewhat lower trip rates due to the considerable travel distance to complementary land uses.

The current scarcity of shopping, employment, and other complementary land uses in the southwest area of the County has resulted in substantial levels of external trip-making to adjacent Counties such as Sutter, Sacramento, and Placer. Beale AFB draws employees from throughout the Sacramento metropolitan area. Regional shopping in Yuba City is just across the Feather River from Yuba County. Employment in North Natomas and South Placer County is approximately 20 miles south of the southern portion of Yuba County.

All three future year scenarios present a more balanced jobs-to-housing ratio than the current condition. Nevertheless, a considerable proportion of trips generated by County land uses (approximately 35 percent) will still have origins or destinations outside the County given the proximity of planned developments directly beyond the County limits in Sutter County (e.g., the Sutter Pointe Specific Plan) and Placer County (such as the city of Lincoln). The assumption of a third Feather River Bridge at Erle Road vastly improves accessibility to the southern area of Yuba City. The substantial amount of new development assumed within Wheatland will generate trips to/from nearby Lincoln, which are relatively short distance but considered external.

Exhibits 4.13-9 through 4.13-12 display the average daily traffic forecasts on roadways through Yuba County for the Growth Scenario 1 (Alternative 2) scenario, Growth Scenario 2 (Alternative 4) scenario, full buildout of the 2030 Yuba County General Plan, and the No Project Alternative, respectively.

The Yuba County TDM did not require specific land use assumptions in adjacent jurisdictions because streets and highways connecting the County and those jurisdictions were modeled as 'external gateways.' However, by comparing the volumes of traffic on those external gateways to projections from those adjacent jurisdictions' traffic models, an understanding of the magnitude of land use absorption can be achieved as described below:

- **SR 65 at the Yuba/Placer County line** – This segment is projected to carry about 76,000 average daily trips (ADT) with full buildout of the 2030 General Plan. This amount of traffic is greater than the cumulative (2050) projection of 58,000 ADT for this segment in the City of Lincoln General Plan, which assumes significant amounts of new land use within Lincoln. The increase in traffic on SR 65 over the City of Lincoln estimate may be due to a greater amount of land use absorption now contemplated in south Yuba County and the City of Wheatland.

- **SR 20, 5th Street, and Third Bridge over Feather River at the Yuba/Sutter County line** – These crossings are projected to carry approximately 200,000 ADT with full buildout of the 2030 General Plan. This amount of traffic is slightly greater than the cumulative (2030) projection of 190,000 ADT from the City of Yuba City Year 2030 Traffic Model, indicating that the Yuba County TDM considers the 2030 land uses from the Yuba City General Plan.

THRESHOLDS OF SIGNIFICANCE

Based on this guidance and on Appendix G of the State CEQA Guidelines, an impact on transportation and traffic is considered significant if the proposed project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- 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;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

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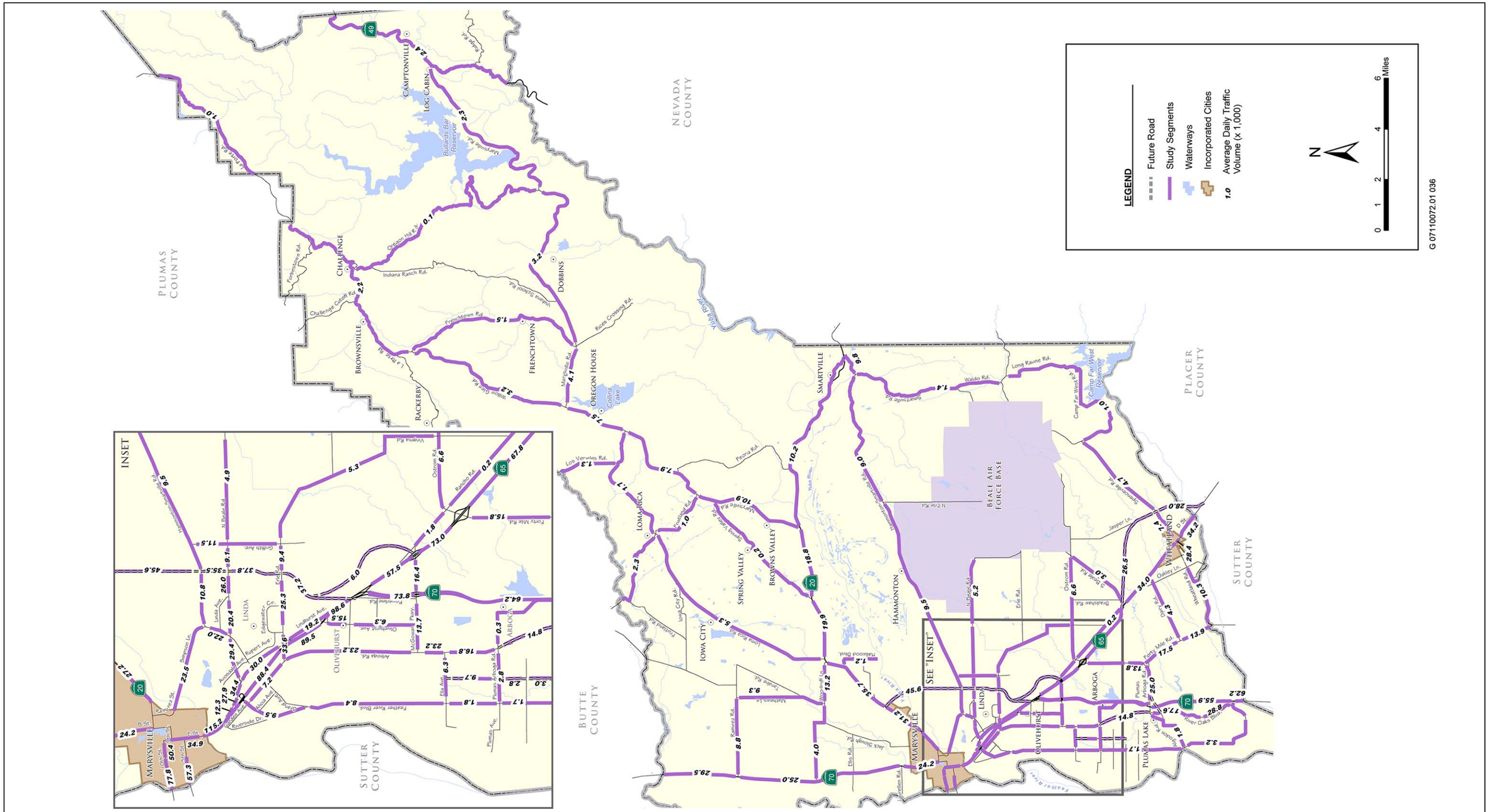
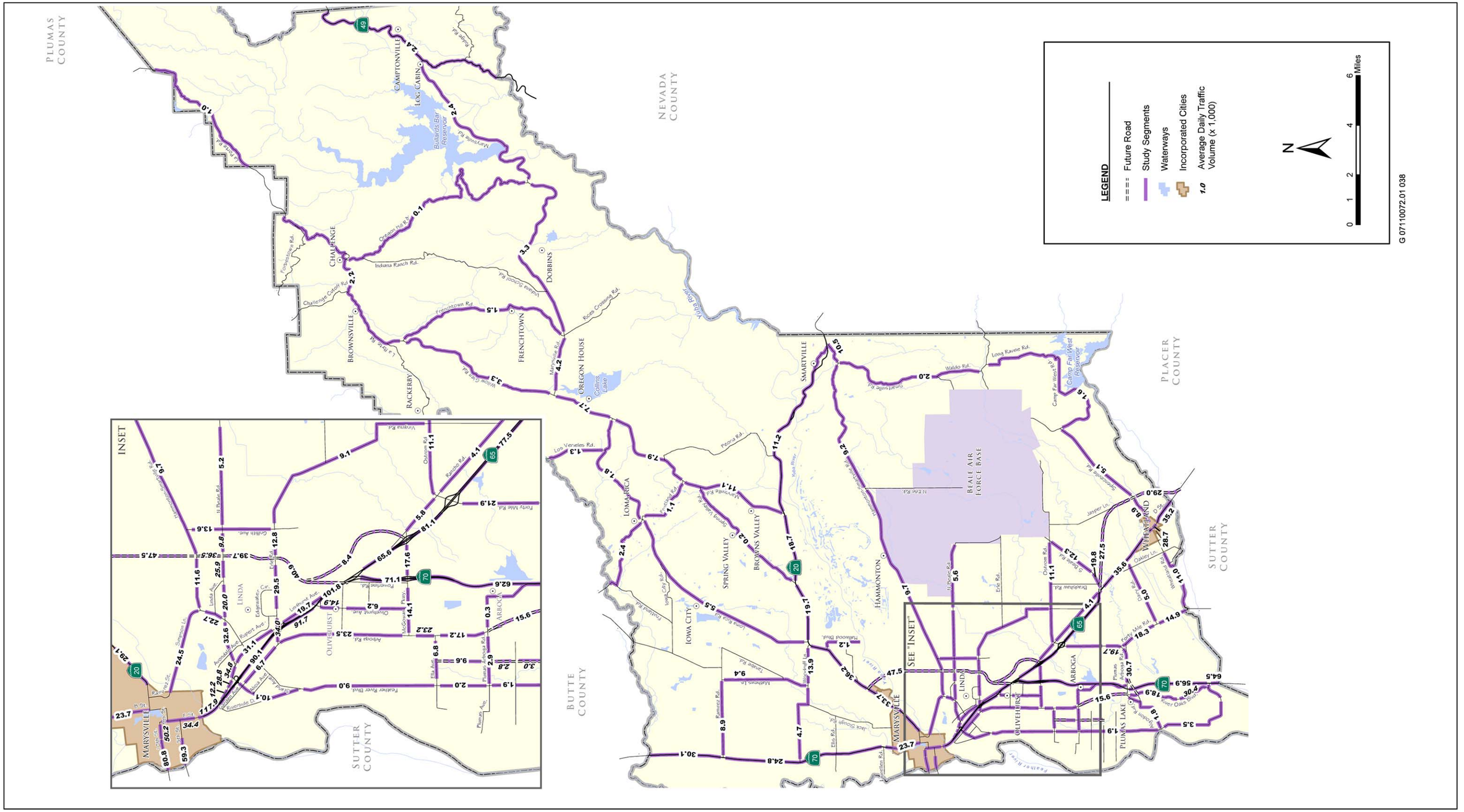
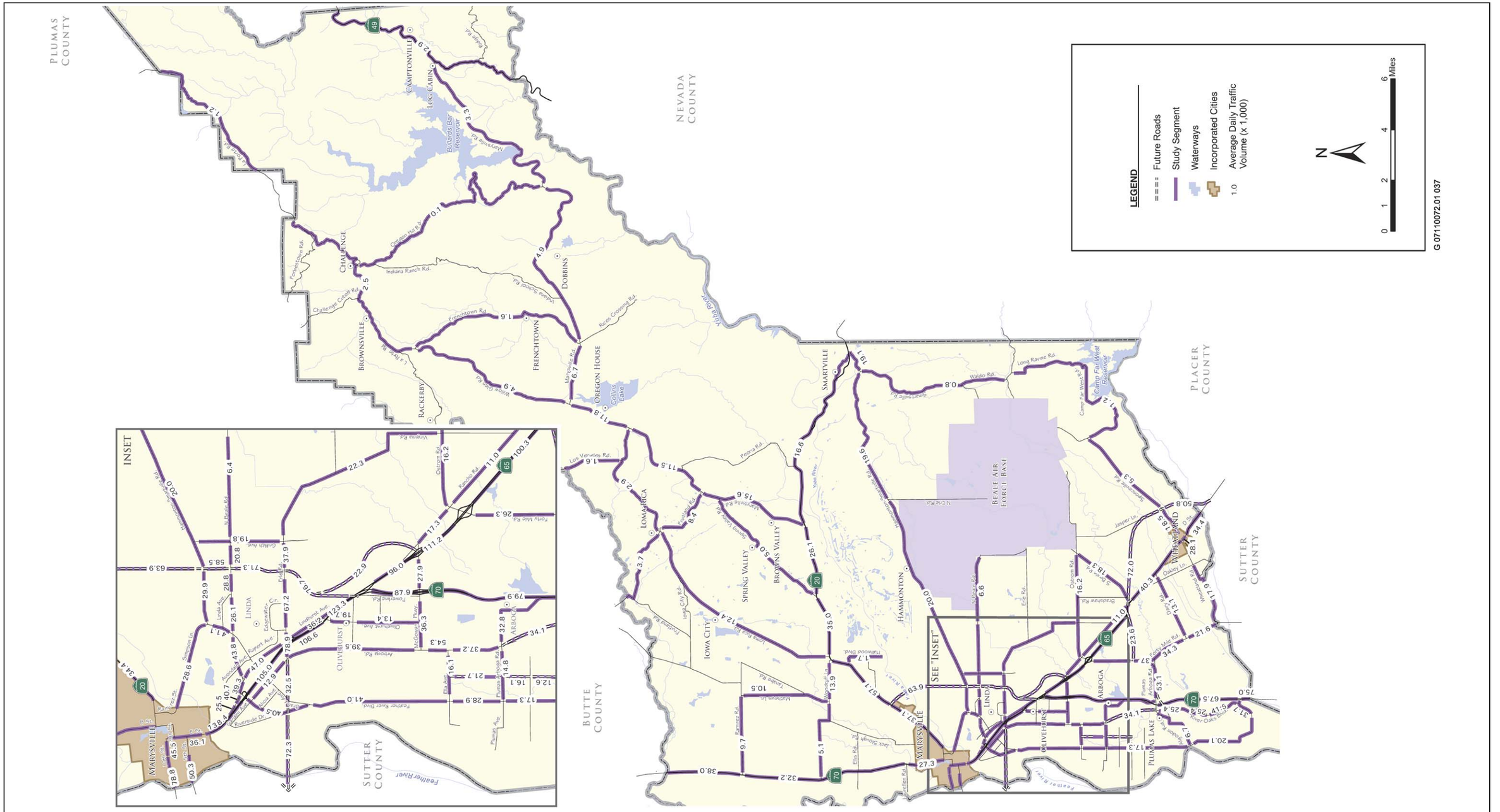


Source: Fehr & Peers 2010

Average Daily Traffic under Growth Scenario 1 (Alternative 2)

Exhibit 4.13-9

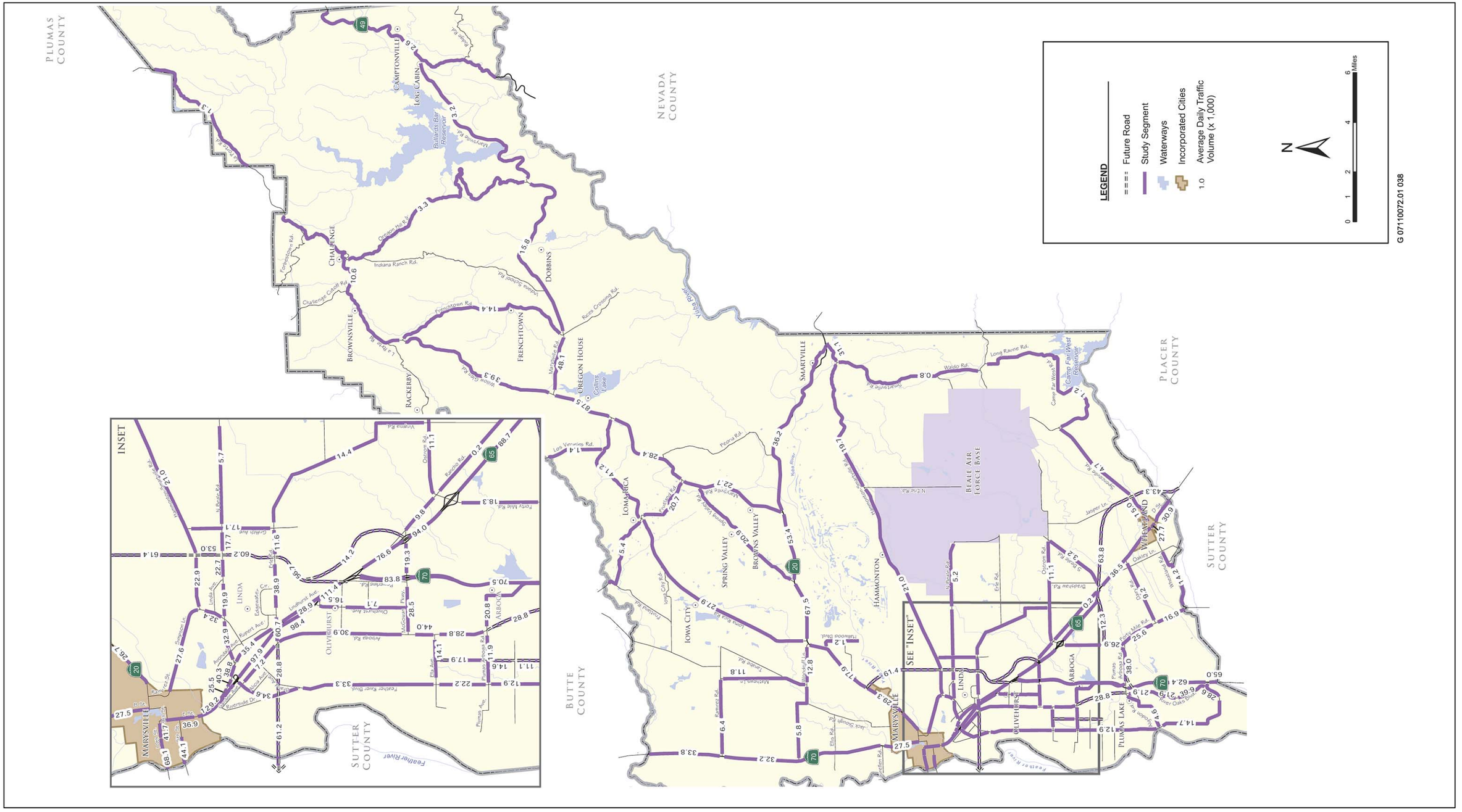

PLUMAS COUNTY
NEVADA COUNTY
PLACER COUNTY
SUTTER COUNTY
BUTTE COUNTY
CAMPTONVILLE
LOG CABIN
Bullards Bar Reservoir
CHALLENGE
BROWNSVILLE
FRENCHTOWN
DOBBINS
RACKERBY
OREGON HOUSE
Collins Lake
SMARTVILLE
Camp Far West Reservoir
BEALE AIR FORCE BASE
LOMA RICA
SPRING VALLEY
BROWNS VALLEY
IOWA CITY
HAMMONTON
MARYSVILLE
LINDA
OLIVEHURST
ARBOGA
PLUMAS LAKE
WHEATLAND
Yuba River
Feather River
Oregon Hill Rd.
Indiana Ranch Rd.
Challenge Cutoff Rd.
Forbestown Rd.
Frenchtown Rd
Marysville Rd.
Ross Crossing Rd.
Waldo Rd.
Long Ravine Rd.
Loma Rica Dr.
Arboga Rd.
Feather River Blvd
Plumas Arboga Rd.
Ellis Rd.
Ella Ave.
Olivehurst Ave.
Powerline Rd.
Lindhurst Ave.
Laurel Ave.
Ruppert Ave.
Ascot Ave.
Alicia Ave.
Edgewater Cir.
Simpson Ln.
Gilsizer Slough
Dry Creek
Jack Slough
Hallwood Blvd.
Dobbins School Rd.
Pleasant Valley Rd.
Peoria Rd.
Los Verjeles Rd.
Jasper Ln.
Dogwood Dr.
Dry Creek Rd.
Oakley Dr.
Dantoni Dr.
Cypress Ln.
Dunbar Rd.
Dobbins-Oregon House Rd.
Marysville Rd.
Camp Far West Rd.
Powerline Rd.
Spenceville Rd.
Smartville Rd.
Pleasant Valley Rd.
Browns Valley Rd.
Loma Rica Rd.
Iowa City Rd.
Hallwood Blvd.
Jack Slough Rd.
Ramirez Rd.
Matthews Rd.
Ella Rd.
Erle Rd.
Dobbins-Oregon House Rd.
Oregon Hill Rd.
Indiana Ranch Rd.
Forbestown Rd.
Challenge Cutoff Rd.
La Porte Rd.
Frenchtown Rd
Marysville Rd.
Ross Crossing Rd.
Waldo Rd.
Long Ravine Rd.
Camp Far West



Source: Fehr & Peers 2010

Average Daily Traffic under Full Buildout of the 2030 General Plan

Exhibit 4.13-11



Source: Fehr & Peers 2010

Average Daily Traffic under No Project Alternative (Buildout of the 1996 General Plan)

Exhibit 4.13-12

IMPACT ANALYSIS

This section provides an evaluation for the potential impacts of the 2030 General Plan for each of the significance criteria listed above. For the transit, bicycle, pedestrian, goods movement, and aviation systems, the analysis consisted of a review of the General Plan policy framework and implementation program associated with the 2030 General Plan. As noted previously, Yuba County does not have a currently applicable congestion management program. This impact will not be discussed further.

IMPACT 4.13-1 **Increase in Traffic Levels.** *Implementation of the 2030 General Plan would result in increases in traffic levels on roadways within Yuba County. This impact is considered* ***significant****.*

The 2030 General Plan would result in greater levels of traffic on most County roadways, when compared to existing conditions. This increase reflects a substantial amount of land use change, as well as an improved mix of land use types that enables a greater proportion of trips to remain internal to the County.

Exhibits 4.13-11 and 4.13-12 display the expected traffic levels on Yuba County roadways for full buildout of the 2030 General Plan and the No Project Alternative (i.e., buildout of the 1996 General Plan). When compared to the 1996 General Plan, the 2030 General Plan would generally result in greater levels of traffic on collectors, arterials, and highways/freeways located in the southwestern area of the County. The 2030 General Plan results in reductions in traffic on most roadways in the County foothills, compared to the 1996 General Plan.

The additional traffic on the roadway system in the southwestern portion of the County could result in a variety of effects, ranging from additional delays incurred by motorists, need for additional street widening, and conflicts with other travel modes. Increased travel demand creates air quality, greenhouse gas emissions, noise, and water quality impacts. Although inconvenience caused by traffic congestion is not in and of itself an adverse physical environmental impact under CEQA, construction of roadways in response to increased travel demand could have adverse environmental impacts.

The specific environmental impacts of each phase of improvements to the County's transportation system will be evaluated at the project level and is beyond the scope and purpose of a General Plan programmatic EIR. The impacts of infrastructure required to serve General Plan buildout is analyzed at a programmatic level along with the direct effects of construction and operation of General Plan land uses throughout this EIR. However, because of the level of development anticipated under the 2030 General Plan, it is possible that the construction of additional transportation facilities could generate significant impacts. Although General Plan policies and actions will require transportation facilities to be provided in a way that reduces environmental impacts, the extent of infrastructure required to serve future demand, depending on phasing of future development, could create significant impacts.

The 2030 General Plan includes a variety of policies ranging from growth management, infill development, integrated land use and transportation planning, travel demand management, improved jobs-housing balance, enhancement of alternative travel modes, and street network connectivity that are intended to reduce travel demand.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD1.1:** Urban and suburban development in the unincorporated County not related to agriculture, mining, or some natural or cultural resource-oriented purpose is prohibited in valley areas outside the Valley Growth Boundary.
- **Policy CD1.3:** Urban land use designation/s will not be assigned within the Planning Reserve area unless the County determines that these lands are needed to fulfill either the County's regional housing needs allocation or accommodate job-generating developments needed to achieve the County's jobs-housing goals.

- **Policy CD1.4:** New developments proposing urban land uses will not be approved within the Planning Reserve area until the County assigns the appropriate General Plan land use designation/s and approves zoning and development standards consistent with the Community Development Element.

- **Policy CD2.1:** The County will encourage infill development and redevelopment of vacant and underutilized properties within existing unincorporated communities.

- **Policy CD2.2:** The County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment.

- **Policy CD2.3:** The County will support reinvestment in Linda and Olivehurst that increases local shopping, job, and housing opportunities.

- **Policy CD2.4:** The County will maintain flexible development standards, infrastructure standards, and impact fees that promote infill development and promote lot consolidation for redevelopment, where necessary.

- **Policy CD2.5:** The County will prioritize public spending on infrastructure within infill areas in order to induce reinvestment, remove blight, and reduce poverty.

- **Policy CD2.6:** The County will support public/private partnerships that encourage infill development consistent with the General Plan.

- **Policy CD2.7:** The County will actively promote vacant industrial sites in the Linda and Olivehurst areas for employment development.

- **Policy CD3.4:** The County will use performance-based standards in mixed-use areas to ensure important aspects of compatibility (air, noise, vibration, heavy truck traffic, light, glare) are addressed without impeding mixed-use development.

- **Action CD3.1:** Compatibility Review and Conditioning of Projects and Plans. The County will review projects against policies in this General Plan and analysis in the General Plan Environmental Impact Report (EIR) to reduce noise and air quality impacts. The County Zoning Ordinance and development standards should identify design and performance standards for noise, light, glare, air pollution, and other relevant issues. The County will use the General Plan to determine the adequacy of proposed buffering between residential land uses, highways, railroads, airports, industries, mining operations, agricultural operations, and other potentially incompatible uses. The County will condition projects, as appropriate, to provide consistency with this General Plan and the General Plan EIR. The County will balance its goals for infill and mixed-use development with policies and standards for noise, vibration, light and glare, and other issues of compatibility.

    - Related Goals: Goal CD3, Goal NR11, Goal HS5, Goal HS10, Goal HS11
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund; applicant funding for project-specific work
    - Time Frame: Ongoing

- **Policy CD4.1:** Employment and Commercial Centers shall be developed in coordination with local transit provider/s to ensure proper placement and design of transit stops and accommodate public transit for both employees and patrons.

- **Policy CD4.2:** Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.

- **Policy CD4.3:** In Commercial and Employment Centers, developments should place buildings close to the frontage street and emphasize the public realm by providing plazas, wide sidewalks, spaces for entertainment and other community events, outdoor seating and gathering areas, and other similar uses and activities.

- **Policy CD4.4:** Commercial projects of more than 20 acres in land area shall use public streets or small private streets to break up proposed development areas into blocks.

- **Policy CD4.5:** New commercial projects in Commercial Centers and other locations shall distribute proposed parking around the project site and not concentrate parking exclusively between the front building façade and the primary abutting street.

- **Policy CD4.6:** The County will encourage development of workforce housing around Employment Centers that is ancillary to, and supportive of employment-generating land uses.

- **Policy CD5.1:** Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks, and other civic uses.

- **Policy CD5.2:** Valley Neighborhoods should provide compact development patterns that conserve land and place homes in close proximity to destinations.

- **Policy CD5.3:** Valley residential development in existing and planned Valley Neighborhoods should provide for the full range of housing types and densities.

- **Policy CD5.4:** New developments within the Valley Growth Boundary shall provide a highly connected travel network that supports all local travel modes.

- **Policy CD5.5:** The County's development standards will allow narrow lots, narrow driveways, alleyway access, zero lot line housing, and other compact housing configurations in Valley Neighborhoods.

- **Action CD5.1: Update Zoning Ordinance.** Following the General Plan adoption, the County will review and revise the Zoning Ordinance, consistent with the updated General Plan. As a part of the revisions, the County will ensure the updated Zoning Ordinance accommodates compact growth patterns, consistent with the General Plan, while continuing to provide for the public health and safety. The County will consider provisions in the Zoning Ordinance that focus more on building form, function, and placement; lot design; and the relationship of buildings to the public realm (streets, plazas, public parks, etc.) and less emphasis on regulating specific land uses.

  To ensure land use compatibility while also encouraging a mix of land uses, the County will base performance standards in the Zoning Ordinance on General Plan policies for such topics as noise, vibration, light, glare, air pollution, and traffic. Such performance standards could be used to ensure compatibility in situations where nonresidential uses are located close to residential uses. The ordinance will also be revised to address nuisances, such as blight, stockpiling, and other similar issues.

  - Related Goals : Goal CD2, Goal CD3, Goal CD4, Goal CD6, Goal CD7, Goal CD8, Goal CD19, Goal HS5, Goal HS10, Goal HS11, Goal NR11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; federal and state funds, as available
  - Time Frame: Update Zoning Ordinance by 2013

- **Policy CD6.1:** Valley Neighborhoods shall contain one or more Neighborhood Center, where medium- and higher-density residences, neighborhood commercial, and public services are focused.

- **Policy CD6.2:** Neighborhood Center activities, retail, and services should serve roughly 3,000 to 5,000 existing or planned residents in the surrounding neighborhood.

- **Policy CD6.3:** Neighborhood Centers should be developed on approximately 4 to 15 acres of land and sized according to the needs of the surrounding neighborhood.

- **Policy CD6.4:** Higher-density residential development and services in Neighborhood Centers should transition to less intense development at the edges of existing and planned Valley Neighborhoods.

- **Policy CD6.5:** Neighborhood Centers should provide for a pedestrian-friendly mix of uses and a range of housing types to meet the needs of the County's diverse households.

- **Policy CD6.6:** Neighborhood Centers shall be located and designed to provide convenient and safe bicycle, pedestrian, and transit access to and from surrounding neighborhoods.

- **Policy CD7.1:** The County will pursue funding for reinvestment along Olivehurst Avenue, McGowan Parkway, North Beale Road, Lindhurst Avenue, and other appropriate corridors.

- **Policy CD7.3:** The County will encourage – through entitlement, streamlining, flexibility in development standards, fee structures, and other incentives – infill development in vacant or underutilized sections of Mixed-Use Corridors.

- **Policy CD7.4:** Developments in Mixed-Use Corridors should have pedestrian-friendly property frontages with buildings built close to the street frontage.

- **Policy CD7.5:** Development in Mixed-Use Corridors should be designed so that building façades, street trees, and other landscaping are more visually prominent compared to surface parking lots and commercial signage.

- **Policy CD7.6:** The County will promote public plazas, outdoor dining, awnings, large windows, and other elements along property frontages that enhance pedestrian attractiveness and activity in Mixed-Use Corridors.

- **Policy CD7.7:** The County will seek funding to add drainage, bicycle, pedestrian, and transit facilities along Mixed-Use Corridors.

- **Policy CD7.8:** The County will seek funding to add street trees along Mixed-Use Corridors, particularly in areas that would shade sidewalks, parking areas, transit stops, and any public gathering places.

- **Action CD7.1: Corridor Planning.** The County will seek funding to support corridor planning efforts for McGowan Parkway, Olivehurst Avenue, Lindhurst Avenue, North Beale Road, the northern section of Feather River Boulevard, and surrounding areas. The County may also identify other Mixed-Use Corridors to address during buildout of the General Plan. Mixed-Use Corridor Plans would be designed to (Exhibit Community Development-10):

    - Guide mixed-use, infill development consistent with the applicable land use designation/s and zoning district/s;

    - Identify multimodal transportation improvements to support development;

    - Describe public infrastructure and facilities needed to encourage private investment; and

- Identify incentives and streamlining that would induce private investment in these areas.

The Plans would be structured to provide a mix and density of development with adequate transportation facilities such that walking, bicycling, or taking transit is viable for daily needs of the residents of surrounding neighborhoods. The County will pursue grant funding and regional partnerships to revitalize its Mixed-Use Corridors. The County will plan and fund infrastructure designed to support increased density and intensity around future transit stops, near planned bicycle/pedestrian facilities, and in other targeted reinvestment areas.

- Related Goals: Goal CD4, Goal CD7, Goal CD8, Goal CD10, Goal CD11, Goal CD15, Goal CD19, Goal NR7, Goal HS5, Goal HS11
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; federal and state funds
- Time Frame: Ongoing, according to funding opportunities as they arise.

- **Policy CD8.1:** New developments should be designed to provide direct and convenient access to nearby parks, trails, commercial and public services, and transit stops.
- **Policy CD8.2:** Valley Neighborhood developments and residential portions of Employment Village areas shall provide relatively short block lengths and continuity of streets in order to facilitate convenient pedestrian, bicycle, and vehicle movement (Exhibit Community Development-11).
- **Policy CD8.3:** New cul-de-sacs are allowed within the Valley Neighborhoods and residential portions of Employment Village areas where they would not create a barrier for pedestrian and bicycle access or circulation between homes and destinations.
- **Policy CD8.4:** New buildings in Valley Neighborhoods and residential portions of Employment Village areas should, in general, be oriented toward, and placed close to frontage streets.
- **Policy CD8.5:** New developments shall be designed so that parking areas and garages are not the dominant visual element of site frontage.
- **Policy CD8.7:** The County's development standards will allow alley-loaded garages.
- **Policy CD8.9:** Fences and walls are discouraged along public travelways where they would present substantial barriers to casual surveillance or multi-modal travel.
- **Policy CD8.10:** New developments in the Valley Growth Boundary should provide streets lined with trees selected and located to provide a shade canopy at maturity.
- **Policy CD8.11:** Multi-family housing developments should be well connected to the surrounding neighborhood. Parking areas should be sized and broken up to avoid creating barriers to pedestrian and bicycle circulation.
- **Policy CD9.6:** The County will support planning for Rural Centers in foothill and mountain portions of the County that would provide a variety of activities and services needed or anticipated to be needed by the local population, including, but not limited to medical and educational services.
- **Policy CD9.9:** Rural Communities can provide clusters of housing constructed at the upper end of allowable density ranges in approved Rural Center plans, but in general should provide larger lots at the edges of the community that transition to the surrounding open space areas.

- **Policy CD9.11:** Rural Centers should be focused on County collector and arterial roads and highways, and particularly at "crossroads" locations central to the surrounding rural communities.

- **Policy CD10.1:** The County will encourage development that improves the balance between local jobs and housing, including new commercial, industrial, home-based businesses, business incubators, and other development that generates net revenues for the County and produces local jobs.

- **Policy CD10.3:** The County will phase growth with efficient infrastructure planning in order to keep fees as low as possible and coordinate with service providers to ensure the savings of this efficient infrastructure planning is passed on to occupants of employment-generating developments.

- **Policy CD10.5:** The County will support community and specific planning efforts following General Plan adoption that identify employment-generating uses and the housing and infrastructure that is needed to support the local workforce.

- **Policy CD10.6:** The County will encourage residential development that is priced, sized, and located to serve the needs of local employers and workers.

- **Policy CD10.7:** Large residential development projects should be phased or timed to occur concurrently with development projects that will provide employment in the County.

- **Action CD10.2: Land Use Monitoring.** The County will monitor progress toward the jobs-housing goal and, as necessary, amend the General Plan, Zoning Ordinance, Specific Plans, Community Plans, and other relevant plans and codes, as appropriate. Any amendments shall address imbalances between job and population growth, and may include revisions to allowable land uses or development standards, financial/regulatory incentives to accelerate the development of job-generating uses, and other actions.

    - Related Goals: Goal CD1, Goal CD4, Goal CD10

    - Agency/Department: Community Development and Services Agency and Economic Development Coordinator.

    - Funding Source: General Fund

    - Time Frame: Report on jobs-housing balance at least once per year to the Board of Supervisors.

- **Policy CD13.1:** Growth should be phased from developed areas and existing infrastructure outward in a logical, efficient manner, and in a way that avoids premature conversion of agricultural lands, changes in rural character, and unnecessary loss of other land-based natural resources.

- **Policy CD13.2:** The County will not induce growth by supporting the provision of services or infrastructure in areas that are not planned for development.

- **Policy CD13.3:** Unincorporated County development between present and 2030 will be focused within the Valley Growth Boundary and Rural Communities.

- **Policy CD13.4:** For areas designated Planning Reserve, allowable land use will be regulated according to the underlying land use designation unless the Board of Supervisors approve the following findings:

    - The subject project or plan proposed within the Planning Reserve Area promotes the goals and is consistent with the polices of the Community Development Element, Natural Resources Element, Housing Element, and Public Health & Safety Element of the General Plan; and

- A Specific Plan or master plan meeting the County's requirements has been prepared; and
- The subject project or plan is planned and designed to improve the match between local jobs and the local labor force, consistent with the goal of accommodating 0.8 total local jobs for every member of the labor force; and
- The subject project or plan proposed within the Planning Reserve Area will directly provide substantial basic (exporting) employment development potential; or
- The subject project or plan proposed within the Planning Reserve Area will construct water, wastewater, and drainage infrastructure that will serve future employment development, with the understanding that project applicants are repaid on a fair-share basis.

- **Policy CD14.5:** The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.

- **Policy CD15.4:** The County's impact fees will be revised to consider cost efficiencies associated with compact, mixed-use, age- or income-restricted, and infill development.

- **Policy CD15.9:** The County will require that new developments include safe and convenient access to nearby schools and work with the local school districts to ensure safe access.

- **Policy CD15.10:** The County will locate its own administrative facilities in downtown areas, along Mixed-Use corridors, or in Neighborhood Centers, whenever possible.

- **Action CD15.1: Revise Impact Fees.** The County will have prepared a Nexus Fee Study following the 2030 General Plan update to support revised development impact fees. One focus of this updated effort would be to ensure that compact development that makes efficient use of land has lower fees, where this approach to development is shown to have lower costs. The County will consider basing fees on an equivalent dwelling unit (EDU) basis, a per-capita basis, or per-acre basis, depending on the type of fee. The per-EDU, per-capita, or per-acre approach would be considered rather than presenting fees on a flat-rate, per unit basis. Different types of dwelling units have different demands for services and different associated costs. The County will also consider reduced fees for infill development that has access to existing infrastructure with adequate capacity to serve that development.
  - Related Goals: Goal CD1, Goal CD2, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD11, Goal CD12, Goal CD13, Goal CD14, Goal CD15, Goal CD16, Goal CD19, Goal NR12, Goal HS9
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund
  - Time Frame: Nexus Fee Study and revised fees by 2014.

- **Policy CD16.1:** The County will maintain roadway levels of service that recognize differences between urban and rural environments and consideration of othercommunity character, economic, and environmental policies of the County.

- **Policy CD16.5:** Where a new development would exceed the County's Level of Service policies, applicants shall first consider feasible revisions to the proposed development that would increase connectivity, enhance bicycle/pedestrian/transit access, provide additional travel demand management measures, and/or provide

other revisions that would help to meet LOS standards by reducing vehicle miles traveled on roads exceeding the target LOS, prior to consideration of adding capacity to roadways and intersections.

- **Policy CD16.10:** The County will not use traffic level of service policies to analyze and mitigate CEQA impacts of new developments, but instead will use its level of service policies to assess fair-share funding of transportation facilities necessary to serve new projects.

- **Policy CD16.11:** The County will analyze and mitigate transportation impacts in CEQA documents according to their relative increase in vehicular travel demand.

- **Action CD16.2: Traffic Impact Fees.** Following adoption of the General Plan, the County will revise its Countywide Traffic Mitigation Fee Program based on a nexus study meeting state law requirements. The County will continue to require specific plans to identify funding for transportation facilities needed to serve development within each subject specific plan. The countywide program would focus on improvements needed to serve development within the unincorporated County not within a specific plan. The County's impact fee programs will be sensitive to elements of proposed projects that reduce their per-unit and per-employee trip generation rates. Centrally located projects, projects with high densities and employment intensities, located in areas with good transit service, located in mixed-use environments, for example, would be expected to have lower per-unit fees. Commercial traffic impact fees should take into account whether the commercial project is designed to attract drivers or oriented toward providing services to neighborhoods.

    - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD13, Goal HS5
    - Agency/Department: Public Works Department
    - Funding Source: Capital improvement funds
    - Time Frame: Update Countywide Traffic Mitigation Fee Program by 2014.

- **Policy CD17.1:** New developments shall be designed to facilitate safe and convenient travel by pedestrians, bicyclists, transit users, and drivers.

- **Policy CD17.2:** The County will coordinate approval of projects and plans with local transit providers to ensure that transit service is provided for work, shopping, school, and other types of trips within the Valley Growth Boundary.

- **Policy CD17.3:** The County will coordinate with Yuba College to provide housing and commercial services within walking and bicycling distance of the Linda campus and plan for convenient and safe pedestrian, bicycle, and transit options for students attending Yuba College.

- **Policy CD17.4:** The County will provide incentives to businesses that sponsor transit routes or create their own travel demand management programs, which may include, but are not limited, to streamlined permitting, and reduction of parking requirements.

- **Policy CD17.5:** The County will review and condition large employment generating projects, defined as new projects that could accommodate more than 50 full-time equivalent employees, according to the provisions of a County Travel Demand Management Ordinance.

- **Policy CD17.6:** New developments and specific plans shall analyze and mitigate impacts related to increased travel demand, as feasible and consistent with County General Plan policy.

- **Policy CD17.7:** The County will help to manage travel demand within Rural Communities by encouraging the development of services that are needed by, and located convenient to the local population.

- **Action CD17.1: Travel Demand Management Ordinance.** The County will develop a Travel Demand Management ordinance that provides options for large employers in mitigating the traffic related impacts of

proposed projects. Reducing travel demand could be used in-lieu of providing traffic impact fees, where demonstrated to reduce trips, particularly during peak demand periods. Options for reducing travel demand in this ordinance could include, but are not limited to providing incentives for employees to commute via transit, bicycle, on foot, or by carpool, rather than the single-occupant vehicular commute. The County will periodically review the approaches provided under this ordinance to ensure their effectiveness and make revisions, as appropriate. The County may promote, as a part of this Ordinance, membership in the Yuba-Sutter Transportation Management Association.

- Related Goals: Goal CD4, Goal HS5, Goal CD16, Goal CD17, Goal CD19
- Agency/Department: Public Works
- Funding Source: General Fund
- Time Frame: Ongoing

- **Policy CD18.8:** The County will coordinate with Caltrans to implement context-sensitive improvements to State facilities that are keyed to local multi-modal transportation needs.

- **Policy CD19.1:** The County will promote mixed-use, infill development and redevelopment in order to reduce dependence on the private automobile.

- **Policy CD19.2:** New developments and specific plans with a buildout population greater than 2,000 dwelling units shall designate Neighborhood Centers, consistent with the policies of the General Plan.

- **Policy CD19.3:** New developments in the Valley Growth Boundary should provide focused nodes of population and employment density around transit stops, planned in coordination with Yuba-Sutter Transit, with a target of 9 units per acre of residential development, 20 employees per acre for nonresidential development, or 20 or more persons plus employees per acre for mixed-use development within ¼ mile of existing and planned transit stops.

- **Policy CD19.4:** The County will plan its investments and condition new developments to provide pedestrian, bicycle, and transit facilities designed to provide multi-modal connections within neighborhoods, within unincorporated communities, and between communities and cities in the County.

- **Policy CD19.5:** New developments shall include the construction or pro-rata funding of transportation infrastructure that may include a connected and integrated system of bicycle and pedestrian facilities, consistent with County standards.

- **Policy CD19.6:** New development shall accommodate safe and frequent crosswalks along roadways, with more frequent crossings in areas expected to have higher pedestrian traffic.

- **Policy CD19.7:** The County's improvement standards and street classification system will be designed to accommodate the full range of locally available travel modes. Intersection dimensions and turning radii should be minimized in areas where high pedestrian and bicycle activity is expected.

- **Policy CD19.8:** The County will seek funding for and, as feasible, install traffic-calming measures, such as planted medians, landscaped planter strips, landscaped traffic circles, and other designs in areas with excessive or high-speed traffic, as appropriate. The County will not support street closures, half closures, or other measures that limit connectivity as a way to calm traffic.

- **Policy CD19.9:** Secure bicycle parking shall be provided at or near public buildings, business districts, parks, playgrounds, shopping centers, schools, transit terminals, bus stops, and other bicycle traffic generators.

- **Policy CD19.10:** The County will collaborate with Yuba-Sutter Transit, other regional transit providers , and local businesses to:

- Ensure transit stops are accommodated in the context of new development and redevelopment;
- Encourage local businesses to collaborate with transit providers to develop transit incentive programs for local employees;
- Plan for and condition projects to provide for park-and-ride facilities; and
- Supports paratransit and other forms of transit service for those unable to use conventional transit service.

- **Policy CD19.11:** The County will support feasible opportunities to provide intra-county and inter-county passenger rail service for Yuba County residents and businesses, including support for expansion of AMTRAK passenger service and transit, along with bicycle, and pedestrian-friendly development around rail and transit stations.

- **Policy CD19.12:** The County will encourage programs that facilitate County employees' use of pedestrian, bicycle, and transit facilities to reach the workplace.

- **Action CD19.1: Pedestrian and Bikeway Master Planning.** The County will collaborate with other agencies during buildout of the General Plan to maintain pedestrian/bicycle master plans designed to meet growth needs. The master plan updates should be designed to improve bicycle and pedestrian connections between each city in the County, cities in adjacent counties, and each unincorporated community. Bicycle/pedestrian master planning efforts should be coordinated with local irrigation districts, special districts, and public agencies with easements and rights-of-way, the railroad, other property owners, and other agencies and interested parties to acquire and/or use existing easements and rights-of-way for development of off-street pedestrian and bicycle pathways. Master plans will focus on improving links between neighborhoods and important destinations, such as schools, shops, commercial services, public services, and recreational opportunities.

  - Related Goals: Goal CD15, Goal CD16, Goal CD17, Goal CD18, Goal CD19
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Grant funding; regional funding
  - Time Frame: Adopt Yuba County Bikeway Master Plan by 2013

- **Action CD19.2: Revise Development Code & Improvement Standards.** Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards, where necessary, to encourage a high level of pedestrian, bicycle, and transit-friendliness in new development. In general, the County will consider revisions to its codes and standards to reduce road widths, reduce the amount of paved areas of roadways and parking lots, reduce pedestrian crossing distances, and reduce curb radii at intersections, in consideration of pedestrian and bicycle comfort and safety, while also considering turning templates needed for service and emergency vehicles. The County will consider revisions to its codes and standards that require wider sidewalks in areas where higher pedestrian and bicycle activity would be anticipated.

  - Related Goals: Goal CD2, Goal CD8, Goal CD13, Goal CD15, Goal CD19, Goal CD 21, Goal HS3, Goal HS5, Goal HS9, Goal HS11, Goal NR7
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; grant funding
  - Time Frame: Revise zoning, development codes, and improvement standards by 2013

- **Action CD19.3: Transit Planning & Facilities Expansion.** During buildout of the General Plan, the County will proactively pursue funding for transit designed to meet the needs of Yuba County children, seniors, persons with disabilities, low-income, and all transit-dependent persons. The County will pursue air quality mitigation efforts that fund transit in coordination with Feather River Air Quality Management District and other interested agencies and nonprofits. The County will plan for, and implement expansion of transit service, as funding is available. Transit projects will be included in the County's capital improvements planning, as appropriate. The County will examine the need for intermodal transit transfer facilities as the transportation system expands. The County will proactively coordinate with Yuba-Sutter Transit on grant funding opportunities to fund transit expansion, consistent with the General Plan, with a focus on transit in areas with at least 20 persons plus employees per acre.

    - Related Goals: Goal CD13, Goal CD15, Goal CD16, Goal CD17, Goal CD18, Goal CD19, Goal HS5, Goal HS11
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Grant funding
    - Time Frame: As funding is available

- **Policy CD20.1:** New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided, wherever feasible.

- **Policy CD20.2:** New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.

- **Policy CD20.3:** New developments shall connect with adjacent roadways and stubbed roads and shall provide frequent stubbed roadways in coordination with future planned development areas. Plans and projects shall connect to adjacent planned development areas and adjacent roadways at a minimum of 600-foot intervals. This minimum interval does not apply to development areas that are adjacent to existing or planned future limited-access highways, freeways, or expressways, or other areas where physical constraints would make this level of connectivity infeasible.

- **Policy CD20.4:** The County discourages the use of sound walls within neighborhoods. Traffic dispersal on a finely connected network of smaller roadways and other planning and site design solutions should be used instead of sound walls to address noise issues, to the greatest extent feasible.

- **Policy CD20.5:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.

- **Policy CD20.6:** The maximum allowable length of a cul-de-sac within the Valley Growth Boundary is 400 feet unless an exception is approved by the Community Development Director in consultation with local emergency service providers. Where cul-de-sacs are allowed, they should incorporate bicycle/pedestrian through access, where feasible.

- **Policy CD20.7:** The County will seek frequent street and trail connections between new residential developments and established Valley Neighborhoods.

- **Policy CD20.8:** Speed bumps, which can inhibit connectivity and emergency access, are discouraged as a method of traffic calming.

- **Policy CD21.1:** New development projects should be designed to minimize the amount of on-site land required to meet parking, internal circulation, and delivery/loading needs.

- **Policy CD21.2:** New developments shall break up any proposed surface parking with landscaping and provide pedestrian routes from parking areas to building entrances.

- **Policy CD21.3:** Land uses with different parking needs that peak at different times of the day should maximize opportunities to share parking, where feasible.

- **Policy CD21.4:** In Rural Communities and the Valley Growth Boundary, parking areas for nonresidential uses should generally be focused to the side or rear of the facility being served.

- **Policy CD21.6:** The County's parking standards will be reduced or eliminated for infill and affordable housing projects in consideration of shared parking, on-street parking, and reduced travel demand attributable to these types of projects.

- **Policy CD21.7:** The County will consider adopting parking maximums in areas where high pedestrian and bicycle activity is expected and in areas around transit stops.

- **Action CD21.1: Revise Development Code & Improvement Standards.** Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards. The County will consider reduced surface parking in areas where pedestrians and bicyclists are concentrated and where transit service is planned. The County will consider strategies to optimize parking supply through shared parking; use of on-street parking to meet demand of nearby properties; and other strategies. The County will consider establishing parking maximums, as well as minimums, as part of the development code and improvement standard revisions.

    - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD19, Goal CD21, Goal NR11, Goal HS3, Goal HS5
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund; grant funding
    - Time Frame: Revise zoning and development codes by 2013, revise improvement standards by 2014.

- **Policy NR1.5:** New developments shall provide for open space corridors consistent with the County's Parks Master Plan, and as needed to provide naturalized drainage and bike/pedestrian connections to nearby neighborhoods and destinations.

- **Policy NR1.8:** Local parks should be located central to the neighborhood they serve and designed to encourage pedestrian and bicycle access.

- **Policy NR1.12:** The County will incorporate trails along canals, transmission lines, and other easements and rights-of-way, where feasible, including trail development atop levees, so long as flood protection facilities are not adversely affected.

- **Policy NR1.13:** The County will communicate with neighboring counties and cities to explore connections with Yuba County's planned regional trail system.

- **Policy NR2.1:** The County will support urban greening projects that are designed to: Improve air and water quality; Protect natural resources; Increase the attractiveness of affordable housing and existing developed areas; Promote public health and the development of a healthy community; Increase access to safe areas for physical activity; Improve access to healthy, local food sources; Improve and use existing infrastructure systems and other community resources; Promote public health; Reduce greenhouse gas emissions; and Adapt to future climate conditions.

- **Policy NR2.2:** The County encourage urban greening projects to be developed in underserved areas of Linda and Olivehurst, such as tree planting and maintenance, natural drainage systems improvements, ecological restoration, park development, renewable energy development and energy conservation projects, trail development, community gardens, and other appropriate project types.

- **Action NR2.1: Urban Greening Projects.** During this General Plan time horizon, the County will identify and seek funding for urban greening projects that provide for a range of benefits, such as:

    - Reducing greenhouse gas emissions;
    - Decreasing air and water pollution;
    - Reducing the consumption of natural resources and energy;
    - Increasing the reliability of local water supplies; and/or
    - Increasing adaptability to climate change.

The County's urban greening projects will be designed to promote infill development and social equity, protect environmental resources, including agricultural lands, and encourage efficient development patterns. The County will coordinate with local school districts, local utility providers, cities, and other local and regional agencies, where appropriate, for Urban Greening Projects of mutual benefit. Urban greening projects will be identified that improve air and water quality, increase the attractiveness and availability of affordable housing, improve infrastructure systems or their function, and promote public health.

- Related Goals: Goal NR1, Goal NR2, Goal CD8, Goal CD11, Goal CD12, Goal CD19
- Agency/Department: Community Development and Services Agency
- Funding Source: Grant funding, as available
- Time Frame: Throughout General Plan implementation, as funding is available.

- **Policy HS3.17:** New developments shall limit construction of new impervious surfaces, such as parking lots, travelways, vehicle waiting areas, and vehicle loading areas to the minimum amount needed to implement the subject project.

- **Policy HS5.1:** The County will guide land use change, direct investments, and apply its fees and programs to encourage more GHG-efficient development patterns.

- **Policy HS5.2:** The County's regulations, investments, and fee programs should be structured to reduce net greenhouse gas emissions for new development in the unincorporated County consistent with the level of emissions needed per-capita or per service population to achieve the County's fair share of the state's emissions mandate.

- **Policy HS5.3:** Since transportation is the largest sector contributing to GHG emissions both locally and at the statewide level, the County will prioritize land use/transportation projects that manage travel demand by increasing housing/employment density, placing homes in closer proximity with destinations, increasing accessibility to transit, or otherwise decreasing vehicle miles traveled (per household, per capita, and/ or per employee).

- **Policy HS5.4:** The County will use an efficiency-based threshold (net emissions per-capita + employee) to evaluate proposed urban land uses, such as homes, retail, office, and other uses where the location, density, and mix of uses in the project area is important to the level of greenhouse gas generation.

- **Policy HS5.8:** The County will actively pursue funding for GHG-efficient transportation systems and other needed infrastructure, building and public realm energy efficiency upgrades, renewable energy production, land use-transportation modeling, and other projects to reduce local greenhouse gas emissions.

- **Policy HS5.11:** Rural Community Plans should address strategies to diversify the local land use mix to meet more resident needs within each community, increase energy efficiency, shorten trips, and encourage non-vehicular travel, as feasible, to increase greenhouse gas efficiency.

- **Action HS5.1: Greenhouse Gas Reduction Plan.** The County will prepare and adopt a Plan to reduce greenhouse gas (GHG) emissions. *[Please see the 2030 General Plan (Public Health & Safety-34, under separate cover, for additional information on the County's Greenhouse Gas Reduction Plan.]*

    - Related Goals: Goal HS1, Goal HS2, Goal HS3, Goal HS5, Goal HS11, Goal CD2, Goal CD4, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD10, Goal CD15, Goal NR2, Goal NR7
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General fund, grant funding
    - Time Frame: Adopt by 2013, monitoring reports and needed revisions in coordination with Housing Element updates and updates to the Regional Transportation Plan.

Conclusion

The 2030 General Plan includes policies that target new growth in strategic areas, integrated land use and transportation planning, and enhancement of alternative travel modes. New land developments will be required to provide for facilities to accommodate travel by all modes, and to include designs with improved street network connectivity and other smart growth principles.

Despite the implementation of these policies, increased levels of traffic will occur on roadways within Yuba County. Increases in travel demand could create **potentially significant** impacts.

Mitigation Measure

The County has included all available feasible mitigation in its General Plan policies and actions. Despite the implementation of these policies and actions, the impact would remain **significant and unavoidable**.

IMPACT 4.13-2 Degradation of Roadway Levels of Service. *Implementation of the 2030 General Plan would result in roadways and intersections degrading below their current operations. Increased congestion is not in and of itself an adverse physical environmental impact under CEQA. Indirect impacts associated with increased traffic and congestion are analyzed in other sections of this EIR. This impact is considered* ***less than significant****.*

Policy 21-CP of the 1996 Yuba County General Plan established a LOS C policy for Yuba County roads and intersections. As described in Section 4.13-2, the vast majority of intersections and roadways currently meet this operating goal. Development under the Growth Scenarios 1 and 2 (Alternatives 2 and 4) and under full buildout of the 2030 General Plan would each result in a number of County facilities degrading to LOS D, E, or F.

Table 4.13-7 lists the various roadways that would operate at an unacceptable LOS E or F under the Growth Scenarios 1 and 2. As shown in Table 4.13-7, the increased level of development assumed under Alternative 4 results in six additional roadway segments operating at LOS E and one additional roadway segment operating at LOS F when compared to Alternative 2. Additional facilities would operate at LOS E or F under full buildout of the 2030 General Plan.

Table 4.13-7
Roadways in Yuba County Operating at LOS E or F under Growth Scenarios 1 and 2 (Alternatives 2 and 4)

Operating Level	Roadways	Alt. 2	Alt. 4
LOS E	1. Feather River Boulevard – Grand Avenue to SR 70		✓
	2. Goldfields Parkway – Erle Road to N. Beale Road	✓	✓
	3. Goldfields Parkway – N. Beale Road to Hammonton-Smartsville Road		✓
	4. Griffith Avenue – Erle Road to Hammonton-Smartsville Road	✓	
	5. Hammonton-Smartsville Road – Simpson Lane to Goldfields Parkway	✓	✓
	6. McGowan Parkway – SR 70 to SR 65	✓	✓
	7. N. Beale Road – Lindhurst Avenue to Feather River Boulevard	✓	✓
	8. N. Beale Road – Hammonton-Smartsville Road to Lindhurst Avenue		✓
	9. SmartsvilleSmartsville Road – Hammonton-Smartsville Road to SR 20		✓
	10. SR 20 – Goldfields Parkway to Woodruff Lane		✓
	11. SR 20 – Loma Rica Road to Marysville Road	✓	✓
	12. SR 65 – South Beale Road to McGowan Parkway		✓
	13. Wheatland Road – Forty Mile Road to Oakley Lane	✓	✓
LOS F	1. Forty Mile Road – Plumas Arboga Road to Wheatland Road	✓	✓
	2. Goldfields Parkway – Hammonton-Smartsville Rd. to SR 20	✓	✓
	3. Griffith Avenue – Erle Road to Hammonton-Smartsville Road		✓
	4. Hammonton-Smartsville Road – N Beale Road to Simpson Lane	✓	✓
	5. Plumas Lake Boulevard – River Oaks Boulevard to SR 70	✓	✓
	6. Simpson Lane –Hammonton-Smartsville Road to 10th Street	✓	✓
	7. SR 65 – Wheatland Bypass (South) to Wheatland Bypass (North)	✓	✓
	8. SR 70 – 12th Street to Butte County Line	✓	✓
	9. SR 70 – SR 65 to 3rd Street	✓	✓
	10. Wheatland Bypass – SR 65 (South) to SR 65 (North)	✓	✓
	11. Woodruff Lane – Matthews Lane to SR 20	✓	✓

Table 4.13-8 displays operations at key intersections in the County under the Growth Scenarios 1 and 2 (refer to Appendix E for calculations). Traffic controls and geometrics at these intersections were assumed in accordance with planned improvements (i.e., widenings described in the 2030 General Plan Community Development Element), completed engineering studies, and cumulatively necessary mitigations from previous environmental documents. As shown, all study intersections would operate at LOS D or better, with the exception of the Erle Road/Lindhust Avenue and North Beale Road/Lindhurst Avenue intersections, which would operate at LOS E or F. Whereas the *SR 65/70 Yuba River Parkway Interchange PSR* showed operations at the Erle Road/Lindhurst Avenue intersection at LOS D with the planned improvements in Year 2030, this analysis shows LOS E or F operations. This conclusion is due primarily to additional travel demand using Lindhurst Avenue, which is diverting from SR 70. Future studies of this interchange (i.e., Project Approval and Environmental Document) may contemplate other improvements to restore operations to LOS D or better.

Table 4.13-8
Yuba County Intersection Operations under Growth Scenarios 1 and 2 (Alternatives 2 and 4)

Intersection	Control	Peak Hour	Alternative 2		Alternative 4	
			Delay[1]	LOS	Delay[1]	LOS
1. SR 20 / Marysville Road	Traffic Signal	AM	16	B	16	B
		PM	17	B	17	B
2. SR 20 / Loma Rica Road	Traffic Signal	AM	10	A	10	B
		PM	10	A	10	A
3. SR 20 / Woodruff Lane	Traffic Signal	AM	13	B	15	B
		PM	15	B	16	B
4. SR 20 / Goldfields Parkway	Traffic Signal	AM	20	B	23	C
		PM	22	C	30	C
5. N. Beale Road / Feather River Blvd	Traffic Signal	AM	22	C	20	B
		PM	27	C	24	C
6. N. Beale Road / Lindhurst Avenue	Traffic Signal	AM	38	D	41	D
		PM	69	E	70	E
7. N. Beale Road / Hammonton-Smartsville Road	Traffic Signal	AM	36	D	39	D
		PM	47	D	46	D
8. Simpson Lane / Hammonton-Smartsville Road	Traffic Signal	AM	52	D	54	D
		PM	24	C	25	C
9. Hammonton-Smartsville Road / Goldfields Pkwy.	Traffic Signal	AM	21	C	20	C
		PM	29	C	30	C
10. N. Beale Road / Goldfields Parkway	Traffic Signal	AM	39	D	44	D
		PM	25	C	29	C
11. Erle Road / SR 70 SB Ramps	Traffic Signal	AM	20	B	21	C
		PM	28	C	31	C
12. Erle Road / Lindhurst Avenue	Traffic Signal	AM	69	E	70	E
		PM	126	F	117	F
13. SR 70 NB Ramps / Lindhurst Avenue	Traffic Signal	AM	16	B	23	C
		PM	42	D	22	C
14. Erle Road / Goldfields Parkway	Traffic Signal	AM	21	C	22	C
		PM	27	C	27	C
15. Powerline Road / Olivehurst Avenue	Roundabout	AM	27	D	29	D
		PM	33	D	34	D
16. McGowan Parkway / Arboga Road	Traffic Signal	AM	17	B	17	B
		PM	17	B	19	B
17. Plumas Arboga Road / Arboga Road	Traffic Signal	AM	22	C	18	B
		PM	21	C	21	C
18. Plumas Lake Blvd. / River Oaks Blvd	Traffic Signal	AM	54	D	62	E
		PM	32	C	34	C
19. Forty Mile Road / Plumas Arboga Road	Traffic Signal	AM	13	B	16	B
		PM	13	B	15	B
20. Feather River Blvd / River Oaks Blvd	Traffic Signal	AM	31	C	31	C
		PM	44	D	44	D

Source: Feer & Peers 2010

As described below, the 2030 General Plan contemplates a minimum LOS of D. The General Plan also indicates that the County will make exceptions to this overall LOS target in locations where additional capacity enhancements are either not feasible, cost-prohibitive, or in conflict with other goals and policies of the General Plan. The LOS D standard is consistent with the County's planning, environmental, and economic policies and matches this General Plan's emphasis on infill and mixed-use development, and enhancement of all travel modes.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD16.1:** The County will maintain roadway levels of service that recognize differences between urban and rural environments and consideration of othercommunity character, economic, and environmental policies of the County.

- **Policy CD16.2:** On County roads in the Valley Growth Boundary, Level of Service "D" shall be maintained during the PM Peak Hour at signalized intersections, as feasible, during the PM Peak Hour.

- **Policy CD16.3:** On County roads in rural areas, Level of Service "D" shall be maintained, as feasible.

- **Policy CD16.5:** Where a new development would exceed the County's Level of Service policies, applicants shall first consider feasible revisions to the proposed development that would increase connectivity, enhance bicycle/pedestrian/transit access, provide additional travel demand management measures, and/or provide other revisions that would help to meet LOS standards by reducing vehicle miles traveled on roads exceeding the target LOS, prior to consideration of adding capacity to roadways and intersections.

- **Policy CD16.6:** New developments shall analyze and provide fair-share funding of roadway improvements necessary to provide an appropriate Level of Service (LOS) and ongoing operation and maintenance of roadways. New developments abutting General Plan Roads will generally be required to construct and dedicate improved roads.

- **Policy CD16.7:** New developments will be required to reserve County and Caltrans rights-of-way necessary to serve the 2030 General Plan at buildout according to County Level of Service policies.

- **Policy CD16.10:** The County will not use traffic level of service policies to analyze and mitigate CEQA impacts of new developments, but instead will use its level of service policies to assess fair-share funding of transportation facilities necessary to serve new projects.

- **Policy CD16.11:** The County will analyze and mitigate transportation impacts in CEQA documents according to their relative increase in vehicular travel demand.

- **Action CD16.1: Capital Improvements Planning.** During General Plan buildout, the County will adopt and implement capital improvement plans designed to provide and maintain transportation facilities needed to serve local travel needs, consistent with the General Plan. The County will monitor land use change in unincorporated areas compared to the assumptions used for the General Plan transportation analysis. If the assumptions used for the General Plan transportation analysis vary substantially from what actually transpires during buildout of the General Plan, the County will consider revising the list of roadway improvement projects necessary to serve the County at buildout. Capital improvement planning will be structured to achieve desired levels of service specified by the General Plan, where feasible. All projects identified in capital improvements plans will be consistent with General Plan goals and policies.

    - Related Goals: Goal CD10, Goal CD 11, Goal CD13, Goal CD16, Goal CD22, Goal HS9

    - Agency/Department: Public Works Department

- Funding Source: Capital improvement funds to fund capital improvement plan development; various local, state, and federal funds to construct improvements identified in capital improvement plans.
- Time Frame: Update capital improvement planning annually and consider substantial revisions, if necessary, every 5 years; Public Works staff will prepare an annual report for consideration by the Board of Supervisors documenting recent trends, and planned improvements for County roadways.

- **Action CD16.2: Traffic Impact Fees.** Following adoption of the General Plan, the County will revise its Countywide Traffic Mitigation Fee Program based on a nexus study meeting state law requirements. The County will continue to require specific plans to identify funding for transportation facilities needed to serve development within each subject specific plan. The countywide program would focus on improvements needed to serve development within the unincorporated County not within a specific plan. The County's impact fee programs will be sensitive to elements of proposed projects that reduce their per-unit and per-employee trip generation rates. Centrally located projects, projects with high densities and employment intensities, located in areas with good transit service, located in mixed-use environments, for example, would be expected to have lower per-unit fees. Commercial traffic impact fees should take into account whether the commercial project is designed to attract drivers or oriented toward providing services to neighborhoods.

  - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD13, Goal HS5
  - Agency/Department: Public Works Department
  - Funding Source: Capital improvement funds
  - Time Frame: Update Countywide Traffic Mitigation Fee Program by 2014

- **Policy CD18.3:** The County will pursue agreements with Sutter County, Yuba City, and SACOG to construct a third bridge across the Feather River.

- **Policy CD18.4:** The County will work cooperatively with Nevada County, Caltrans, and SACOG to improve capacity on State Highway 20 east of Marysville.

Conclusion

The above policies establish new operating thresholds for the Yuba County roadway system. In addition to these policies, the 2030 General Plan contains a number of policies relating to funding and timely implementation of needed infrastructure. This approach will only be effective if the County can demonstrate that the full cost of necessary improvements can be collected through assessments on new development and other funding sources.

With the proposed change to the County's LOS policy and since traffic congestion in and of itself is not an adverse physical environmental impact under CEQA, the impact is considered **less than significant**. Indirect impacts of traffic congestion are analyzed in other topic-specific sections of this EIR. See in particular Section 4.3, "Air Quality" and Section 4.7, "Climate Change."

IMPACT 4.13-3 Potential Traffic Impacts in Other Jurisdictions. *Implementation of the 2030 General Plan would contribute to roadways and intersections degrading below the applicable LOS standard of the incorporated Cities of Wheatland, Marysville, and Yuba City, and the adjacent Counties of Sutter, Placer, Butte, and Nevada. This impact is considered* ***potentially significant.***

Table 4.13-9 displays the ADT on gateway streets serving jurisdictions adjacent to Yuba County under existing conditions and under the Growth Scenario 1 (Alternative 2), Growth Scenario 1 (Alternative 4), No Project Alternative, and full buildout of the 2030 General Plan. Full buildout of the 2030 General Plan results in greater traffic volumes than existing conditions or the No Project Alternative at external gateways into Yuba City,

Wheatland, Marysville, Placer, and Sutter Counties. This is because a much greater proportion of the planned land use under this scenario is situated in the valley floor growth area, whereas the No Project Alternative (1996 General Plan buildout) has a much greater amount of planned land development in the foothills. The benefits of this land use allocation in terms of reductions in vehicle trip lengths and average daily miles of travel are described later in this section. However, impacts to adjacent jurisdictions could be greater.

Table 4.13-9
Average Daily Traffic Volumes on Gateway Streets to Adjacent Jurisdictions

Roadway Segment	Adjacent Jurisdiction	Average Daily Traffic (ADT)				
		Existing	Alt. 2	Alt. 4	No Project	2030 General Plan
State Route 70 at Yuba/Sutter line	Sutter County	17,100	62,200	64,500	65,000	75,000
Forty Mile Road at Yuba/Sutter line	Sutter County	3,100	7,500	7,900	9,300	11,100
State Route 65 at Yuba/Placer line	Placer County	18,500	61,300	63,500	66,200	75,900
State Route 20 at Yuba/Nevada line	Nevada County	8,400	16,500	16,900	18,600	20,900
State Route 49 at Yuba/Nevada line	Nevada County	1,600	2,400	2,400	2,600	2,900
State Route 70 at Yuba/Butte line	Butte County	11,500	29,500	29,800	33,800	38,000
State Route 65 / Wheatland Bypass (North)	City of Wheatland	18,200	60,500	63,100	100,300	112,300
Wheatland Road	City of Wheatland	1,500	10,300	11,000	14,200	17,900
Spenceville Road	City of Wheatland	2,900	4,700	5,100	4,700	5,300
State Route 70 across Yuba River	City of Marysville	59,000	115,200	117,900	129,200	138,400
State Route 20 at Marysville East Limits	City of Marysville	12,000	31,200	33,700	29,300	37,100
Simpson Lane across Yuba River	City of Marysville	11,600	23,500	24,500	27,600	28,600
State Route 70 north of Marysville	City of Marysville	13,600	26,300	26,000	33,300	33,500
5th Street Bridge	City of Yuba City	33,000	57,300	59,300	44,100	50,300
SR 20 at Yuba/Sutter line	City of Yuba City	41,000	77,800	80,800	68,100	78,800
New Feather River Bridge	City of Yuba City	N/A	N/A	N/A	61,200	72,300

Notes: Gateway streets listed here for specific jurisdictions are locations that experience growth in traffic due to planned development in Yuba County. It should be noted that some of the traffic growth is also attributable to regional "through" travel and growth in surrounding jurisdictions.
N/A = Not Applicable.
Source: Fehr & Peers 2010

Yuba City General Plan

The Yuba City General Plan (2004) identifies a minimum LOS D policy for its roadway system. Exceptions to this standard are made on the SR 20, Bridge Street, and future Lincoln Road (3rd Feather River) bridges, in which LOS F operations are considered acceptable. These crossings were assumed to consist of four lanes, two lanes, and four lanes, respectively, and carried a combined cumulative 115,000 ADT in the Yuba City General Plan.

Growth Scenario 1 (Alternative 2) and Growth Scenario 2 (Alternative 4) would result in a combined volume of between 135,000 and 140,000 ADT on the SR 20 (assumed six-lane) and Bridge Street (assumed four-lane) crossings. Thus, it can be inferred from these "screenline growth totals" that Growth Scenarios 1 and 2 would result in additional trips in Yuba City beyond what is contemplated in the City's General Plan. This, in turn, may

cause degraded cumulative operations at some intersections and roadways within the City. The differences in the location and assumed capacity of bridge crossings between the Yuba City and Yuba County General Plan scenarios would make any quantitative effort of evaluating changes in operations within Yuba City a speculative exercise. Therefore, such analysis is not presented here.

Wheatland General Plan

The City of Wheatland General Plan (2006) identifies a minimum LOS C policy for its roadway system with a LOS D threshold within ¼-mile of state highways. The transportation analysis for the Wheatland General Plan assumed the Wheatland Bypass is constructed as a four-lane expressway. The analysis concluded that all study intersections and roadways within Wheatland would operate acceptably with the exception of the downtown segment of SR 65 through downtown Wheatland, which would operate at LOS F. The parallel segments of existing SR 65 and the Wheatland Bypass (north of Dairy Road) were projected to carry a combined 64,600 ADT under cumulative conditions according to the Wheatland General Plan.

According to the traffic forecasts from Growth Scenario 1 (Alternative 2) and Growth Scenario 2 (Alternative 4) scenarios, all roadways except existing SR 65 and the Wheatland Bypass would operate at an acceptable LOS C or better. Growth Scenario 2 (Alternative 4) scenario results in approximately 63,000 ADT on the parallel segments of the Wheatland Bypass and existing SR 65(north of Dairy Road), which is slightly lower than the 64,600 ADT screenline projection from the Wheatland General Plan. Whereas the Wheatland General Plan analysis assumes a four-lane Wheatland Bypass expressway, the Yuba County General Plan analysis assumes a two-lane bypass. The difference in the assumed bypass capacity causes greater levels of traffic and impacts on existing SR 65. It is worth noting that the State Route 65 CSMP identifies the Wheatland Bypass as a two-lane expressway to be completed in 2025.

Marysville

Growth Scenario 1 (Alternative 2) and Growth Scenario 2 (Alternative 4) would also likely result in additional traffic on streets maintained by the City of Marysville. Roadways most likely to experience traffic increases include streets that provide access to the Simpson Lane Bridge and the downtown grid street system.

Lincoln – State Route 65 Bypass

The completion of the SR 65 Lincoln Bypass is expected in 2012. This two- to four-lane expressway will accommodate both local and regional travel from Sheridan to south of Lincoln. While Growth Scenario 1 (Alternative 2) and Growth Scenario 2 (Alternative 4) may result in some additional trips on City of Lincoln and Placer County streets, the majority of regional traffic will use state highway facilities.

Sutter County Draft General Plan

The Sutter County General Plan Draft EIR (2010) indicates that SR 70 at the Yuba/Sutter County Line would carry 34,000 ADT under the Sutter County Adjusted General Plan Buildout Scenario. This volume is substantially lower than the 62,200 to 64,500 ADT projections in the Growth Scenario 1 (Alternative 2) and Growth Scenario 2 (Alternative 4) scenarios. This discrepancy suggests that the Sutter County transportation analysis did not contemplate the level of development in Yuba County that is proposed in this General Plan. While Growth Scenario 1 (Alternative 2) and Growth Scenario 2 (Alternative 4) may result in some additional trips on Sutter County streets, the majority of regional traffic will use state highway facilities such as SR 70 and SR 99.

Based on the magnitude of increased traffic crossing into these jurisdictions, the County anticipates that significant impacts would occur to adjacent jurisdictions' roadway systems.

The 2030 General Plan includes a number of policies and actions that address inter-jurisdictional impacts. These include coordinating with adjacent jurisdictions on transportation planning and funding, cooperating on regional

planning efforts, pursuing specific regional infrastructure improvements, and requiring new development to mitigate for inter-jurisdictional impacts.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD14.4:** The County will coordinate with special districts, cities, LAFCo, SACOG, Caltrans, joint powers authorities, and other relevant agencies to provide efficient local and regional infrastructure, public facilities, and public services.
- **Policy CD14.9:** The County will support agreements with Marysville and Wheatland that promote mutual goals for fiscal sustainability, growth management, review of spheres of influence, transportation planning, agricultural preservation, emergency access and response, flood protection, renewable energy development, regional infrastructure provision, and other important planning and environmental issues, consistent with the General Plan.
- **Policy CD17.6:** New developments and specific plans shall analyze and mitigate impacts related to increased travel demand, as feasible and consistent with County General Plan policy.
- **Policy CD18.2:** County staff will seek input from Marysville and Wheatland, Sutter County, Butte County, Nevada County, Placer County, Sierra County and Yuba City during land use and transportation planning efforts that may have regional effects.
- **Policy CD18.6:** The County will evaluate and consider the effects of future land use changes on regional circulation facilities as part of land use planning decisions.
- **Action CD18.1: Regional Traffic Fee Program.** The County will coordinate with cities and surrounding counties to develop and implement a regional fee program to address non-County transportation facilities, including vehicular, bicycle, pedestrian, and public transit. The regional mitigation fee program should be designed to address cumulative regional transportation needs on a fair-share basis for new specific plans and new developments. This program should address state highway facilities, as appropriate, and account for outside funding sources for state highway facilities, including but not limited to: State Transportation Improvement Program and State Highway Operation and Protection Plan funding.

  The traffic impact fees will be used to fund improvements that will be needed in the future as development occurs. If feasible, the County will use provisions of Streets and Highways Code sections 114 and 130 to bank fees for future highway projects.

  - Related Goals: Goal CD13, Goal CD16, Goal CD18, Goal CD22, Goal HS9
  - Agency/Department: Community Development and Services Agency
  - Funding Source: County mitigation fees, funding from aggregate sales, federal and state funds
  - Time Frame: Nexus Fee Study and revised fees by 2014

Conclusion

The above policies require that Yuba County collaborate with adjacent jurisdictions regarding transportation and land use decisions. The County has included all feasible available mitigation related to regional impacts and reducing travel demand as General Plan policies and actions. Yuba County cannot unilaterally ensure the timely implementation of needed improvements in adjacent cities or counties. Therefore, although the County intends to fully engage with these adjacent agencies, this impact is considered **significant and unavoidable**.

IMPACT 4.13-4 Traffic Impacts on Caltrans' Facilities. *Implementation of the 2030 General Plan would result in Caltrans' facilities degrading below the applicable LOS standard. This impact would be* ***significant.***

Table 4.13-10 displays the ADT and LOS on various Caltrans facilities under the Growth Scenario 1 (Alternative 2), the Growth Scenario 2 (Alternative 4), the No Project Scenario, and the 2030 General Plan full buildout Scenario. This table also compares the LOS with the concept LOS threshold as listed in the appropriate TCCR or CSMP for each facility. Results from this table yield the following conclusions:

- State Route 20: The General Plan Community Development Element includes the widening of SR 20 to four lanes between Marysville and Loma Rica Road. The TCCR includes spot improvements and passing lanes along this segment, but also introduces the concept of the Feather River Expressway, which along with passing lanes may be sufficient to alleviate the need for the SR 20 widening.

- State Route 65: Planned development in southern Yuba County and within the City of Wheatland will necessitate construction of the Wheatland Bypass. Table 4.13-10 indicates that a two-lane highway bypass is not sufficient to handle the projected travel demand. Expansion of Wheatland Bypass to an eventual four-lane highway or expressway is necessary. Consistent with the State Route 65 CSMP, the ultimate facility for SR 65 is a four- to six-lane freeway bypass.

- State Route 70 (south of Marysville): The segment of SR 70 between SR 65 and Marysville is anticipated to operate at LOS F under the Alternative 2 and Alternative 4 scenarios despite inclusion of several improvements in the General Plan Vehicular Circulation Diagram that help alleviate congestion including:

    - Goldfields Parkway
    - Widening of parallel streets (e.g., Lindhurst Avenue, and Arboga Road) to four-lane arterials
    - Yuba County support for constructing a third bridge over the Feather River

- State Route 70 (north of Marysville): Between Marysville and the Yuba/Butte County line, spot improvements and passing lanes are planned according to the TCCR. With the addition of the Feather River Expressway, resulting operations may be improved to LOS D or better.

Table 4.13-10
Average Daily Traffic Volumes and LOS on Caltrans Facilities

Freeway/Highway Segment	Facility Type	LOS Standard	ADT – LOS			
			Alternative 2 Scenario	Alternative 4 Scenario	No Project	2030 General Plan Full Buildout
State Route 20 – Marysville East City Limits to Goldfields Parkway	Four-lane highway	E	31,200 – C	33,700 – D	29,300 – C	37,100 – E
State Route 20 –Goldfields Parkway to Woodruff Lane	Four-lane highway	E	35,700 – D	36,200 – E	77,900 – F	57,100 – F
State Route 20 – Woodruff Lane to Spring Valley Road	Two-lane highway[1]	E	19,900 – E	19,700 – E	67,500 – F	35,000 – D
State Route 20 –Spring Valley Road to Marysville Road	Two-lane highway [1]	E	18,800 – E	18,700 – E	53,400 – F	26,100 – C
State Route 20 – Marysville Road to Nevada County Line	Two-lane highway	D	10,200 – D	11,200 – D	36,200 – F	16,600 – E
State Route 49 – Marysville Road to Nevada County Line	Two-lane highway	D	2,400 – C	2,400 – C	2,600 – C	2,900 – C
State Route 65 – Placer County Line to downtown Wheatland	Two-lane highway	E	34,200 – F	35,200 – F	30,900 – F	34,400 – F
State Route 65 – through downtown Wheatland	Two-lane highway	E	28,400 – F	28,700 – F	27,700 – F	28,100 – F

Table 4.13-10
Average Daily Traffic Volumes and LOS on Caltrans Facilities

Freeway/Highway Segment	Facility Type	LOS Standard	ADT – LOS			
			Alternative 2 Scenario	Alternative 4 Scenario	No Project	2030 General Plan Full Buildout
State Route 65 – downtown Wheatland to S. Beale Road	Two-lane highway	E	34,000 – F	35,600 – F	36,500 – F	40,300 – F
State Route 65 – S. Beale Road to Forty Mile Road	Four-lane freeway	C	67,800 – D	77,500 – E	88,700 – F	100,300 – F
State Route 65 – Forty Mile Road to McGowan Parkway	Four-lane freeway	C	73,000 – D	81,100 – E	94,000 – F	111,200 – F
State Route 65 – McGowan Parkway to SR 70	Four-lane freeway	C	57,500 – C	65,600 – D	76,600 – D	96,000 – F
State Route 70 – Sutter County Line to Feather River Boulevard (South)	Four-lane freeway	D	62,200 – C	64,500 – D	65,000 – D	75,000 – D
State Route 70 – Feather River Boulevard (South) to Plumas Lake Boulevard	Four-lane freeway	D	55,900 – C	56,900 – C	62,400 – C	67,500 – D
State Route 70 – Plumas Lake Boulevard to McGowan Parkway	Four-lane freeway	D	64,200 – D	62,600 – C	70,500 – D	79,900 – E
State Route 70 – McGowan Parkway to SR 65	Four-lane freeway	E	73,800 – D	71,100 – D	83,800 – E	87,900 – F
State Route 70 – SR 65 to Olivehurst Avenue	Four-lane freeway	E	98,600 – F	101,800 – F	111,400 – F	123,300 – F
State Route 70 – Olivehurst Avenue to Erle Road	Four-lane freeway	E	89,500 – F	91,700 – F	98,400 – F	106,600 – F
State Route 70 – Erle Road to Feather River Boulevard (North)	Four-lane freeway	E	88,400 – F	90,100 – F	97,900 – F	105,000 – F
State Route 70 – Across Yuba River	Four-lane arterial	E	115,200 – F	117,900 – F	129,200 – F	138,400 – F
State Route 70 – between Marysville and Laurellen Road	Two-lane highway	D	24,200 – F	23,700 – F	27,500 – F	27,300 – F
State Route 70 – between Laurellen Road and Ramirez Road	Two-lane highway	D	25,000 – F	24,800 – F	32,200 – F	32,200 – F
State Route 70 – between Ramirez Road and Butte County line	Two-lane highway	D	29,500 – F	30,100 – F	33,800 – F	38,000 – F
Wheatland Bypass – between Placer County line and Spenceville Road	Two-lane highway	N/A	28,000 – F	29,000 – F	43,300 – F	50,800 – F
Wheatland Bypass – between Spenceville Road and SR 65/S. Beale Road	Two-lane highway	N/A	26,500 – F	27,500 – F	63,800 – F	72,000 – F

Note:
[1] Assumed to be widened from two to four lanes under No Project and 2030 General Plan scenarios.
N/A = Not Applicable.
Source: Fehr & Peers 2010

To illustrate the benefits of the County-sponsored Goldfields Parkway project, a run of the Yuba County travel demand model was performed without this planned roadway for the Growth Scenario 1 (Alternative 2). Table 4.13-11 provides a comparison of traffic volumes on SR 70, SR 20, and Simpson Lane without and with Goldfields Parkway. As shown, Goldfields Parkway diverts approximately 32,000 vehicles per day away from the SR 70 and Simpson Lane bridges over the Yuba River. Goldfields Parkway also benefits SR 70 north of Marysville. Goldfields Parkway attracts more trips to the SR 20 corridor. To mitigate this added traffic, widening of this corridor to four lanes is shown in the General Plan Vehicular Circulation Diagram.

Table 4.13-11
Effects of Goldfields Parkway on State Facilities and Bridge Crossings

Freeway/Highway Segment	Facility Type	Alternative 2 Scenario with Goldfields Parkway		Alternative 2 Scenario without Goldfields Parkway	
		ADT	LOS	ADT	LOS
State Route 20 – Marysville East City Limits to Goldfields Parkway	Four-lane highway	31,200	C	17,700	C
State Route 20 –Goldfields Parkway to Woodruff Lane	Four-lane highway	35,700	D	16,700	C
State Route 70 – SR 65 to Olivehurst Avenue	Four-lane freeway	98,600	F	108,000	F
State Route 70 – Erle Road to Feather River Boulevard (North)	Four-lane freeway	88,400	F	94,000	F
State Route 70 – Across Yuba River	Four-lane arterial	115,200	F	141,000	F
State Route 70 – between Woodruff Lane and Ramirez Road	Two-lane highway	25,000	F	30,800	F
Simpson Lane – across Yuba River	Two-lane arterial	23,500	F	30,000	F
Goldfields Parkway – across Yuba River	Four-lane highway	45,600	F	N / A	N / A

Note: N / A = Not Applicable.
Source: Fehr & Peers 2010

Relevant Policies and Actions of the 2030 General Plan

In addition to policies and actions listed under Impact 4.13-1, several General Plan policies specifically address the need to mitigate for impacts to the state highway system.

- **Policy CD18.3:** The County will pursue agreements with Sutter County, Yuba City, and SACOG to construct a third bridge across the Feather River.
- **Policy CD18.4:** The County will work cooperatively with Nevada County, Caltrans, and SACOG to improve capacity on State Highway 20 east of Marysville.
- **Policy CD18.7:** New developments shall analyze impacts to Caltrans facilities and shall provide fair-share funding to address impacts to Caltrans facilities, as feasible.
- **Policy CD18.8:** The County will coordinate with Caltrans to implement context-sensitive improvements to State facilities that are keyed to local multi-modal transportation needs.

Conclusion

The above policies require that Yuba County coordinate with Caltrans regarding improvements to state facilities and provision of fair-share funding from new developments to address impacts to Caltrans facilities. However, Yuba County cannot ensure the timely implementation of needed improvements to Caltrans facilities because they are owned and operated by Caltrans. Therefore, although the County intends to coordinate with Caltrans regarding needed improvements, this impact would be **significant and unavoidable**.

IMPACT 4.13-5 Increased Vehicle Miles of Travel (VMT). *Implementation of the 2030 General Plan would result in greater VMT compared to existing conditions. This impact is considered potentially significant.*

The Yuba County TDM was used to compare relative differences in VMT within Yuba County for existing conditions and for the No Project Alternative, the Growth Scenarios 1 and 2, and full buildout of the 2030 General Plan. Given the substantial increase in non-residential land use planned for Yuba County, VMT comparisons were made for all existing and planned land uses under each scenario. The evaluation followed the three-step process described below:

- *Step 1 – Estimate Total VMT for all roads in Yuba County by trip origin and destination.* Trips were classified as I-I (originates and remains with the County), X-I and I-X (one end of the trip has an origin or destination in Yuba County and the other end occurs in an adjacent City or County). External-to-external trips (X-X) were removed from the analysis as they are not associated with land uses in Yuba County.

- *Step 2 – Reduce X-I and I-X VMT by 50 percent.* This reduction is made in recognition that 50 percent of the responsibility of an I-X or X-I trip is assigned to the adjacent jurisdiction from which the trip originates or is destined. Since the proportion of I-X and X-I trips is similar for each scenario, the inclusion or exclusion of this step would not materially affect the comparison results.

- *Step 3 – Summarize Resulting VMT and Normalize Based on Development Levels.* Table 4.13-12 displays the population and employment totals within Yuba County for all analysis scenarios. The 2030 General Plan scenario has 14 percent more population and employment than the No Project scenario.

Table 4.13-12
Population and Employment Comparison

Scenario	Population	Employment	Population+ Employment
Existing	69,151	18,679	87,830
Alternative 2	104,407	34,673	139,080
Alternative 4	109,664	41,552	151,216
No Project Alternative	157,811	62,671	220,482
Full Buildout of the 2030 General Plan	168,755	83,524	252,279

Table 4.13-13 compares the VMT on roadways in Yuba County for the No Project Alternative (buildout of the 1996 General Plan), Growth Scenario 1 (Alternative 2), Growth Scenario 2 (Alternative 4), and full buildout of the 2030 General Plan scenarios. Table 4.13-14 compares the average trip length for trips remaining internal to Yuba County for all scenarios.

Table 4.13-13 VMT Comparison (Within Yuba County Only)			
Scenario	VMT	Population+Employment	VMT/(Pop+Emp)
Existing	765,263	87,830	8.7
Alternative 2	2,799,256	139,080	20.1
Alternative 4	3,057,930	151,216	20.2
No Project	6,975,202	220,482	31.6
2030 General Plan	5,667,305	252,279	22.5
Note: [1] Refer to above steps for calculation of VMT			

Table 4.13-14 Average Trip Length Comparison (For Intra-County Trips Only)			
Scenario	Internal-to- Internal VMT	Internal-to- Internal Trips	Average Trip Length
Existing	505,327	86,769	5.8
Alternative 2	1,795,703	297,351	6.0
Alternative 4	1,969,389	316,954	6.2
No Project	5,658,404	544,900	10.4
2030 General Plan	4,104,593	619,246	6.6

Table 4.13-15 presents the VMT resulting from Yuba County land uses for both trips that remain within the County and trips that travel to an adjacent County or City. The average trip length for the "inter-County" trips generated by Yuba County land uses was estimated from SACOGs 2035 SACMET travel demand model, which covers the six-County metropolitan region. The VMT shown in Table 4.13-15 for existing conditions likely underestimates the actual VMT associated with Yuba County land uses. This occurs because the SACMET model is likely underestimating the amount of non-home-based travel (outside of Yuba County) associated with the residential projects in southern Yuba County. In addition, the model's estimate of average length of trips that enter/exit Yuba County into Sutter, Sacramento, and Placer Counties appears to be underestimated given current employment and regional shopping opportunities. As such, the increase in VMT between existing conditions and the future scenarios shown in this table is likely an overestimate. A more useful comparison may be between Growth Scenario 1 (Alternative 2), Growth Scenario 2 (Alternative 4), the No Project Alternative (1996 General Plan), and full buildout of the 2030 General Plan.

Table 4.13-15 VMT Comparison				
Scenario	Intra-County VMT	External I-X/X-I VMT	Total VMT	VMT/(Pop+Emp)
Existing	765,263	569,685	1,334,948[1]	15.2
Alternative 2	2,799,256	1,608,818	4,408,074	31.7
Alternative 4	3,057,930	1,688,783	4,746,713	31.4
No Project	6,975,202	1,993,458	8,968,660	40.7
2030 General Plan	5,667,305	2,394,505	8,061,810	32.0
Note: [1] Refer to above discussion regarding reasons why existing VMT is underestimated.				

The data from these three tables reveals the following key conclusions regarding VMT generated by land uses in Yuba County:

- According to Table 4.13-15, full buildout of the General Plan would have VMT that is 10% reduced compared to the No Project Alternative. However, when the greater amount of population and employment contemplated in the 2030 General Plan is considered, a "normalized" VMT reduction of 21% is achieved. This occurs because of a more favorable mix and location of land uses.

- For trips that remain internal to Yuba County, full buildout of the General Plan would have an average trip length that is 33 percent shorter than for the No Project scenario.

The above results likely overestimate the 2030 General Plan's actual VMT. This is because the VMT calculations were derived from a traditional travel demand model, which does not consider a number of factors incorporated into this General Plan that tend to reduce VMT including: shifts in travel to transit, bike, and walk modes, improved local street connectivity, and mixed-use projects with "balanced land uses". The 2030 General Plan includes other policies that will act to reduce VMT, but are difficult to quantify within a travel demand model such as travel demand management, increased density, shared parking, and workforce housing. As such, the VMT analysis in this section is considered conservative because it does not account for these more localized VMT reduction benefits.

Extensive research has shown that the above planning techniques can reduce vehicle trips, increase non-automobile mode share, reduce trip lengths, and reduce VMT. Increases in density and development intensity are correlated with reduced vehicle travel (on a per unit or square foot basis). Mixing complementary uses in a neighborhood setting increases internal trip "capture." Many different urban design approaches are used to increase transportation connectivity and provide high-quality bicycle, pedestrian, and transit facilities, increasing the attractiveness of non-automobile modes of travel. Access to regional destinations involves the strategic placement of land uses near regional attractions. A wide array of 2030 General Plan policies and actions incorporate these concepts.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD1.1:** Urban and suburban development in the unincorporated County not related to agriculture, mining, or some natural or cultural resource-oriented purpose is prohibited in valley areas outside the Valley Growth Boundary.

- **Policy CD1.3:** Urban land use designation/s will not be assigned within the Planning Reserve area unless the County determines that these lands are needed to fulfill either the County's regional housing needs allocation or accommodate job-generating developments needed to achieve the County's jobs-housing goals.

- **Policy CD1.4:** New developments proposing urban land uses will not be approved within the Planning Reserve area until the County assigns the appropriate General Plan land use designation/s and approves zoning and development standards consistent with the Community Development Element.

- **Policy CD2.1:** The County will encourage infill development and redevelopment of vacant and underutilized properties within existing unincorporated communities.

- **Policy CD2.2:** The County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment.

- **Policy CD2.3:** The County will support reinvestment in Linda and Olivehurst that increases local shopping, job, and housing opportunities.

- **Policy CD2.4:** The County will maintain flexible development standards, infrastructure standards, and impact fees that promote infill development and promote lot consolidation for redevelopment, where necessary.

- **Policy CD2.5:** The County will prioritize public spending on infrastructure within infill areas in order to induce reinvestment, remove blight, and reduce poverty.

- **Policy CD2.6:** The County will support public/private partnerships that encourage infill development consistent with the General Plan.

- **Policy CD2.7:** The County will actively promote vacant industrial sites in the Linda and Olivehurst areas for employment development.

- **Policy CD3.4:** The County will use performance-based standards in mixed-use areas to ensure important aspects of compatibility (air, noise, vibration, heavy truck traffic, light, glare) are addressed without impeding mixed-use development.

- **Action CD3.1: Compatibility Review and Conditioning of Projects and Plans.** The County will review projects against policies in this General Plan and analysis in the General Plan Environmental Impact Report (EIR) to reduce noise and air quality impacts. The County Zoning Ordinance and development standards should identify design and performance standards for noise, light, glare, air pollution, and other relevant issues. The County will use the General Plan to determine the adequacy of proposed buffering between residential land uses, highways, railroads, airports, industries, mining operations, agricultural operations, and other potentially incompatible uses. The County will condition projects, as appropriate, to provide consistency with this General Plan and the General Plan EIR. The County will balance its goals for infill and mixed-use development with policies and standards for noise, vibration, light and glare, and other issues of compatibility.

    - Related Goals: Goal CD3, Goal NR11, Goal HS5, Goal HS10, Goal HS11
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund; applicant funding for project-specific work
    - Time Frame: Ongoing, as funding opportunities arise

- **Policy CD4.1:** Employment and Commercial Centers shall be developed in coordination with local transit provider/s to ensure proper placement and design of transit stops and accommodate public transit for both employees and patrons.

- **Policy CD4.2:** Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.

- **Policy CD4.3:** In Commercial and Employment Centers, developments should place buildings close to the frontage street and emphasize the public realm by providing plazas, wide sidewalks, spaces for entertainment and other community events, outdoor seating and gathering areas, and other similar uses and activities.

- **Policy CD4.4:** Commercial projects of more than 20 acres in land area shall use public streets or small private streets to break up proposed development areas into blocks.

- **Policy CD4.5:** New commercial projects in Commercial Centers and other locations shall distribute proposed parking around the project site and not concentrate parking exclusively between the front building façade and the primary abutting street.

- **Policy CD4.6:** The County will encourage development of workforce housing around Employment Centers that is ancillary to, and supportive of employment-generating land uses.

- **Policy CD5.1:** Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks, and other civic uses.

- **Policy CD5.2:** Valley Neighborhoods should provide compact development patterns that conserve land and place homes in close proximity to destinations.

- **Policy CD5.3:** Valley residential development in existing and planned Valley Neighborhoods should provide for the full range of housing types and densities.

- **Policy CD5.4:** New developments within the Valley Growth Boundary shall provide a highly connected travel network that supports all local travel modes.

- **Policy CD5.5:** The County's development standards will allow narrow lots, narrow driveways, alleyway access, zero lot line housing, and other compact housing configurations in Valley Neighborhoods.

- **Action CD5.1: Update Zoning Ordinance.** Following the General Plan adoption, the County will review and revise the Zoning Ordinance, consistent with the updated General Plan. As a part of the revisions, the County will ensure the updated Zoning Ordinance accommodates compact growth patterns, consistent with the General Plan, while continuing to provide for the public health and safety. The County will consider provisions in the Zoning Ordinance that focus more on building form, function, and placement; lot design; and the relationship of buildings to the public realm (streets, plazas, public parks, etc.) and less emphasis on regulating specific land uses.

  To ensure land use compatibility while also encouraging a mix of land uses, the County will base performance standards in the Zoning Ordinance on General Plan policies for such topics as noise, vibration, light, glare, air pollution, and traffic. Such performance standards could be used to ensure compatibility in situations where nonresidential uses are located close to residential uses. The ordinance will also be revised to address nuisances, such as blight, stockpiling, and other similar issues.

  - Related Goals : Goal CD2, Goal CD3, Goal CD4, Goal CD6, Goal CD7, Goal CD8, Goal CD19, Goal HS5, Goal HS10, Goal HS11, Goal NR11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; federal and state funds, as available
  - Time Frame: Update Zoning Ordinance by 2013

- **Policy CD6.1:** Valley Neighborhoods shall contain one or more Neighborhood Center, where medium- and higher-density residences, neighborhood commercial, and public services are focused.

- **Policy CD6.2:** Neighborhood Center activities, retail, and services should serve roughly 3,000 to 5,000 existing or planned residents in the surrounding neighborhood.

- **Policy CD6.3:** Neighborhood Centers should be developed on approximately 4 to 15 acres of land and sized according to the needs of the surrounding neighborhood.

- **Policy CD6.4:** Higher-density residential development and services in Neighborhood Centers should transition to less intense development at the edges of existing and planned Valley Neighborhoods.

- **Policy CD6.5:** Neighborhood Centers should provide a pedestrian-friendly mix of uses and a range of housing types to meet the needs of the County's diverse households.

- **Policy CD6.6:** Neighborhood Centers shall be located and designed to provide convenient and safe bicycle, pedestrian, and transit access to and from surrounding neighborhoods.

- **Policy CD6.7:** Buildings in Neighborhood Centers should be placed relatively close to the front property line and parking should mostly be located on the street, on the side of buildings, or behind buildings.

- **Policy CD7.1:** The County will pursue funding for reinvestment along Olivehurst Avenue, McGowan Parkway, North Beale Road, Lindhurst Avenue, and other appropriate corridors.

- **Policy CD7.3:** The County will encourage – through entitlement, streamlining, flexibility in development standards, fee structures, and other incentives – infill development in vacant or underutilized sections of Mixed-Use Corridors.

- **Policy CD7.4:** Developments in Mixed-Use Corridors should have pedestrian-friendly property frontages with buildings built close to the street frontage.

- **Policy CD7.5:** Development in Mixed-Use Corridors should be designed so that building façades, street trees, and other landscaping are more visually prominent compared to surface parking lots and commercial signage.

- **Policy CD7.6:** The County will promote public plazas, outdoor dining, awnings, large windows, and other elements along property frontages that enhance pedestrian attractiveness and activity in Mixed-Use Corridors.

- **Policy CD7.7:** The County will seek funding to add drainage, bicycle, pedestrian, and transit facilities along Mixed-Use Corridors.

- **Policy CD7.8:** The County will seek funding to add street trees along Mixed-Use Corridors, particularly in areas that would shade sidewalks, parking areas, transit stops, and any public gathering places.

- **Action CD7.1: Corridor Planning.** The County will seek funding to support corridor planning efforts for McGowan Parkway, Olivehurst Avenue, Lindhurst Avenue, North Beale Road, the northern section of Feather River Boulevard, and surrounding areas. The County may also identify other Mixed-Use Corridors to address during buildout of the General Plan. Mixed-Use Corridor Plans would be designed to (Exhibit Community Development-10):

    - Guide mixed-use, infill development consistent with the applicable land use designation/s and zoning district/s;

    - Identify multimodal transportation improvements to support development;

    - Describe public infrastructure and facilities needed to encourage private investment; and

    - Identify incentives and streamlining that would induce private investment in these areas.

The Plans would be structured to provide a mix and density of development with adequate transportation facilities such that walking, bicycling, or taking transit is viable for daily needs of the residents of surrounding neighborhoods. The County will pursue grant funding and regional partnerships to revitalize its Mixed-Use Corridors. The County will plan and fund infrastructure designed to support increased density and intensity around future transit stops, near planned bicycle/pedestrian facilities, and in other targeted reinvestment areas.

- Related Goals: Goal CD4, Goal CD7, Goal CD8, Goal CD10, Goal CD11, Goal CD15, Goal CD19, Goal NR7, Goal HS5, Goal HS11

- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund; federal and state funds
- Time Frame: Ongoing, according to funding opportunities as they arise.

- **Policy CD8.1:** New developments should be designed to provide direct and convenient access to nearby parks, trails, commercial and public services, and transit stops.
- **Policy CD8.2:** Valley Neighborhood developments and residential portions of Employment Village areas shall provide relatively short block lengths and continuity of streets in order to facilitate convenient pedestrian, bicycle, and vehicle movement (Exhibit Community Development-11).
- **Policy CD8.3:** New cul-de-sacs are allowed within the Valley Neighborhoods and residential portions of Employment Village areas where they would not create a barrier for pedestrian and bicycle access or circulation between homes and destinations.
- **Policy CD8.4:** New buildings in Valley Neighborhoods and residential portions of Employment Village areas should, in general, be oriented toward, and placed close to frontage streets.
- **Policy CD8.5:** New developments shall be designed so that parking areas and garages are not the dominant visual element of site frontage.
- **Policy CD8.7:** The County's development standards will allow alley-loaded garages.
- **Policy CD8.9:** Fences and walls are discouraged along public travelways where they would present substantial barriers to casual surveillance or multi-modal travel.
- **Policy CD8.10:** New developments in the Valley Growth Boundary should provide streets lined with trees selected and located to provide a shade canopy at maturity.
- **Policy CD8.11:** Multi-family housing developments should be well connected to the surrounding neighborhood. Parking areas should be sized and broken up to avoid creating barriers to pedestrian and bicycle circulation.
- **Policy CD9.6:** The County will support planning for Rural Centers in foothill and mountain portions of the County that would provide a variety of activities and services needed or anticipated to be needed by the local population, including, but not limited to medical and educational services (Exhibit Community Development-12).
- **Policy CD9.9:** Rural Communities can provide clusters of housing constructed at the upper end of allowable density ranges in approved Rural Center plans, but in general should provide larger lots at the edges of the community that transition to the surrounding open space areas.
- **Policy CD9.10:** Rural Centers should be focused on County collector and arterial roads and highways, and particularly at "crossroads" locations central to the surrounding rural communities.
- **Policy CD10.1:** The County will encourage development that improves the balance between local jobs and housing, including new commercial, industrial, home-based businesses, business incubators, and other development that generates net revenues for the County and produces local jobs.

- **Policy CD10.3:** The County will phase growth with efficient infrastructure planning in order to keep fees as low as possible and coordinate with service providers to ensure the savings of this efficient infrastructure planning is passed on to occupants of employment-generating developments.

- **Policy CD10.5:** The County will support community and specific planning efforts following General Plan adoption that identify employment-generating uses and the housing and infrastructure that is needed to support the local workforce.

- **Policy CD10.6:** The County will encourage residential development that is priced, sized, and located to serve the needs of local employers and workers.

- **Policy CD10.7:** Large residential development projects should be phased or timed to occur concurrently with development projects that will provide employment in the County.

- **Action CD10.2: Land Use Monitoring.** The County will monitor progress toward the jobs-housing goal and, as necessary, amend the General Plan, Zoning Ordinance, Specific Plans, Community Plans, and other relevant plans and codes, as appropriate. Any amendments shall address imbalances between job and population growth, and may include revisions to allowable land uses or development standards, financial/regulatory incentives to accelerate the development of job-generating uses, and other actions.

    - Related Goals: Goal CD1, Goal CD4, Goal CD10
    - Agency/Department: Community Development and Services Agency and Economic Development Coordinator.
    - Funding Source: General Fund
    - Time Frame: Report on jobs-housing balance at least once per year to the Board of Supervisors.

- **Policy CD13.1:** Growth should be phased from developed areas and existing infrastructure outward in a logical, efficient manner, and in a way that avoids premature conversion of agricultural lands, changes in rural character, and unnecessary loss of other land-based natural resources.

- **Policy CD13.2:** The County will not induce growth by supporting the provision of services or infrastructure in areas that are not planned for development.

- **Policy CD13.3:** Unincorporated County development between present and 2030 will be focused within the Valley Growth Boundary and Rural Communities.

- **Policy CD13.4:** For areas designated Planning Reserve, allowable land use will be regulated according to the underlying land use designation unless the Board of Supervisors approve the following findings:

    - The subject project or plan proposed within the Planning Reserve Area promotes the goals and is consistent with the polices of the Community Development Element, Natural Resources Element, Housing Element, and Public Health & Safety Element of the General Plan; and
    - A Specific Plan or master plan meeting the County's requirements has been prepared; and
    - The subject project or plan is planned and designed to improve the match between local jobs and the local labor force, consistent with the goal of accommodating 0.8 total local jobs for every member of the labor force; and

- The subject project or plan proposed within the Planning Reserve Area will directly provide substantial basic (exporting) employment development potential; or

- The subject project or plan proposed within the Planning Reserve Area will construct water, wastewater, and drainage infrastructure that will serve future employment development, with the understanding that project applicants are repaid on a fair-share basis.

- **Policy CD14.6:** The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.

- **Policy CD15.4:** The County's impact fees will be revised to consider cost efficiencies associated with compact, mixed-use, age- or income-restricted, and infill development.

- **Policy CD15.9:** The County will require that new developments include safe and convenient access to nearby schools and work with the local school districts to ensure safe access.

- **Policy CD15.10:** The County will locate its own administrative facilities in downtown areas, along Mixed-Use corridors, or in Neighborhood Centers, whenever possible.

- **Action CD15.1: Revise Impact Fees.** The County will have prepared a Nexus Fee Study following the 2030 General Plan update to support revised development impact fees. One focus of this updated effort would be to ensure that compact development that makes efficient use of land has lower fees, where this approach to development is shown to have lower costs. The County will consider basing fees on an equivalent dwelling unit (EDU) basis, a per-capita basis, or per-acre basis, depending on the type of fee. The per-EDU, per-capita, or per-acre approach would be considered rather than presenting fees on a flat-rate, per unit basis. Different types of dwelling units have different demands for services and different associated costs. The County will also consider reduced fees for infill development that has access to existing infrastructure with adequate capacity to serve that development.

    - Related Goals: Goal CD1, Goal CD2, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD11, Goal CD12, Goal CD13, Goal CD14, Goal CD15, Goal CD16, Goal CD19, Goal NR12, Goal HS9

    - Agency/Department: Community Development and Services Agency

    - Funding Source: General Fund

    - Time Frame: Nexus Fee Study and revised fees by 2014

- **Policy CD16.1:** The County will maintain roadway levels of service that recognize differences between urban and rural environments and consideration of other community character, economic, and environmental policies of the County.

- **Policy CD16.5:** Where a new development would exceed the County's level of service policies, applicants shall first consider feasible revisions to the proposed development that would increase connectivity, enhance bicycle/pedestrian/transit access, provide additional travel demand management measures, and/or provide other revisions that would help to meet LOS standards by reducing vehicle miles traveled on roads exceeding the target LOS, prior to consideration of adding capacity to roadways and intersections.

- **Policy CD16.10:** The County will not use traffic level of service policies to analyze and mitigate CEQA impacts of new developments, but instead will use its level of service policies to assess fair-share funding of transportation facilities necessary to serve new projects.

- **Policy CD16.11:** The County will analyze and mitigate transportation impacts in CEQA documents according to their relative increase in vehicular travel demand.

- **Action CD16.2: Traffic Impact Fees.** Following adoption of the General Plan, the County will revise its Countywide Traffic Mitigation Fee Program based on a nexus study meeting state law requirements. The County will continue to require specific plans to identify funding for transportation facilities needed to serve development within each subject specific plan. The countywide program would focus on improvements needed to serve development within the unincorporated County not within a specific plan. The County's impact fee programs will be sensitive to elements of proposed projects that reduce their per-unit and per-employee trip generation rates. Centrally located projects, projects with high densities and employment intensities, located in areas with good transit service, located in mixed-use environments, for example, would be expected to have lower per-unit fees. Commercial traffic impact fees should take into account whether the commercial project is designed to attract drivers or oriented toward providing services to neighborhoods.

    - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD13, Goal HS5
    - Agency/Department: Public Works Department
    - Funding Source: Capital improvement funds
    - Time Frame: Update Countywide Traffic Mitigation Fee Program by 2014

- **Policy CD17.1:** New developments shall be designed to facilitate safe and convenient travel by pedestrians, bicyclists, transit users, and drivers.

- **Policy CD17.2:** The County will coordinate approval of projects and plans with local transit providers to ensure that transit service is provided for work, shopping, school, and other types of trips within the Valley Growth Boundary.

- **Policy CD17.3:** The County will coordinate with Yuba College to provide housing and commercial services within walking and bicycling distance of the Linda campus and plan for convenient and safe pedestrian, bicycle, and transit options for students attending Yuba College.

- **Policy CD17.4:** The County will provide incentives to businesses that sponsor transit routes or create their own travel demand management programs, which may include, but are not limited, to streamlined permitting, and reduction of parking requirements.

- **Policy CD17.5:** The County will review and condition large employment generating projects, defined as new projects that could accommodate more than 50 full-time equivalent employees, according to the provisions of a County Travel Demand Management Ordinance.

- **Policy CD17.6:** New developments and specific plans shall analyze and mitigate impacts related to increased travel demand, as feasible and consistent with County General Plan policy.

- **Action CD17.1: Travel Demand Management Ordinance.** The County will develop a Travel Demand Management ordinance that provides options for large employers in mitigating the traffic related impacts of proposed projects. Reducing travel demand could be used in-lieu of providing traffic impact fees, where demonstrated to reduce trips, particularly during peak demand periods. Options for reducing travel demand in this ordinance could include, but are not limited to providing incentives for employees to commute via transit, bicycle, on foot, or by carpool, rather than the single-occupant vehicular commute. The County will periodically review the approaches provided under this ordinance to ensure their effectiveness and make revisions, as appropriate. The County may promote, as a part of this Ordinance, membership in the Yuba-Sutter Transportation Management Association.

    - Related Goals: Goal CD4, Goal HS5, Goal CD16, Goal CD17, Goal CD19
    - Agency/Department: Public Works

- Funding Source: General Fund
- Time Frame: Ongoing

- **Policy CD18.8:** The County will coordinate with Caltrans to implement context-sensitive improvements to State facilities that are keyed to local multi-modal transportation needs.

- **Policy CD19.1:** The County will promote mixed-use, infill development and redevelopment in order to reduce dependence on the private automobile.

- **Policy CD19.2:** New developments and specific plans with a buildout population greater than 2,000 dwelling units shall designate Neighborhood Centers, consistent with the policies of the General Plan.

- **Policy CD19.3:** New developments in the Valley Growth Boundary shall provide focused nodes of population and employment density around transit stops, planned in coordination with Yuba-Sutter Transit, with a target of 9 units per acre of residential development, 20 employees per acre for nonresidential development, or 20 or more persons plus employees per acre for mixed-use development within ¼ mile of existing and planned transit stops.

- **Policy CD19.4:** The County will plan its investments and condition new developments to provide pedestrian, bicycle, and transit facilities designed to provide multi-modal connections within neighborhoods, within unincorporated communities, and between communities and cities in the County.

- **Policy CD19.5:** New developments shall include the construction or pro-rata funding of transportation infrastructure that may include a connected and integrated system of bicycle and pedestrian facilities, consistent with County standards.

- **Policy CD19.6:** New development shall accommodate safe and frequent crosswalks along roadways, with more frequent crossings in areas expected to have higher pedestrian traffic.

- **Policy CD19.7:** The County's improvement standards and street classification system will be designed to accommodate the full range of locally available travel modes. Intersection dimensions and turning radii should be minimized in areas where high pedestrian and bicycle activity is expected.

- **Policy CD19.8:** The County will seek funding for and, as feasible, install traffic-calming measures, such as planted medians, landscaped planter strips, landscaped traffic circles, and other designs in areas with excessive or high-speed traffic, as appropriate. The County will not support street closures, half closures, or other measures that limit connectivity as a way to calm traffic.

- **Policy CD19.9:** Secure bicycle parking shall be located at or near public buildings, business districts, parks, playgrounds, shopping centers, schools, transit terminals, bus stops, and other bicycle traffic generators.

- **Policy CD19.10:** The County will collaborate with Yuba-Sutter Transit, other regional transit providers, and local businesses to:

  - Ensure transit stops are accommodated in the context of new development and redevelopment;

  - Encourage local businesses to collaborate with transit providers to develop transit incentive programs for local employees.

  - Plan for and condition projects to provide for park-and-ride facilities in coordination with Yuba-Sutter Transit.

  - Supports paratransit and other forms of transit service for those unable to use conventional transit service.

- **Policy CD19.11:** The County will support feasible opportunities to provide intra-county and inter-county passenger rail service for Yuba County residents and businesses, including support for expansion of AMTRAK passenger service and transit, along with bicycle, and pedestrian-friendly development around rail and transit stations.

- **Policy CD19.12:** The County will encourage programs that facilitate County employees' use of pedestrian, bicycle, and transit facilities to reach the workplace.

- **Action CD19.1: Pedestrian and Bikeway Master Planning.** The County will collaborate with other agencies during buildout of the General Plan to maintain pedestrian/bicycle master plans designed to meet growth needs. The master plan updates should be designed to improve bicycle and pedestrian connections between each city in the County, cities in adjacent counties, and each unincorporated community. Bicycle/pedestrian master planning efforts should be coordinated with local irrigation districts, special districts, and public agencies with easements and rights-of-way, the railroad, other property owners, and other agencies and interested parties to acquire and/or use existing easements and rights-of-way for development of off-street pedestrian and bicycle pathways. Master plans will focus on improving links between neighborhoods and important destinations, such as schools, shops, commercial services, public services, and recreational opportunities.

    - Related Goals: Goal CD15, Goal CD16, Goal CD17, Goal CD18, Goal CD19
    - Agency/Department: Community Development and Services Agency
    - Funding Source: Grant funding; regional funding
    - Time Frame: Adopt Yuba County Bikeway Master Plan by 2013

- **Action CD19.2: Revise Development Code & Improvement Standards.** Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards, where necessary, to encourage a high level of pedestrian, bicycle, and transit-friendliness in new development. In general, the County will consider revisions to its codes and standards to reduce road widths, reduce the amount of paved areas of roadways and parking lots, reduce pedestrian crossing distances, and reduce curb radii at intersections, in consideration of pedestrian and bicycle comfort and safety, while also considering turning templates needed for service and emergency vehicles. The County will consider revisions to its codes and standards that require wider sidewalks in areas where higher pedestrian and bicycle activity would be anticipated.

    - Related Goals: Goal CD2, Goal CD8, Goal CD13, Goal CD15, Goal CD19, Goal CD 21, Goal HS3, Goal HS5, Goal HS9, Goal HS11, Goal NR7
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund; grant funding
    - Time Frame: Revise zoning, development codes, and improvement standards by 2013

- **Action CD19.3: Transit Planning & Facilities Expansion.** During buildout of the General Plan, the County will proactively pursue funding for transit designed to meet the needs of Yuba County children, seniors, persons with disabilities, low-income, and all transit-dependent persons. The County will pursue air quality mitigation efforts that fund transit in coordination with Feather River Air Quality Management District and other interested agencies and nonprofits. The County will plan for, and implement expansion of transit service, as funding is available. Transit projects will be included in the County's capital improvements planning, as appropriate. The County will examine the need for intermodal transit transfer facilities as the transportation system expands. The County will proactively coordinate with Yuba-Sutter Transit on grant funding opportunities to fund transit expansion, consistent with the General Plan, with a focus on transit in areas with at least 20 persons plus employees per acre.

- Related Goals: Goal CD13, Goal CD15, Goal CD16, Goal CD17, Goal CD18, Goal CD19, Goal HS5, Goal HS11
- Agency/Department: Community Development and Services Agency
- Funding Source: Grant funding
- Time Frame: As funding is available

- **Policy CD20.1:** New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided wherever feasible.
- **Policy CD20.2:** New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.
- **Policy CD20.3:** New developments shall connect with adjacent roadways and stubbed roads and shall provide frequent stubbed roadways in coordination with future planned development areas. Plans and projects shall connect to adjacent planned development areas and adjacent roadways at a minimum of 600-foot intervals. This minimum interval does not apply to development areas that are adjacent to existing or planned future limited-access highways, freeways, or expressways, or other areas where physical constraints would make this level of connectivity infeasible.
- **Policy CD20.4:** The County discourages the use of sound walls within neighborhoods. Traffic dispersal on a finely connected network of smaller roadways and other planning and site design solutions should be used instead of sound walls to address noise issues, to the greatest extent feasible.
- **Policy CD20.5:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.
- **Policy CD20.6:** The maximum allowable length of a cul-de-sac within the Valley Growth Boundary is 400 feet unless an exception is approved by the Community Development Director in consultation with local emergency service providers. Where cul-de-sacs are allowed, they should incorporate bicycle/pedestrian through access, where feasible.
- **Policy CD20.7:** The County will seek frequent street and trail connections between new residential developments and established Valley Neighborhoods.
- **Policy CD21.1:** New development projects should be designed to minimize the amount of on-site land required to meet parking, internal circulation, and delivery/loading needs.
- **Policy CD21.2:** New developments shall break up any proposed surface parking with landscaping and provide pedestrian routes from parking areas to building entrances.
- **Policy CD21.3:** Land uses with different parking needs that peak at different times of the day should maximize opportunities to share parking where feasible.
- **Policy CD21.4:** In Rural Communities and the Valley Growth Boundary, parking areas for nonresidential uses should generally be focused to the side or rear of the facility being served.

- **Policy CD21.6:** The County's parking standards will be reduced or eliminated for infill and affordable housing projects in consideration of shared parking, on-street parking, and reduced travel demand attributable to these types of projects.

- **Policy CD21.7:** The County will consider adopting parking maximums in areas where high pedestrian and bicycle activity is expected and in areas around transit stops.

- **Action CD21.1: Revise Development Code & Improvement Standards.** Following adoption of the 2030 General Plan, the County will revise its development code and improvement standards. The County will consider reduced surface parking in areas where pedestrians and bicyclists are concentrated and where transit service is planned. The County will consider strategies to optimize parking supply through shared parking; use of on-street parking to meet demand of nearby properties; and other strategies. The County will consider establishing parking maximums, as well as minimums, as part of the development code and improvement standard revisions.

    - Related Goals: Goal CD2, Goal CD7, Goal CD8, Goal CD19, Goal CD21, Goal NR11, Goal HS3, Goal HS5
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund; grant funding
    - Time Frame: Revise zoning and development codes by 2013, revise improvement standards by 2014

- **Policy NR1.5:** New developments shall provide for open space corridors consistent with the County's Parks Master Plan, and as needed to provide naturalized drainage and bike/pedestrian connections to nearby neighborhoods and destinations.

- **Policy NR1.8:** Local parks should be located central to the neighborhood they serve and designed to encourage pedestrian and bicycle access.**Policy NR1.12:** The County will incorporate trails along canals, transmission lines, and other easements and rights-of-way, where, feasible, including trail development atop levees, so long as flood protection facilities are not adversely affected.

- **Policy NR1.13:** The County will communicate with neighboring counties and cities to explore connections with Yuba County's planned regional trail system.**Policy NR2.1:** The County will encourage urban greening projects that are designed to: Improve air and water quality; Protect natural resources; Increase the attractiveness of affordable housing and existing developed areas; Promote public health and the development of a healthy community; Increase access to safe areas for physical activity; Improve access to healthy, local food sources; Improve and use existing infrastructure systems and other community resources; Promote public health; Reduce greenhouse gas emissions; and Adapt to future climate conditions.

- **Policy NR2.2:** The County will encourage for urban greening projects to be developed in underserved areas of Linda and Olivehurst, such as tree planting and maintenance, natural drainage systems improvements, ecological restoration, park development, renewable energy development and energy conservation projects, trail development, community gardens, and other appropriate project types.

- **Action NR2.1: Urban Greening Projects.** During this General Plan time horizon, the County will identify and seek funding for urban greening projects that provide for a range of benefits, such as:

    - Reducing greenhouse gas emissions;
    - Decreasing air and water pollution;
    - Reducing the consumption of natural resources and energy;

- Increasing the reliability of local water supplies; and/or
- Increasing adaptability to climate change.

The County's urban greening projects will be designed to promote infill development and social equity, protect environmental resources, including agricultural lands, and encourage efficient development patterns. The County will coordinate with local school districts, local utility providers, cities, and other local and regional agencies, where appropriate, for Urban Greening Projects of mutual benefit. Urban greening projects will be identified that improve air and water quality, increase the attractiveness and availability of affordable housing, improve infrastructure systems or their function, and promote public health.

- Related Goals: Goal NR1, Goal NR2, Goal CD8, Goal CD11, Goal CD12, Goal CD19
- Agency/Department: Community Development and Services Agency
- Funding Source: Grant funding, as available
- Time Frame: Throughout General Plan implementation, as funding is available

- **Policy HS3.17:** New developments shall limit construction of new impervious surfaces, such as parking lots, travelways, vehicle waiting areas, and vehicle loading areas to the minimum amount needed to implement the subject project.

- **Policy HS5.1:** The County will guide land use change, direct investments, and apply its fees and programs to encourage more GHG-efficient development patterns.

- **Policy HS5.2:** The County's regulations, investments, and fee programs should be structured to reduce net greenhouse gas emissions for new development in the unincorporated County consistent with the level of emissions needed per-capita or per service population to achieve the County's fair share of the state's emissions mandate.

- **Policy HS5.3:** Since transportation is the largest sector contributing to GHG emissions both locally and at the statewide level, the County will prioritize land use/transportation projects that manage travel demand by increasing housing/employment density, placing homes in closer proximity with destinations, increasing accessibility to transit, or otherwise decreasing vehicle miles traveled (per household, per capita, and/ or per employee).

- **Policy HS5.4:** The County will use an efficiency-based threshold (net emissions per-capita + employee) to evaluate proposed urban land uses, such as homes, retail, office, and other uses where the location, density, and mix of uses in the project area is important to the level of greenhouse gas generation.

- **Policy HS5.9:** The County will actively pursue funding for GHG-efficient transportation systems and other needed infrastructure, building and public realm energy efficiency upgrades, renewable energy production, land use-transportation modeling, and other projects to reduce local greenhouse gas emissions.

- **Policy HS5.12:** Rural Community Plans should address strategies to diversify the local land use mix to meet more resident needs within each community, increase energy efficiency, shorten trips, and encourage non-vehicular travel, as feasible, to increase greenhouse gas efficiency.

- **Action HS5.1: Greenhouse Gas Reduction Plan.** The County will prepare and adopt a Plan to reduce greenhouse gas (GHG) emissions. *[Please see the 2030 General Plan (Public Health & Safety-34), under separate cover, for additional information on the County's Greenhouse Gas Reduction Plan.]*

  - Related Goals: Goal HS1, Goal HS2, Goal HS3, Goal HS5, Goal HS11, Goal CD2, Goal CD4, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD10, Goal CD15, Goal NR2, Goal NR7

- Agency/Department: Community Development and Services Agency
- Funding Source: General fund, grant funding
- Time Frame: Ongoing, as funding is available

Conclusion

The above policies will place an even greater emphasis on reducing vehicle travel within Yuba County. Despite creating a 2030 General Plan that generates 19 percent less VMT on Yuba County roadways and 10 percent less VMT overall than the No Project alternative, an increase in VMT occurs over the existing condition due to the addition of new land uses.

Mitigation Measure

The County has included all available feasible mitigation as General Plan policies and actions. Therefore, this impact is considered **significant and unavoidable**.

IMPACT 4.13-6 Result in Change in Air Traffic Patterns. *Implementation of the 2030 General Plan would not result in a change in air traffic patterns that would result in substantial safety risks. This impact would be less than significant.*

Yuba County has three general aviation airports, as shown in **Exhibit 4.13-7**. Beale Air Force Base is a military facility owned by the United States Air Force. The Yuba County Airport is owned and operated by the County, while the Brownsville Airport is for public use, but privately owned. The County anticipates continued operation of the Yuba County Airport as a general aviation facility, with commuter air traffic that could expand in response to increased demand.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD22.6:** The County will continue to protect and promote full use of Yuba County Airport as a general aviation facility and encourage expanded commuter air carrier traffic.
- **Policy CD22.7:** The County will periodically update the Yuba County Airport Master Plan and will consider the feasibility of air cargo transport in future updates.
- **Policy CD22.8:** The County will protect and promote Brownsville Aero Pines Airport as a general aviation airport.
- **Action CD22.1: Airport Strategic Plan Updates and Master Planning**
  - The County will periodically review and, if necessary, revise the Airport Strategic Plan section of the Yuba County Economic Development Strategic Plan. The County will review economic studies related to the airport to guide updates. The County will coordinate with SACOG on funding and updating of the Yuba County Airport Master Plan.
  - Related Goals: Goal HS4, Goal CD14, Goal CD22
  - Agency/Department: Community Development and Services Agency, Economic Development Coordinator, Airport Manager, Administrative Services Department
  - Funding Source: General Fund; regional funding sources

- Time Frame: As needed and as funding is available

- **Policy HS4.1:** The County will collaborate with the Airport Land Use Commission to update local airport land use compatibility plans and will condition projects, as necessary, to ensure compliance with these plans.

- **Policy HS4.2:** New developments shall be located and designed to avoid conflicts with current and potential future operations at Beale Air Force Base, including Beale's Phased Array Warning System.

- **Policy HS4.3:** New construction within the Air Installation Compatibility Use Zone 65 dB CNEL noise contours for the existing and potential future missions shall use building materials and construction techniques to mitigate noise impacts.

- **Action HS4.1:** Airport Land Use Compatibility Planning. During General Plan buildout, the County will collaborate with the Airport Land Use Commission and local airports to update compatibility plans. The County will regulate and condition new development according to restrictions of local airport land use compatibility plans.

  - Related Goals: Goal HS4, Goal HS7, Goal HS10, Goal CD3, Goal CD22
  - Agency/Department: Community Development and Services Agency
  - Funding Source: State and federal grants, other State or federal funding, General Fund
  - Time Frame: Adopt Yuba County and Beale CLUPs by 2012 with periodic revisions during General Plan buildout

- **Action HS4.2:** Beale Air Force Base Coordination. The County, along with the cities and other public service agencies, will coordinate with Beale Air Force Base representatives to ensure continued land use compatibility between County lands and base operations. The County will involve Beale representatives in development project review and conditions.

  - Related Goals: Goal HS4, Goal CD3, Goal CD10
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund, project applicant funds
  - Time Frame: Ongoing, and as needed, in response to project proposals near Beale AFB

Conclusion

The above policies will continue the operation of the Yuba County and Brownsville airports as general aviation facilities. Details of their operations including potential changes in service are analyzed as part of periodic updates to the Yuba County Airport Master Plan. This impact would be **less than significant**.

IMPACT 4.13-7 Introduce New Traffic Hazards. *Implementation of the 2030 General Plan would not introduce new traffic hazards due to a design feature or incompatible use. The General Plan, however, would add traffic across existing at-grade railroad crossings and to areas where the County anticipates ongoing movement of agricultural equipment. This impact would be potentially* ***significant.***

Yuba County maintains Improvement Standards that guide the construction of new transportation facilities to minimize design hazards for all users of the system. Through the environmental review process, land use proposals that would add traffic to streets not designed to current standards are carefully evaluated. If needed, mitigations are identified and the project is conditioned to construct or provide funding for an improvement that would minimize or eliminate the hazard. Typical improvements include shoulder widening, special signage and

striping, adding turn pockets, adding sidewalks or crosswalks, constructing bus turnouts, realigning sharp curves, prohibiting certain turning movements, and other improvements.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD4.2:** Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.
- **Policy CD6.6:** Neighborhood Centers shall be located and designed to provide convenient and safe bicycle, pedestrian, and transit access to and from surrounding neighborhoods.
- **Policy CD8.3:** New cul-de-sacs are allowed within the Valley Neighborhoods only where they would not create a barrier for pedestrian and bicycle access or circulation between homes and destinations. Cul-de-sacs may be allowed around the edges neighborhoods, in areas adjacent to ongoing agricultural operations, in areas adjacent to existing large volume roadways, or where connectivity is limited by existing physical conditions.
- **Policy CD19.7:** The County's improvement standards and street classification system will be designed to accommodate the full range of locally available travel modes. Intersection dimensions and turning radii should be minimized in areas where high pedestrian and bicycle activity is expected.
- **Policy CD19.10:** The County will minimize intersection dimensions and turning radii, as appropriate, to preserve pedestrian safety and comfort, while also accommodating vehicular movements.
- **Policy CD20.1:** New developments shall be designed to discourage concentration of traffic at a few intersections. Multiple points of access shall be provided, wherever feasible.
- **Policy CD20.2:** New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.
- **Policy CD20.5:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.
- **Policy CD20.6:** The maximum allowable length of a cul-de-sac within the Valley Growth Boundary is 400 feet unless an exception is approved by the Community Development Director in consultation with local emergency service providers. Where cul-de-sacs are allowed, they should incorporate bicycle/pedestrian through access, where feasible.
- **Policy CD20.8:** Speed bumps, which can inhibit connectivity and emergency access, are discouraged as a method of traffic calming.

The above policies would reduce the introduction of traffic hazards and unnecessarily barriers to access, including emergency access. In addition, the Valley Growth Boundary communicates to property owners, developers, and the public regarding the County's intent to maintain large areas of the County in open space and direct growth within valley portions of the County to areas with existing development and infrastructure availability. The County's approach to growth management ensures efficient infrastructure provision, but also helps reduce the level of development in areas with ongoing agricultural operations. The General Plan would result in substantial traffic added to certain routes with existing at-grade railroad crossings. Although this does not necessarily

represent a traffic hazard, if there are intersections located close to existing at-grade railroad crossings and if the additional added traffic would cause congestion that would cause traffic to queue and block roadways.

Mitigation Measure 4.13-7: Railroad Crossings

- For developments that would add substantial traffic, defined as adding 5,000 or more daily trips, across existing at-grade railroad crossings, traffic analysis shall be submitted to the County for review. This analysis and report shall estimate daily and peak-hour traffic at the subject at-grade crossing, as well as accident data; estimates of train, vehicle, bicycle, and pedestrian travel at the crossing; and a description of existing and planned and funded equipment at at-grade rail crossings.

- The County will review traffic data in communication with the California PUC to identify improvements needed to ensure the public safety.

- As appropriate and feasible, the County will condition approval of projects and plans that add substantial traffic across at-grade crossings to participate in the funding for improvements needed to ensure the public safety as determined by the County. Such improvements may include coordinated highway/rail traffic signals, enhanced rail crossing signage, warning equipment, and markings, and grade-separations.

- Depending on the outcome of these studies, the County may include improvements in future updates to its Capital Improvement Program.

Conclusion

The above policies will continue the County's policy of ensuring that proposed land use developments would not introduce new design hazards, and would not exacerbate existing deficiencies. Through periodic updates of its Improvement Standards and application of those standards to new development proposals, the County is providing for new facilities that do not create hazards and upgrading/replacing current facilities as needed. The above mitigation will ensure that large projects that would add substantial traffic to existing at-grade railroad crossings will provide analysis to the County and will be conditioned, as necessary, to fund needed improvements. With County's normal CIP process, application of future state and regional funds to needed railroad crossings, and project review and conditioning, this impact would be reduced. However, the County cannot demonstrate that this would alleviate the potential impact to a less-than-significant level. The County has incorporated all feasible mitigation in existing regulations, 2030 General Plan policies and actions, and mitigation. Therefore, this impact is considered **significant and unavoidable**.

IMPACT 4.13-8 Adverse Effects on Emergency Access. *Implementation of the 2030 General Plan would not adversely affect access to emergency services. This impact would be less than significant.*

The County's adoption of a minimum LOS D standard (versus LOS C) would permit up to an additional 20 seconds of delay per vehicle at signalized intersections. Emergency vehicles would incur little or no additional delays because most vehicles and traffic signal systems are equipped with signal pre-emption devices. Furthermore, design of the roadway system with the majority of intersections operating at LOS D or better means that vehicle queues will be moderate at most locations, which will allow emergency vehicles to pass through intersections without incurring excessive delays.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD12.6:** The County will condition new developments and collaborate with local fire districts to locate stations so that first fire response can be provided within 6 minutes in 95% or more of cases within the Valley Growth Boundary.

- **Policy CD12.7:** The County's target for fire protection is an ISO (Insurance Service Organization) rating of no greater than 5 within the Valley Growth Boundary and no greater than 8 for Rural Communities.

- **Policy CD12.9:** The County's target for law enforcement is to provide one officer per 1,000 persons within the unincorporated area and to provide an average response time of 5 minutes or less for Priority 1 emergency calls within the Valley Growth Boundary.

- **Policy CD20.7:** Since gated residential areas discourage connectivity, the County will only allow such developments if multi-modal connectivity and emergency access to and from surrounding areas will not be significantly impaired. The County will not allow gates unless emergency access can be provided consistent with the standards of the relevant fire district.

- **Policy CD20.11:** Speed bumps, which can inhibit connectivity and emergency access, are discouraged as a method of traffic calming.

Conclusion

2030 General Plan policies will require infrastructure and new developments to be designed so as to not adversely affect emergency vehicle access. The County's policies would support purchase of emergency vehicle systems, as needed, to provide service to new development. This impact would be **less than significant**.

IMPACT 4.13-9 Conflicts with Policies Supporting Alternative Transportation. *Implementation of the 2030 General Plan would not conflict with adopted plans, policies, or programs supporting alternative transportation. This impact would be less than significant.*

As described under Impact 4.13-1 and 4.13-5, the 2030 General Plan contains numerous policies and actions that encourage planning for and use of transit, bicycle, and pedestrian travel modes. Where LOS standards cannot be met, policies encourage travel demand management measures, transit enhancements, bicycle/pedestrian improvements or other revisions to reduce vehicles miles of travel.

Relevant Policies and Actions of the 2030 General Plan

Please refer to policies and actions listed under Impact 4.13-1 and 4.13-5.

Conclusion

The 2030 General Plan would not introduce policies that conflict with adopted plans, policies, or programs supporting alternative transportation. The 2030 General Plan substantially enhances the County's policy approach to promote all forms of travel available locally. Therefore, this impact would be **less than significant**.

4.14 UTILITIES AND SERVICE SYSTEMS

This section presents analysis of the impacts that implementation of the 2030 General Plan may have related to water, wastewater, solid waste, and storm drainage facilities in unincorporated Yuba County.

Impacts associated with the extension of public services, including fire protection, law enforcement, schools, parks and recreation services, and libraries are analyzed separately in Section 4.12, "Public Services and Recreation." An evaluation of water quality can be found in Section 4.9, "Hydrology and Water Quality."

4.14.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Sections 4.4, "Biological Resources," and 4.9, "Hydrology and Water Quality," describe the requirements of the federal Clean Water Act as it relates to discharge of fill to waters of the United States and surface water quality and management.

Public Utility Regulatory Policies Act

Congress enacted the Public Utility Regulatory Policies Act to promote conservation of energy, efficient use of facilities and resources, and equitable rates to customers. This legislation set forth electric utility service practice and rate-making standards for consideration by state regulatory authorities and non-regulated utilities. The legislation has been amended to include additional standards related to electric utilities. Please see Section 4.15 of this EIR, "Energy" for further discussion of energy demand and infrastructure. State Plans, Policies, Regulations, and Laws

Water Supply and Water Quality

Porter-Cologne Water Quality Control Act of 1969

The 1969 Porter-Cologne Water Quality Control Act also established the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) as the primary state agencies with regulatory authority over water quality. Under the act, the SWRCB has the ultimate authority over state water rights and water quality policy.

California Water Code

The California Water Code outlines the general state authority and responsibilities over water in California. It establishes the Department of Water Resources (DWR) as the primary research, supply development, and management agency for water. The Water Code identifies the SWRCB as the decision making body for overall water quality policy development and for dealing with water rights issues. The nine RWQCBs are charged with regulation, enforcement, and protection of the beneficial uses of water.

Surface Water Rights

The SWRCB has jurisdiction over all water rights in California under the common-law public-trust doctrine. Section 1735 of the California Water Code provides the regulatory framework for long-term transfers, subject to the requirements of CEQA.

Appropriative water rights allow the diversion of surface water for beneficial use. Before 1914, appropriative water rights involved a simple posting to describe intent and scope of water use, diversion, or construction of diversion activities. Since 1914, the sole method for obtaining appropriative water rights has been to file an

application with the SWRCB. Before it can issue a water rights permit, the SWRCB must demonstrate the availability of unappropriated water. Both pre- and post-1914 appropriative water rights may be lost if the water has gone unused for a period of five years.

Riparian water rights apply to lands that are traversed by, or border on a natural watercourse. Riparian owners have a right (correlative with the right of each other riparian owner) to share in the reasonable beneficial use of the natural flow of water that passes the owners land. No permit is required for such use. Riparian water must be used reasonably, beneficially, and solely on riparian (adjacent) land and cannot be stored for later use.

Groundwater Rights

The state requires that counties enact regulations covering well design to protect groundwater quality from surface contamination, and to ensure proper well construction and development for domestic use. However, these regulations are not related to the quantity of water extracted.

Counties can also enact an ordinance to ensure that wells developed on one property do not interfere with the use of adjacent wells. In some areas of overuse, and where there is a high dependence on groundwater, groundwater rights are determined judicially in what are termed "adjudicated groundwater basins."

Senate Bill 610

Senate Bill 610 (SB 610) (Chapter 643, Statutes of 2001; Water Code Sections 10910–10915) made changes to the State Water Code to require additional information in urban water management plans (UWMPs) if groundwater is identified as a source available to the supplier. The information required includes a copy of any groundwater management plan adopted by the supplier, a copy of the adjudication order or decree for adjudicated basins, and if nonadjudicated, whether the basin has been identified as being overdrafted or projected to be overdrafted in the most current DWR publication on that basin. If the basin is in overdraft, that plan must include current efforts to eliminate any long-term overdraft.

Another key provision in SB 610 requires that any project subject to CEQA supplied with water from a public water system be provided a specified water supply assessment for large developments (e.g., projects of 500 or more residential units, 500,000 square feet of retail commercial space, or 250,000 square feet of office commercial space), except as specified in the law. These assessments, prepared by "public water systems" responsible for service, address whether there are adequate existing or projected water supplies available to serve proposed projects, in consideration of urban and agricultural demands and other anticipated development in the service area in which the subject project is located.

Where a water supply assessment (WSA) concludes that insufficient supplies are available, the WSA must lay out steps that would be required to obtain the necessary supply. The content requirements for the assessment include, but are not limited to, identification of the existing and future water suppliers and quantification of water demand and supply by source in 5-year increments over a 20-year projection. This information must be provided for average normal, single-dry, and multiple-dry years.

The absence of an adequate current water supply does not preclude project approval, but does require a lead agency to address a water supply shortfall in its project approval findings.

Senate Bill 221

SB 221 (Chapter 642, Statutes of 2001; Government Code Section 66473.7) prohibits approval of subdivisions consisting of more than 500 dwelling units unless there is verification of sufficient water supplies for the project from the applicable water supplier(s). This requirement also applies to increases of 10% or more of service connections for public water systems with less than 500 service connections. The law defines criteria for

determining “sufficient water supply,” such as using normal, single-dry, and multiple-dry year hydrology and identifying the amount of water that the supplier can reasonably rely on to meet existing and future planned uses.

Rights to extract additional groundwater, if proposed to be used for the subject project, must be substantiated.

Groundwater Management Act

The Groundwater Management Act, Assembly Bill 3030 (AB 3030), signed into law in 1992, provides a systematic procedure for an existing local agency to develop a groundwater management plan. This section of the code provides such an agency with the powers of a water replenishment district to raise revenue to pay for facilities to manage the basin (extraction, recharge, conveyance, quality). In some basins, groundwater is managed under other statutory or juridical authority.

Urban Water Management Act

The California Urban Water Management Planning Act of 1983 requires that each urban water supplier, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, shall prepare, update and adopt its urban water management plan at least once every five years on or before December 31, in years ending in five and zero.

Wastewater and Storm Drainage

The SWRCB, in coordination with the Central Valley RWQCB, regulates water quality, including issuance of discharge permits. The RWQCBs issue waste discharge requirements for major point-source discharges, such as municipal wastewater treatment plants and industrial facilities. The RWQCB also issues and monitor enforcement actions when water quality standards are violated, and oversee activities necessary to address those enforcement actions.

Solid Waste

California Integrated Waste Management Act

To minimize the amount of solid waste disposal, the State Legislature passed the California Integrated Waste Management Act (CIWMA) of 1989 (AB 939), effective January 1990. According to the CIWMA, all cities and counties were required to divert 25% of all solid waste from landfill facilities by January 1, 1995, and 50% by January 1, 2000.

Each jurisdiction is required to develop solid waste plans demonstrating integration of the CIWMA plan with the County plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal.

Private Utilities

California Public Utilities Commission

The California Public Utilities Commission (CPUC) has jurisdiction over the siting of natural gas transmission lines, as well as electrical transmission facilities, and substations. CPUC General Order 131-D (adopted by Decision 94-06-014 and modified by Decision 95-08-038) establishes the rules for the planning and construction of new transmission facilities, distribution facilities, and substations. This decision requires utilities to obtain permits to construct certain power line facilities or substations if the voltage would exceed 50 kilovolts (kV) or if the substation would require the acquisition of land or an increase in voltage rating above 50 kV. Utilities do not need to comply with this decision for distribution lines and substations with voltage less than 50 kV. However, they must obtain any nondiscretionary local permits required for the construction and operation of these projects.

Compliance with the California Environmental Quality Act (CEQA) is required for construction of facilities in accordance with the decision. Please see Section 4.15 of this EIR, "Energy" for further discussion of energy demand and infrastructure.

4.14.2 ENVIRONMENTAL SETTING

WATER SUPPLY, DISTRIBUTION, AND DEMAND

Water Supplies

Water supplies in Yuba County are provided by several different providers that, in turn, rely on both surface and groundwater sources. Significant bodies of water in the County consist of the Yuba, Feather, and Bear Rivers; Honcut Creek; several lakes and reservoirs; and many lesser creeks, canals, and streams --- all of which provide some amount of local surface water supply.

The eastern portion of the County is within the Sierra Nevada foothills and mountain region. These areas rely primarily on surface water supplies due to the underlying granite bedrock that does not allow for many pockets of dependable groundwater, with the exception of limited areas with fractures in the bedrock (Yuba County Water Agency 2008: 2-2).

The portions of the County in the Sacramento Valley, west of the foothills, rely on both surface and groundwater sources. Municipal water purveyors, including California Water Service, Linda County Water District (LCWD), the City of Wheatland, Olivehurst Public Utilities District (OPUD), and Beale Air Force Base (AFB), use groundwater exclusively. Urban users rely primarily on groundwater while most agricultural users rely on a combination of surface and groundwater supplies (YCWA 2008:4-28, 4-29).

Yuba County Water Agency (YCWA), described in more detail below, provides its member units with surface water sources from the Yuba River.

Surface Water

The Yuba River serves as the County's largest single source for water supplies (Yuba County IRWMP 2008; 4-1). The Yuba River basin spans approximately 1,339 square miles on the western slope of the Sierra Nevada, and encompasses portions of Yuba, Nevada, Placer, and Sierra Counties. The river's average annual unimpaired flow at Smartsville, prior to in basin and out of basin diversions, is 2.45 million acre-feet (af), although it has ranged from a high of 4.925 million af in 1986 to a low of 370,000 af in 1977 (Yuba County Water Agency 2008: 4-1). The Yuba River is the largest tributary of the Feather River. The Yuba River converges with the Feather River at Marysville.

Surface water supplies in Yuba County are managed by the YCWA and a number of other entities. YCWA was formed as an independent special district to provide wholesale water and flood control services to Yuba County. It does not provide water directly to users, but it provides wholesale water service to its member units: South Yuba Water District (SYWD); Dry Creek Mutual Water Company; Brophy Water District; Cordua Irrigation District; Hallwood Irrigation Company; Ramirez Water District; Browns Valley Irrigation District; and Wheatland Water District. YCWA and its constituent members manage surface water supplies within the County. In addition to the deliveries that YCWA makes to member units, several water purveyors in the County have their own pre-1914 water rights to divert surface waters for consumptive and non-consumptive uses. These entities include BVID, Cordua Irrigation District and Hallwood Irrigation Company. YCWA must coordinate its operations with these senior rights to ensure that the supplies of senior users are delivered as requested.

The inflow of water to YCWA's primary facility is approximately 1.2 million af annually. YCWA experiences an average daily demand for water of 1,140 af and has experienced a peak day demand of 2,273 af. YCWA operates one storage reservoir and has a storage capacity of 314,893 million gallons (mg).

YCWA's infrastructure includes dams, reservoirs, and tunnels that control the Yuba River and the South Yuba Canal for distribution of surface water to south Yuba County. Surface water sources include the North Yuba River, Oregon Creek, and the Middle Yuba River.

YCWA was the lead agency for preparing the Integrated Regional Water Management Plan (IRWMP), completed in 2008, which developed strategies for changes in groundwater levels and water quality and the need for enhanced flood protection.

Groundwater

The valley area of Yuba County is underlain by an alluvial aquifer system that is divided into two subbasins: the North Yuba and South Yuba Subbasins. The North Yuba Subbasin is bound by Honcut Creek to the north, the Feather River to the west, the Yuba River to the south, and the Sierra Nevada to the east. The South Yuba Basin is located directly south of the North Yuba Subbasin, with the Yuba River to the north, the Feather River to the west, the Bear River to the south, and the Sierra Nevada foothills and mountains to the east (Yuba County Water Agency 2008: 4-11).

Groundwater levels in the North Yuba Subbasin range from approximately 130 feet above mean sea level (msl) at the eastern edge of the basin to approximately 50 feet msl near Marysville. Similar groundwater levels are found in the South Yuba Subbasin, where they vary from approximately 140 feet msl at the eastern edge of the subbasin to 25 feet msl near the western edge (Yuba County Water Agency 2008: 4-12).

The estimated total storage capacity of the groundwater basins is about 7.5 million af (Yuba County IRWMP 2008; 4-13). Of this amount approximately 2.8 million af occur within 200 feet of the land surface (Yuba County Water Agency 2008: 4-13). Not all of these supplies are available for withdrawal because well capacity and recharge rates limit the amount that can be safely withdrawn.

Currently, the YCWA and other water providers are coordinating to avoid ground water overdraft and land subsidence associated with ground water extraction, however the yearly safe-yield (amount of water that can be withdrawn without adverse effects) is not currently known (Scott Matyac, Yuba County Water Agency, pers. comm.). In addition, neither the North or South Yuba Subbasins are adjudicated (Scott Maytac, Yuba County Water Agency, pers. comm.[1]).

As mentioned above, groundwater availability in the foothills and mountains is very limited due to fractured granite formations underlying the Sierra Nevada. Small amounts of groundwater can be stored in the rock fractures and in some cases, in small alluvial deposits located adjacent to small streams. Some wells for rural residences not linked to municipal water sources supplied with surface water are used in these limited areas, but reliability on these groundwater sources is limited, particularly since groundwater levels in these areas are highly variable during droughts (Yuba County Water Agency 2008: 4-14).

Existing Water Use within Yuba County

The existing water use within the planning area was described in the Yuba County IRWMP, which includes the entire County plus Yuba City. This document estimates annual urban and agricultural consumption during the 2005 water year at approximately 563,200 af. Table 4.14-1 breaks out the constituent elements of this water use by sector.

Agricultural uses by far created the largest demand in all geographic areas, with a total of 514,100 af, whereas urban uses had a demand of 49,100 af. Water for agricultural purposes in the foothills and mountains is provided

by surface water supplies. Groundwater in the foothills and mountains is used only for residential or other developed (non-agricultural) use. Surface water in the Valley is used only for agricultural uses.

The numbers provided in Table 4.4-1 represent typical deliveries. However, the volatility of rainfall affects available water supplies. For example, the unimpaired flow of the Yuba River ranges from a historical high of 4.9 million acre feet in 1986 to 370,000 acre feet in 1977 (YCWA 2005:4-3). During drought years, individual water deliveries that member units of YCWA receive are curtailed according to the deficiency provisions indicated in the YCWA IRWMP (YCWA 2005:4-9). During drought years, shortages in water supplies can occur.

Table 4.14-1
Existing Conditions: Water Use (in acre-feet per year)

Area	Agricultural Uses			Urban Uses			Total
	Surface Water	Groundwater	Total	Surface Water	Groundwater	Total	
North Yuba Groundwater Basin							
North Yuba Subarea	188,500	39,000	227,500	0	3,800	3,800	231,300
City of Marysville Subarea	0	300	300	0	3,600	3,600	3,900
Subtotal	**188,500**	**39,300**	**227,800**	**0**	**7,400**	**7,400**	**235,200**
South Yuba Groundwater Basin							
South Yuba Subarea	170,100	82,700	252,800	0	22,000	22,000	274,800
City of Wheatland Subarea	6,300	4,100	10,400	0	1,200	1,200	11,600
Subtotal	**176,400**	**86,800**	**263,200**	**0**	**23,200**	**23,200**	**286,400**
Foothill/Mountains							
Foothills/Mountains	23,100	0	23,100	7,300	11,200	18,500	41,600
Total Plan Area	**388,000**	**126,100**	**514,100**	**7,300**	**41,800**	**49,100**	**563,200**

Source: Yuba County Water Agency: 2008:4-29, Table 4-6

The current annual YCWA demand as stated in the YCWA Lower Yuba River Accord EIR as of 2007 was 305,000 acre-feet and the future expected demand is 345,000 acre-feet. The difference in these two amounts is the addition of the Yuba Wheatland Canal Project, which is mostly complete; therefore the correct demand for YCWA would be 345,000 acre-ft (YCWA 2011).

WASTEWATER

There are 11 state-regulated wastewater treatment facilities in Yuba County, including facilities operated by OPUD, LCWD, River Highlands CSD, Beale AFB, and the cities of Marysville and Wheatland. In addition, there are several private sewage systems operated at various facilities throughout the County, including Sleep Train Amphitheatre, campgrounds, and mobile home parks.

In addition to these larger-scale wastewater treatment facilities, many properties throughout the County, but particularly in the more rural areas, use private septic systems. The three largest wastewater treatment providers – Linda County Water District (LCWD), Olivehurst Public Utilities District (OPUD), and River Highlands Community Services District (RHCSD) – are described below. Please refer to the Infrastructure, Public Facilities, and Public Services General Plan Update Background Report, under separate cover (available at the County Planning Department and online at: http://www.yubavision2030.org/Library.aspx).

Linda County Water District

The LCWD provides wastewater collection, treatment, and disposal services for 3,360 connections, primarily for residences, but with some commercial uses. The wastewater treatment plant (WWTP) is located in the unincorporated community of Linda and has a capacity of 1.8 million gallons per day (mgd) for secondary treatment standards.

As of March 2010, average daily flows to the WWTP were approximately 1.1 mgd. Although the expected growth did not occur, LCWD moved forward with its plans to expand the WWTP, in order to comply with environmental requirements. Design for the expansion has been completed, and construction began in December 2009. The WWTP expansion will have a capacity of 5 mgd for liquid train and 3 mgd for solid train by 2011 (Davis 2010, pers. comm.)

Following the expansion of the WWTP, these percolation ponds will not be necessary since the expansion includes an upgrade to provide wastewater effluent treatment to tertiary-level standards. The District also maintains a permitted outfall pipeline that allows discharge of treated effluent to the Feather River.

Olivehurst Public Utilities District

The Olivehurst Public Utilities District (OPUD) provides wastewater collection, treatment, and disposal services to the communities of Olivehurst-Plumas Lake. OPUD owns, operates, and maintains a WWTP with a permitted capacity of 3 mgd for average dry weather flows. The WWTP was expanded and upgraded to tertiary-level standards in 2006, but OPUD still anticipates the eventual need for another phase of improvements to accommodate growth in Plumas Lake. However, similar to the situation in the LCWD service area, due to changes in the housing market and economy, growth in Plumas Lake has slowed, so the need for WWTP improvements is not immediate.

Average daily flows to the WWTP are approximately 1.53 mgd, with peak wet weather flows reaching up to 8 mgd. The buildout wastewater demand estimate for the Plumas Lake Specific Plan alone is between 5 and 6.5 mgd. OPUD anticipates that flows to the WWTP at buildout of all known planned development in its service area is between 7.1 and 8.85 mgd.

Other infrastructure under the control of OPUD includes a pond, drying beds, 51 miles of 8-inch diameter and greater sewer pipelines, and associated pump stations. Improvements to the wastewater collection system in Olivehurst are needed due to age and because it is no longer adequately sized. Treated effluence from the WWTP is discharged to the Western Pacific Interceptor Drainage Canal, which is tributary to the Bear River and the Feather River.

River Highlands Community Services District

The River Highlands CSD wastewater system is smaller than LCWD and OPUD, with a maximum capacity of 260,000 gallons per day (gpd) average dry weather flow (ADWF) and only serving 84 residences in a single development. That facility had severe maintenance issues that resulted in the failure of the treatment facility and caused water quality violations and led to the referral of the violations to the California Attorney General in 2007. The old wastewater system is no longer in use. A new facility was completed in October 2010 and is being operated by Yuba County.

SOLID WASTE

In 2008, the Yuba-Sutter Regional Waste Management Authority, which has jurisdiction over solid waste matters in both Yuba and Sutter Counties, disposed of a total of 136,831 tons of solid waste – all of which was landfilled within California (CalRecycle 2010d). A breakdown of solid waste generated in unincorporated Yuba County is not available.

Solid waste collection services, including garbage pickup, recycling, and yard waste hauling, in Yuba County are provided by Recology Yuba-Sutter, formerly known as Yuba-Sutter Disposal, Inc. The company serves Yuba and Sutter Counties, including the incorporated cities and Beale AFB, as well as the community of Knights Landing in Yolo County. Recology Yuba-Sutter operates two transfer stations – one in Marysville and the other in Brownsville. Recology also operates a household hazardous waste collection facility, a recycling buy-back center, and a composting facility. The transfer station located in Marysville has a maximum permitted throughput of 1,080 tons per day (CalRecycle 2010a). The Ponderosa Transfer Station, located in Brownsville, has a maximum throughput of 96 tons per day (CalRecycle 2010b).

Once solid waste is collected and sorted at the transfer stations, it is disposed of at the Ostrom Road Landfill, which is located approximately four miles north of Wheatland. Ostrom Road Landfill is owned and operated by Recology. According to the California Department of Resources, Recycling, and Recovery (CalRecycle, formerly the California Integrated Waste Management Board), it has a maximum permitted throughput of 3,000 tons per day and has a total maximum permitted capacity of 41,822,300 cubic yards. The Ostrom Road Landfill has a remaining capacity of approximately 40,600,000 (97% of total capacity) and an anticipated closure date of December 31, 2066 (CalRecycle 2010c).

According to CalRecycle, the average disposal rate in Yuba County, considered to be within the Central Valley region, was 0.36 tons per resident per year (CalRecycle 2009a). Business disposal rates vary depending on the type of business, as some businesses create more waste than others by nature, from an average of 0.2 tons per employee per year (Forestry and Industrial Machinery Manufacturing) to 3.3 tons per employee per year (Building Materials and Gardening Retail) (CalRecycle 2009b).

STORMWATER DRAINAGE AND FLOOD PROTECTION

Flood protection and drainage are closely linked with regard to infrastructure needs. Adequate facilities and maintenance are necessary to prevent issues associated with flood protection. In some cases, flood protection and drainage services and/or infrastructure are provided by the same agency in an area, or by many different agencies, in which case they work together to provide adequate flood protection and drainage in a particular area. In Yuba County, several agencies have some jurisdiction over flood protection and the drainage infrastructure associated with flood control, including: the U.S. Army Corps of Engineers, California Department of Water Resources, YCWA, the Three Rivers Levee Improvement Authority (TRLIA), Marysville Levee District, several reclamation districts, and Yuba County. An overview of floodplains, water features and planned development is provided in Exhibit 4.9-1 in Section 4.9 *Hydrology and Water Quality.*

Flood Protection Infrastructure

Major flood protection infrastructure within Yuba County includes major levee systems along the Feather, Yuba, and Bear Rivers, as well as other major drainage canals and watercourses, dams at New Bullards Bar Reservoir, the Western Pacific Interceptor Canal (WPIC) channel, and various slurry cutoff walls, ditches, and detention basins located at appropriate locations throughout the County. Oroville Dam in Butte County also provides flood protection to Yuba County, which is downstream. Additional information about specific flood control infrastructure and the agencies providing maintenance to those facilities can be found in the "Infrastructure, Public Facilities, and Public Services" General Plan Update Background Report. Flooding hazards are addressed in greater detail in Section 4.9, "Hydrology and Water Quality." The remainder of this analysis will focus on storm drainage facilities.

Stormwater Drainage Facilities

In addition to major flood control facilities, such as levees and dams, smaller-scale drainage infrastructure can play a role in preventing localized flooding during larger flood or storm events. Drainage needs depend on the

amount of precipitation and upstream flow, the amount of urban development, the rate of groundwater infiltration (percolation), downstream flood conditions, water quality, and evolving regulatory standards.

Urban development results in additional impervious surfaces, such as streets, sidewalks, driveways, buildings, and parking lots, which do not allow water to soak into the ground, so the water must be transported elsewhere to prevent it from pooling and causing localized flooding. This urbanization and development of new impermeable surfaces may create new pollutant sources, which can affect water quality downstream. Urban runoff and related water quality impacts can be reduced through management techniques that slow down and disperse runoff and allow water to soak into the ground. Cities and counties typically conduct comprehensive drainage master planning that is linked to long-range land use plans. As development is proposed, the locally relevant aspects of the overall drainage master plan are funded and constructed (Yuba LAFCO 2008).

Yuba County, the City of Marysville, the City of Wheatland, Reclamation District 784, and Beale AFB are responsible for the operation and maintenance of local runoff collection, conveyance and discharge systems, and 22 of the County Service Areas (CSAs) provide maintenance of roadside ditches along private roads throughout the County (Yuba LAFCO 2008).

Yuba County

Yuba County operates and maintains a drainage system consisting of roads with drainage systems, catch basins, water basins, detention basins, constructed wetlands, artificial channels, aqueducts, curbs, gutters, ditches, sumps, pumping stations, storm drain inlets, and storm drains, which provide stormwater drainage to unincorporated County lands (Yuba LAFCO 2008).

The southwestern portion of the County experiences the greatest impacts from drainage overflow issues, as water backs up into the Feather and Bear Rivers and the Western Pacific Interceptor Canal channel during major storm events. The County has identified the need to improve drainage infrastructure in Linda and Olivehurst. In general, improvements to the County drainage system are developer-driven and funded. However, there is a known need for improvements to the existing system so that new development does not further exacerbate issues. The southwest portion of the County was the only area identified in the General Plan Update Background Report and the Municipal Services Review prepared for LAFCO as needing major drainage improvements. However, much of this area includes planned future development areas within Linda and Olivehurst - Plumas Lake.

Reclamation District 784

RD 784 provides drainage in the Olivehurst - Plumas Lake and Linda. RD 784 maintains major drainage channels, most detention basins, and pumping stations. Water drains from the county-owned infrastructure in subdivisions into district-owned channels and detention basins, and is finally pumped over the levees into the Feather and Bear Rivers and the WPIC. Drainage infrastructure maintained by RD 784 includes 43 miles of internal drainage ditches, nine pumping stations, and five detention basins. Recommended improvements include the development of new detention basins, channel widening, and improvements to pump stations (Yuba LAFCO 2008).

4.14.3 Environmental Impacts and Mitigation Measures

Methodology

Impacts on utility infrastructure that would result from buildout of the 2030 General Plan are evaluated at a programmatic level by comparing existing infrastructure, its available capacity, and ability to serve future demand on utilities that would be caused by buildout. Once future demands have been estimated, the analysis determines whether the increased demand would result in the need for new or expanded facilities, the construction of which

could possibly result in adverse impacts on the physical environment. Policies and actions of the 2030 General Plan that would reduce these impacts are identified.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact on public utilities is considered significant if the proposed project would:

- 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 could cause significant environmental effects;
- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could result in significant physical 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.

IMPACT ANALYSIS

IMPACT 4.14-1 Exceed Wastewater Treatment Requirements. *Implementation of the 2030 General Plan would result in the development of new residential, commercial, industrial, and civic uses, which would increase local demand for wastewater treatment facilities. It is possible that land use change could exceed the capacity of wastewater treatment facilities. It is possible that, depending on the specific uses developed under the 2030 General Plan, wastewater treatment requirements may be exceeded. This impact is considered* ***potentially significant****.*

The potential to exceed wastewater treatment requirements or capacity is an impact that is associated with new land uses that would increase wastewater effluent or substantially decrease water quality being discharged to wastewater systems. The 2030 General Plan creates land use designations and policies that organize growth, but does not, by itself, propose new development projects. The County anticipates that urban development would occur under the General Plan, including housing, commercial retail and services, parks, schools, and some amount of light industrial and industrial development.

The specific environmental impacts of projects, including projects that may produce wastewater effluent in large amount or high pollutant concentrations, will be evaluated at the project level and is beyond the scope and purpose of a General Plan programmatic EIR. The impacts of infrastructure required to serve General Plan buildout is analyzed at a programmatic level along with the direct effects of construction and operation of General Plan land uses throughout this EIR.

Typical urban development is not known to generate wastewater in such amounts or concentrations as to create challenges at any of the existing wastewater treatment plants serving the unincorporated area. It is not knowable at this time whether or not uses may be proposed that would require on-site treatment or pre-treatment due to

unusual wastewater effluent generation characteristics. Because the exact nature of future projects and their potential impact on the water treatment requirements of specific wastewater treatment systems is unknown. The impact is considered **potentially significant**.

Relevant Policies and Actions of the 2030 General Plan

- **Policy CD12.2:** New developments will be required to construct and dedicate and/or fund on a fair-share basis wastewater collection, conveyance, and treatment facilities consistent with applicable local, State, and federal standards.

- **Action CD12.1: Facility Planning.** Following adoption of the General Plan, as funding allows, the County will seek to draft and/or update long range facility plans for relevant County departments. The Community Development and Services Agency will provide detail on population growth assumptions for different parts of the County to assist with the facility planning effort. It is anticipated that joint-use and operation opportunities would arise from a coordinated facility planning process that involves multiple County departments. The County should identify and prioritize discrete projects in the facilities master plan. Facility master plan projects would be a part of the County's ongoing capital improvements programming and the subject of grant applications. For example, the County should coordinate facility master plan updates with applications for the US Department of Agriculture's Rural Development low-interest loan and grant programs for rural parts of the County.

    - Related Goals: Goal CD12
    - Agency/Department: Community Development and Services Agency; Administrative Services Department; Library Department
    - Funding Source: Impact fees; federal and state funds; General Fund
    - Time Frame: Update facility master plans by 2015

- **Action CD14.1: Impact Fees and Tax/Revenue Agreements.** Following General Plan adoption, the County will coordinate with the cities and other public service agencies on revenue sharing, redevelopment pass-through funding, development impact fees, and other important fiscal arrangements to implement General Plan policies.

    - Related Goals: Goal CD1, Goal CD2, Goal CD12, Goal CD13, Goal CD14, Goal CD15, Goal CD16, Goal CD17
    - Agency/Department: Community Development and Services Agency and County Administrator's Office.
    - Funding Source: General Fund
    - Time Frame: Ongoing during General Plan buildout.

The County's policies and actions would require planning and funding of infrastructure needed to serve the General Plan at buildout, including wastewater treatment facilities with the capacity and treatment mechanisms needed to meet regional and state requirements. However, the County cannot demonstrate at this programmatic level of analysis that the implementation of these policies and actions would reduce impacts to a less-than-significant level. The impact is considered **potentially significant**, requiring mitigation.

Mitigation Measure 4.14-1: Wastewater Treatment Verification.

The County shall implement the following measures to ensure the availability of adequate wastewater collection and removal systems for land development projects in the unincorporated county under the 2030 General Plan:

- Before approval of any tentative subdivision map for a proposed residential project, the County shall formally consult with the appropriate wastewater system provider that would serve the proposed subdivision to make a factual showing or impose conditions to ensure the availability of an adequate wastewater removal system for the proposed development.

- Before recordation of any final subdivision map, or before County approval of any project-specific discretionary approval or entitlement for nonresidential land uses, the project applicant shall demonstrate, based on substantial evidence, the availability of a long-term, reliable wastewater collection and treatment system for the amount of development that would be authorized by the final subdivision map or project-specific discretionary nonresidential approval or entitlement. Such a demonstration shall consist of a written verification that existing treatment capacity is, or will be available and that needed physical improvements for treating wastewater from the project site will be in place before occupancy.

Conclusion

Implementation of the above mitigation would assist in ensuring that sufficient service capacity is available to serve future growth projected in the 2030 General Plan and avoid issues related to wastewater treatment requirements. By adhering to the policies proposed in the 2030 General Plan, as well as the above requirement mitigation and existing regulations, the impact is considered **less than significant**.

IMPACT 4.14-2 Construction of New or Expanded Water or Wastewater Facilities. *Implementation of the 2030 General Plan would result in the development of new residential, commercial, industrial, and civic uses, which would increase local demand for water conveyance and wastewater collection, conveyance, and treatment facilities. In addition, implementation of the 2030 General Plan could accommodate development in areas that currently are not served by water systems or a wastewater treatment provider. Construction of new or expanded water and wastewater facilities could have adverse effects on the physical environment. This impact is* ***potentially significant.***

The 2030 General Plan would govern land use in unincorporated parts of Yuba County. Within the unincorporated portion of the County, primary wastewater treatment providers are LCWD and OPUD, both of which serve the areas planned for growth under the 2030 General Plan, including Linda, Olivehurst-Plumas Lake, and Arboga.

As mentioned in the Environmental Setting above, OPUD recently upgraded its WWTP to tertiary standards in 2006 and has a permitted capacity of 3 mgd for average dry weather flows (adwf). Current flows are 1.53 mgd adwf, just slightly over 50% of the WWTP's capacity. However, OPUD estimates that buildout of all known planned development within OPUD's service boundary, including Plumas Lake, will eventually reach between 7.1 and 8.85 mgd adwf. Therefore, another expansion to the WWTP would be required to serve planned development prior to buildout. This was the case before the County initiated this General Plan update. In addition to the need for wastewater treatment capacity upgrades, wastewater conveyance infrastructure, such as pipes and pumping stations will be required in currently undeveloped areas where no such infrastructure currently exists.

LCWD is currently in the process of upgrading its existing WWTP. Construction of the WWTP expansion began in December 2009 and is expected to be completed in December 2011 and will have a capacity of five mgd. Another expansion to 6.6 mgd is anticipated by 2030 to accommodate new development. Because additional development could exceed future projected treatment capacity, LCWD may also need to construct collection infrastructure in new development areas and expand and improve existing infrastructure, as needed.

New development that could occur in Rural Community Boundary areas is anticipated to be served by private septic systems. The 2030 General Plan includes a policy that promotes the use of centralized and shared septic systems in the Rural Centers within the Rural Community boundaries, where land uses would be more clustered than in other parts of the community (Policy HS3.9) to minimize the impact of such systems. It is also possible that clustered developments could occur that would be served by a public wastewater system. It is not possible to know at this time whether development would be served by septic systems, shared septic systems, or public wastewater treatment systems.

Water supplies in Yuba County are provided by several different providers that, in turn, rely on both surface and groundwater sources. Municipal water purveyors, including California Water Service, Linda County Water District (LCWD), the City of Wheatland, Olivehurst Public Utilities District (OPUD), and Beale Air Force Base (AFB), use groundwater exclusively.

OPUD operates two separate water systems in the Olivehurst – Plumas Lake area. Well water is treated at one of four treatment facilities or pumped directly into the distribution system during times of high demand, when the treated wells cannot meet demand. The total maximum well pumping capacity of both systems is 24,070 gallons per minute (gpm), 16,370 gpm in Olivehurst and 7,700 gpm in Plumas Lake. The maximum day demand in 2005 used only 60 percent of the system's capacity. The Olivehurst system has enough source capacity to meet peak demand. However, providing sufficient treated water to the eastern side of the system has posed a challenge to OPUD (Yuba Local Agency Formation Commission 2008).

LCWD also serves developed portions of unincorporated Yuba County. Key infrastructure includes six production wells, eleven booster pumps, approximately 40 miles of pipe line, and four treatment facilities. The water supply system has a maximum pumping capacity of 14.7 mgd. LCWD's water supply is provided entirely by the South Yuba Groundwater Basin from six wells. Each well is equipped with a wellhead treatment system to treat taste, odor, and color. The current water system has the pumping capacity to serve anticipated growth until 2010, according to UWMP projections. However, if growth occurs as predicted, an additional three mgd capacity will be needed by 2015 and an additional 20 mgd will be needed by 2030 to accommodate maximum daily demand. The additional five mgd of pumping capacity from Well 17 is expected to meet the needs of the District beyond 2015.

To serve the 2030 General Plan at buildout, there will need to be improvements to the water supply systems of OPUD and LCWD, as well as improvements in the more rural parts of the County. The County anticipates the need for additional wells, treatment systems, pumps, and delivery/conveyance facilities.

The specific environmental impacts of each phase of improvements to the water and wastewater infrastructure will be evaluated at the project level and is beyond the scope and purpose of a General Plan programmatic EIR. The impacts of infrastructure required to serve General Plan buildout is analyzed at a programmatic level along with the direct effects of construction and operation of General Plan land uses throughout this EIR. However, because of the level of development anticipated under the 2030 General Plan, it is possible that the construction of additional facilities could generate significant impacts. Installing water and wastewater conveyance facilities would involve earth disturbance, transport of materials, and operation of equipment similar to that which will also be required for installation of other infrastructure in the same public rights-of-way and between public rights-of-way and end users. Although General Plan policies and actions will require infrastructure and facilities to be provided in a way that reduces environmental impacts, the extent of infrastructure required to serve future demand, depending on phasing of future development, could create significant impacts.

Relevant Policies and Actions of the 2030 General Plan

The 2030 General Plan contains the following policies and actions to minimize the environmental effects associated with wastewater treatment facilities and infrastructure. In addition, the County's 2030 General Plan policies and actions intended to reduce cultural, biological, air quality, climate change, noise, hydrology, geology

and soils, and other impact areas would also apply to expansion and extension of wastewater treatment, collection, and conveyance facilities.

- **Policy CD3.5:** Prior to approval, new developments are required to demonstrate consistency with established standards for setbacks from landfills, airports, sewage treatment plants, and other similar uses, as applicable.

- **Action CD3.1: Compatibility Review and Conditioning of Projects and Plans.** The County will review projects against policies in this General Plan and analysis in the General Plan Environmental Impact Report (EIR) to reduce noise and air quality impacts. The County Zoning Ordinance and development standards should identify design and performance standards for noise, light, glare, air pollution, and other relevant issues. The County will use the General Plan to determine the adequacy of proposed buffering between residential land uses, highways, railroads, airports, industries, mining operations, agricultural operations, and other potentially incompatible uses. The County will condition projects, as appropriate, to provide consistency with this General Plan and the General Plan EIR. The County will balance its goals for infill and mixed-use development with policies and standards for noise, vibration, light and glare, and other issues of compatibility.

  - Related Goals: Goal CD3, Goal NR11, Goal HS5, Goal HS10, Goal HS11
  - Agency/Department: Community Development and Services Agency
  - Funding Source: General Fund; applicant funding for project-specific work
  - Time Frame: Ongoing

- **Policy CD12.2:** New developments will be required to construct and dedicate and/or fund on a fair-share basis wastewater collection, conveyance, and treatment facilities consistent with applicable local, State, and federal standards.

- **Action CD12.1: Facility Planning.** Following adoption of the General Plan, as funding allows, the County will seek to draft and/or update long range facility plans for relevant County departments. The Community Development and Services Agency will provide detail on population growth assumptions for different parts of the County to assist with the facility planning effort. It is anticipated that joint-use and operation opportunities would arise from a coordinated facility planning process that involves multiple County departments. The County should identify and prioritize discrete projects in the facilities master plan. Facility master plan projects would be a part of the County's ongoing capital improvements programming and the subject of grant applications. For example, the County should coordinate facility master plan updates with applications for the U.S. Department of Agriculture's Rural Development low-interest loan and grant programs for rural parts of the County.

  - Related Goals: Goal CD12
  - Agency/Department: Community Development and Services Agency; Administrative Services Department; Library Department
  - Funding Source: Impact fees; federal and state funds; General Fund
  - Time Frame: Update facility master plans by 2015

- **Policy CD14.1:** The County will support regional electricity, water, wastewater, water conservation, and other agreements, where cost-effective and environmentally sustainable.

- **Action CD14.1: Impact Fees and Tax/Revenue Agreements.** Following General Plan adoption, the County will coordinate with the cities and other public service agencies on revenue sharing, redevelopment pass-through funding, development impact fees, and other important fiscal arrangements to implement General Plan policies.

- Related Goals: Goal CD1, Goal CD2, Goal CD12, Goal CD13, Goal CD14, Goal CD15, Goal CD16, Goal CD17
- Agency/Department: Community Development and Services Agency and County Administrator's Office.
- Funding Source: General Fund
- Time Frame: Ongoing during General Plan buildout.

- **Policy HS3.10:** New developments proposing private well and septic systems shall demonstrate compliance with the County's standards for water wells and sewage disposal systems, which are designed to protect the public and environmental health.

The County's policies and actions listed above, in addition to the environmental topic specific policies and actions included throughout the General Plan and referenced throughout this EIR would reduce impacts associated with construction and operation of needed water delivery and wastewater treatment, collection, and conveyance facilities.

Conclusion

By adhering to the policies proposed in the 2030 General Plan, as well as all applicable requirements pertaining to water supply, wastewater treatment, and septic systems, the County could minimize impacts associated with construction of new wastewater treatment facilities or extension of existing facilities or infrastructure. Technical sections of this EIR evaluate the effects of construction activities relative to specific environmental issue areas, such as biological resources, air quality, etc., at a programmatic level of detail, as is appropriate for a general plan. The 2030 General Plan includes policies and actions, and this EIR includes mitigation measures, where necessary, to reduce or avoid impacts, as noted throughout Section 4.0 of this EIR. Despite mitigating policies and actions and the application of necessary mitigation measures, construction and operation of new or expanded water delivery and wastewater conveyance and treatment infrastructure may result in significant environmental effects. The County has included throughout the 2030 General Plan all feasible measures available to mitigate such impacts. The impact is considered **significant and unavoidable**.

IMPACT 4.14-3 New or Expanded Storm Water Drainage Facilities. *Buildout of the 2030 General Plan would accommodate an expansion of the urbanized landscape and construction of new impermeable surfaces that would generate additional stormwater runoff compared to baseline conditions. New land uses would be expected to include residential, commercial, industrial, and civic uses. Each of these land uses could involve addition of impermeable surfaces, with associated increases in stormwater runoff. The construction of new facilities and conveyance infrastructure or the expansion of existing facilities and infrastructure to handle this runoff could generate significant environmental effects. This impact is considered* ***potentially significant.***

Buildout of the 2030 General Plan would accommodate an expansion of the urbanized landscape and construction of new impermeable surfaces that would generate additional stormwater runoff compared to baseline conditions. The 2030 General Plan could accommodate urbanization in areas currently in agricultural production, which would increase stormwater runoff in these areas. The increased flow in stormwater would increase demand for stormwater conveyance and discharge facilities.

Under the 2030 General Plan, the Linda and Olivehurst areas would be expected to experience some redevelopment and new development. These areas currently experience localized flooding due to deficiencies in the existing stormwater drainage system. Redevelopment and new development activities in or near these communities could exacerbate these existing issues by adding urbanized impermeable surfaces to the landscape, so improvements will be necessary along with redevelopment and new development.

The specific environmental impacts of each phase of improvements to the drainage infrastructure will be evaluated at the project level and is beyond the scope and purpose of a General Plan programmatic EIR. The impacts of infrastructure required to serve General Plan buildout is analyzed at a programmatic level along with the direct effects of construction and operation of General Plan land uses throughout this EIR. However, because of the level of development anticipated under the 2030 General Plan, it is possible that the construction of additional facilities could generate significant impacts.

Installing drainage facilities would involve earth disturbance, transport of materials, and operation of equipment similar to that which will also be required for installation of other infrastructure in the same public rights-of-way and between public rights-of-way and end users. Although General Plan policies and actions will require infrastructure and facilities to be provided in a way that reduces environmental impacts, the extent of infrastructure required to serve future demand, depending on phasing of future development, could create significant impacts.

Relevant Policies and Actions of the 2030 General Plan

The County's 2030 General Plan policies and actions intended to reduce cultural, biological, air quality, climate change, noise, hydrology, geology and soils, and other impact areas would also apply to expansion and extension of stormwater detention, collection, and conveyance facilities. Please refer to the topic-specific subsections of Section 4.0 of this EIR for more information. The 2030 General Plan also includes policies and actions that are intended to provide adequate stormwater infrastructure that would protect the unincorporated developed areas of the County from localized flooding associated with stormwater drainage issues, including the following.

- **Policy CD12.3:** The County will implement stormwater master plans designed to provide collection, detention, and conveyance consistent with local standards for developed areas within the Valley Growth Boundary. In general, new developments will be required to demonstrate no net increase in stormwater runoff prior to approval.

- **Action CD12.1: Facility Planning.** Following adoption of the General Plan, as funding allows, the County will seek to draft and/or update long range facility plans for relevant County departments. The Community Development and Services Agency will provide detail on population growth assumptions for different parts of the County to assist with the facility planning effort. It is anticipated that joint-use and operation opportunities would arise from a coordinated facility planning process that involves multiple County departments. The County should identify and prioritize discrete projects in the facilities master plan. Facility master plan projects would be a part of the County's ongoing capital improvements programming and the subject of grant applications. For example, the County should coordinate facility master plan updates with applications for the US Department of Agriculture's Rural Development low-interest loan and grant programs for rural parts of the County.

    - Related Goals: Goal CD12
    - Agency/Department: Community Development and Services Agency; Administrative Services Department; Library Department
    - Funding Source: Impact fees; federal and state funds; General Fund
    - Time Frame: Update facility master plans by 2015

- **Policy CD15.7:** County and reclamation district drainage fees should be structured to provide incentives for use of Low Impact Development and natural drainage approaches that slow down, disperse, and filter stormwater runoff.

- **Policy CD15.8:** The County will encourage the joint use of parks for school and public use, as well as stormwater detention, as appropriate.

- **Action CD15.1: Revise Impact Fees.** The County will have prepared a Nexus Fee Study following the 2030 General Plan update to support revised development impact fees. One focus of this updated effort would be to ensure that compact development that makes efficient use of land has lower fees, where this approach to development is shown to have lower costs. The County will consider basing fees on an equivalent dwelling unit (EDU) basis, a per-capita basis, or per-acre basis, depending on the type of fee. The per-EDU, per-capita, or per-acre approach would be considered rather than presenting fees on a flat-rate, per unit basis. Different types of dwelling units have different demands for services and different associated costs. The County will also consider reduced fees for infill development that has access to existing infrastructure with adequate capacity to serve that development.

    - Related Goals: Goal CD1, Goal CD2, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD11, Goal CD12, Goal CD13, Goal CD14, Goal CD15, Goal CD16, Goal CD19, Goal NR12, Goal HS9
    - Agency/Department: Community Development and Services Agency
    - Funding Source: General Fund
    - Time Frame: Nexus Fee Study and revised fees by 2014.

- **Policy HS3.16:** New developments are encouraged to incorporate open, vegetated swales to filter, slow down, and convey stormwater and encourage groundwater infiltration.

- **Policy HS3.17:** New developments shall limit construction of new impervious surfaces, such as parking lots, travelways, vehicle waiting areas, and vehicle loading areas to the minimum amount needed to implement the subject project.

- **Policy HS3.18:** New developments shall break up parking areas, intersperse parking with vegetated areas, and incorporate other best management practices that filter and slow down runoff and promote infiltration.

- **Action HS3.1: Ongoing Monitoring and Corrective Actions.** During General Plan buildout, the County may conduct water quality monitoring along key waterways and watersheds. The County may require more stringent water quality standards for developments that may affect waterways or watersheds with identified water quality problems. The County, in collaboration with regional water supply providers, will conduct ongoing monitoring to ensure the application and effectiveness of construction and environmental policies and standards. Ongoing monitoring would be designed to identify problems that may require corrective actions. The County will collaborate with regional and state agencies on the need for corrective actions for ongoing uses that pollute the County's water supply.

    - Related Goals: Goal HS3, NR12
    - Agency/Department: Community Development and Services Agency
    - Funding Source: State and federal grants, other State or federal funding, and private funding for projects near the County's waterbodies
    - Time Frame: Ongoing, with corrective actions, as needed

- **Policy NR1.10:** The County's recreational open space should be designed to provide multiple benefits, including recreational, circulation, and stormwater drainage conveyance and detention. Applicable impact and

in-lieu-fees will be reduced to reflect these overlapping uses for developments that include multi-use open space.

- **Policy NR6.3:** New developments, roads, water and sewer lines, and stormwater infrastructure should be located to avoid impacts to significant cultural resources.

- **Action NR6.2: Paleontological Resources.** If potential paleontological resources are detected during construction, work shall stop and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include construction worker education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures, as appropriate.

  - Related Goals: Goal NR6
  - Agency/Department: Community Development and Services Agency
  - Funding Source: Project applicant funds
  - Time Frame: Ongoing, as construction occurs under the General Plan

Conclusion

Implementation of the 2030 General Plan would require new and expanded stormwater infrastructure. Technical sections of this EIR evaluate the effects of construction activities relative to specific environmental issue areas, such as biological resources, air quality, etc., at a programmatic level of detail, as is appropriate for a general plan. By adhering to the policies proposed in the 2030 General Plan, as well as all applicable requirements pertaining to drainage systems, the County could minimize impacts. The 2030 General Plan includes policies and actions, and this EIR includes mitigation measures, where necessary, to reduce or avoid impacts, as noted throughout Section 4.0 of this EIR. For example, drainage facilities will be located to avoid identified cultural resources. However, as with all ground disturbing construction, there is the potential for impacts to previously unidentified resources. In addition, other natural resources within the footprint of an expanded stormwater drainage network may be adversely affected. Despite mitigating policies and actions and the application of necessary mitigation measures, construction and operation of new or expanded drainage facilities and infrastructure may result in significant environmental effects. The County has included throughout the 2030 General Plan all feasible measures available to mitigate such impacts. The impact is considered **significant and unavoidable**.

IMPACT 4.14-4 Insufficient Water Supplies to Meet the Future Water Demand in Unincorporated Areas Served by the County. *Implementation of the 2030 General Plan would designate land uses that, if developed to full buildout, would increase water demand. Reductions in agricultural cultivation caused by conversion of agricultural land would decrease water consumption within Yuba County. Existing regulations require additional water conservation measures in new development and for large developments to demonstrate ongoing reliable water supply. Considering existing regulations that require conservation and demonstration of water supply and that the overall change in water demand compared to existing supply is not substantial, the impact is considered less than significant.*

Adoption of the 2030 General Plan, by itself, would not create new water demand. The policies of the 2030 General Plan provide a means for organizing and regulating land use change. However, land uses allowed under the 2030 General Plan, if developed, would lead to new water demand. Implementation of the 2030 General Plan could accommodate up to 100,000 additional residents in unincorporated areas at full buildout. This population increase would be accompanied by additional commercial, industrial, and civic uses, as well, which would generate water demand. Because specific development develop proposals for these land uses are not considered in this EIR, the exact increase in water demand and the water purveyors that would provide this water cannot determined. However this impact analysis examines the estimated increase in demand in relation to the existing water use conditions in Yuba County to estimate the availability of water supply.

Prior to the preparation of the 2030 General Plan, YWCA estimated that foreseeable growth within the County (including incorporated areas) would result in an increase in annual urban water demand of approximately 45,000 acre feet, while conversion of agricultural land would result in a decrease in annual agricultural water demand of approximately 31,000 acre feet over the same period (YCWA 2008:4-33). These estimates result in a net increase in annual demand of approximately 14,000 acre feet, projected by 2030, based upon foreseeable patterns of development prior to development of the 2030 General Plan. The projected increase in water demand, calculated by YCWA prior to development of the 2030 General Plan is relatively small in relation to existing patterns of consumption. The projected net increase of 14,000 acre feet per year constitutes approximately an increase in consumption of 2.4% relative to the water used in 2005. However, urban water demand, at least in the immediate future would most likely be served with groundwater, while the agricultural demand is mostly surface water. Today, roughly 75% of agricultural water demand is met with surface water and 85% of urban demand is met using groundwater. Additionally, when agricultural land, especially flood irrigated land, is retired and development occurs, it is possible that the net infiltration of water from the land surface would be reduced due to loss of percolation of irrigation water and increased impervious surfaces.

In addition to YCWA estimates, the California Department of Water Resources (DWR) provides estimates of per–capita, per-day (GPCD) water demand for the subregions of California. Yuba County is within DWR Hydrologic Region 5 (Sacramento River), where the average rate of water consumption is 253 GPCD (DWR 2010). Per capita water use is defined as the total applied water of a service area divided by the permanent population of that area (DWR 1994:5). This metric provides a means of estimating how much an increase in population in a particular area will increase water demand, assuming that development conforms roughly to existing patterns of land use.

Based upon this figure, an increase in population of 100,000 individuals within unincorporated portions of the County could result in an increase in water demand of approximately 28,340 acre feet per year. The net effect of buildout however, must consider reductions in agricultural water use associated with conversion of agricultural land to urban use, as anticipated under the 2030 General Plan. Conservatively estimated, the conversion of farmland from land use change under the 2030 General Plan (approximately 9,324 acres, excluding grazing land where water is not applied) could reduce agricultural water consumption by approximately 23,124 af at the time of buildout, based upon an average applied water rate of 2.48 af per year in the U.S. (USGS 2011). The net increase in demand resulting from buildout of the 2030 General Plan, considering the increase in population relative to changes in land use is estimated to be approximately 5,216 af per year. The County tracks crop type and has some Geographic Information Systems data describing crop types throughout the County, although the County does not have comprehensive information. If estimates by crop type are used instead of overall average irrigation rates, the decrease in water demand from conversion of agricultural land to urban us is 19,917 af per year (DWR 2011). This estimate is conservative since, as noted, tracking of crop types is not comprehensive throughout portions of the County that could be subject to land use change under the 2030 General Plan.

The net effect of buildout of the 2030 General Plan would increase water demand by 1 percent relative to the water consumed in Yuba County in 2005. However, as noted above, urban water demand, at least in the immediate future would most likely be served with groundwater, while the agricultural demand is mostly surface water. Ignoring the decrease in demand by converting agricultural land, the total increase in water demand is conservatively estimated to be approximately 5% above existing water demand levels for full buildout of the 2030 General Plan. Assuming 85% of the new demand is for groundwater, full buildout of the 2030 General Plan could increase the demand for groundwater by approximately 17%. These amounts will be further reduced by enforcement of the California Green Building Code (Title 24, Cal. Code of Regulations [CCR] Part 11). The Green Building Code requires an overall 20% reduction in residential indoor potable water use (24 CCR Part 11, Section 4.303.1) and a 20% reduction in indoor potable and wastewater use for non-residential buildings (24 CCR Part 11, Section 5.303.2 and 5.303.4). These reductions would occur relative to the baselines for typical appliances and fixtures provided in the Code. The Green Building Code also requires irrigation controls for residential developments that adjust irrigation in response to changes in plants' needs and changes in weather in

order to reduce water use. Existing regulations that will be required for new development accommodated under the 2030 General Plan will reduce the net increase in demand compared to the previously provided estimates.

The estimated total storage capacity of the groundwater basins is about 7.5 million af (Yuba County IRWMP 2008; 4-13). Not all of these supplies are available for withdrawal because well capacity and recharge rates limit the amount that can be safely withdrawn. However, approximately 2.8 million af occur within 200 feet of the land surface (Yuba County IRWMP 2008:4-13). Although the net increase in water demand relative to existing demand is insubstantial and existing supplies appear to be sufficient, the determination of sufficient and reliable supplies for specific projects requires identification of particular service systems and consideration of the availability and reliability of supplies that a purveyor can deliver in relation to existing commitments considering the potential fluctuations of water availability at the time the project proponent seeks to secure new water rights. The potential for drought makes future deliveries uncertain. In drier years, due to shortages in surface water supplies, agricultural water users may turn to groundwater, which may affect the availability and quantity of groundwater for urban use. However, existing requirements of state law require projects that would consume large amounts of water to demonstrate sufficient and reliable supplies (California Water Code 10910 et seq.). Existing regulations incorporated into the California Green Building Code require additional water conservation measures as a part of new development. The increase in water demand is counterbalanced with a decrease in the amount of irrigated agricultural land that would be converted to urban development if the 2030 General Plan is fully built out. The net increase in water demand under the 2030 General Plan is very small (roughly 1 percent relative to the water consumed in Yuba County in 2005) compared to existing demand and existing supplies. Therefore, the County considers the impact to be **less than significant**.

Relevant Policies and Actions of the 2030 General Plan

The General Plan Exhibit Natural-Resources-1, Open Space Diagram, along with supporting polices, establish the County's approach for surface and groundwater management. These policies include both land use designations and project review requirements to assess the availability of water for particular land uses. Among the open space designations defined in the Natural Resources Element is a category called "Water and Groundwater Recharge." Important areas for groundwater recharge are mapped, and are intended to be reserved for water quality protection, habitat conservation, and other uses that do not adversely affect groundwater recharge. The 2030 General Plan includes policies related directly to protecting groundwater recharge areas, in addition to indirectly promoting groundwater recharge with policies that encourage multi-use open spaces. The 2030 General Plan also includes policies and actions that address a wide variety of issues related to conserving water and ensuring adequate water supply, including those articulated below.

- **Policy CD12.1:** New developments will be required to demonstrate the availability of adequate water supply and infrastructure, including during multiple dry years, prior to approval.

- **Policy CD14.1:** The County will support regional electricity, water, wastewater, water conservation, and other agreements, where cost-effective and environmentally sustainable.

- **Policy CD14.12:** The County will coordinate with Yuba County Water Agency on conjunctive water use, renewable energy generation and use, and other agreements that would provide advantages to local industries and benefits to existing residents and businesses.

- **Policy CD15.5:** New developments should incorporate water conservation techniques to reduce water demand, including the use of reclaimed water for landscaping and irrigation.

- **Action CD15.1: Revise Impact Fees.** The County will have prepared a Nexus Fee Study following the 2030 General Plan update to support revised development impact fees. One focus of this updated effort would be to ensure that compact development that makes efficient use of land has lower fees, where this approach to development is shown to have lower costs. The County will consider basing fees on an equivalent dwelling unit (EDU) basis, a per-capita basis, or per-acre basis, depending on the type of fee. The per-EDU, per-capita,

or per-acre approach would be considered rather than presenting fees on a flat-rate, per unit basis. Different types of dwelling units have different demands for services and different associated costs. The County will also consider reduced fees for infill development that has access to existing infrastructure with adequate capacity to serve that development.

- Related Goals: Goal CD1, Goal CD2, Goal CD5, Goal CD6, Goal CD7, Goal CD8, Goal CD11, Goal CD12, Goal CD13, Goal CD14, Goal CD15, Goal CD16, Goal CD19, Goal NR12, Goal HS9
- Agency/Department: Community Development and Services Agency
- Funding Source: General Fund
- Time Frame: Nexus Fee Study and revised fees by 2014.

- **Policy NR1.10:** The County's recreational open space should be designed to provide multiple benefits, including recreational, circulation, and stormwater drainage conveyance and detention. Applicable impact and in-lieu-fees will be reduced to reflect these overlapping uses for developments that include multi-use open space.

- **Policy NR1.11.** Recreational open space along rivers and streams should incorporate flood control objectives, habitat preservation, and habitat restoration, as appropriate.

- **Policy NR1.14:** Recreational facilities and open space should be designed to use recycled materials and green building techniques, minimize surface runoff, reduce water demand, provide habitat for native species, reduce the need for ongoing maintenance, and incorporate universal access principles to facilitate use by people of all ages and abilities.

- **Policy NR12.1:** For new developments, the County will manage land use change in a way that reduces the potential for overdraft of groundwater supplies, recognizes overlying groundwater rights and surface water rights, and helps to ensure that the combined use of surface and groundwater resources provides for current and future water demand.

- **Policy NR12.2:** Large new developments shall coordinate with the relevant water service provider to demonstrate availability of water to the satisfaction of the County prior to approval, according to the requirements of the California Water Code Section 10631. Large developments are generally those with more than 500 dwelling units or employing more than 1,000 people, but shall be defined according to the details in Section 10912 of the California Water Code.

- **Policy NR12.3:** New developments are strongly discouraged in areas with high groundwater infiltration rates and the County's development standards will restrict the amount of impervious surface that can be added in these areas in the context of new developments.

- **Policy NR12.4:** The County will encourage the use of recycled water and water from irrigation districts that is not treated to urban standards for outdoor irrigation, toilet flushing, fire hydrants; commercial and industrial processes, carwashes, concrete batching, laundromats; dust control; parks, golf courses, and other landscaped areas, and other appropriate water-intensive uses.

- **Policy NR12.5:** New developments shall use climate appropriate landscaping in parks and open space, landscaping within new rights of way, yards, and other appropriate spaces, to the maximum extent feasible.

- **Policy NR12.6:** New developments shall include water conservation technologies such as low-flow toilets, efficient clothes washers, and efficient water-using industrial equipment, in accordance with state law.

- **Policy NR12.7:** Projects and plans that include recycled water systems, rainwater collection and use, climate appropriate landscaping, smaller lawns, and other water-conserving measures beyond that required by state law should enjoy proportionally lower development impact fees.

- **Policy NR12.9:** New developments proposing individual wells within Rural Communities shall demonstrate an adequate supply of water without adverse impact to groundwater through testing, hydrological studies, or other means approved by the County.

- **Policy NR12.10:** Prior to issuing a building permit for a habitable structure, the County will require demonstration of minimum flow rates prior to approval. The County may require demonstration of storage capacity for systems that produce low flows, pursuant to County standards.

Policy NR12.11: Any new water wells drilled near existing County watercourses shall be set back from waterbodies such that the stream hydrology is not directly impacted.

Conclusion

The proposed policies of the 2030 General Plan require individual projects that would occur under buildout to demonstrate sufficient and reliable water supplies (Policy CD 12.1). In addition, the policies of the General Plan incorporate and reference the existing requirements of state law which require projects that would consume large amounts of water to demonstrate sufficient and reliable supplies (Policy NR12.2, California Water Code 10910 et seq.). Furthermore the 2030 General Plan requires consideration of the individual and cumulative effect of new projects on groundwater supplies (Policy NR12.1). Policies CD 12.1 and NR12.1 would be applied to individual projects that fall under the thresholds of California Water Code Section 10910, and would be enforced as part of project-level review for tiered projects that would occur under buildout. The requirements of California Water Code 10910 et seq. would be enforced at the time of project level review under buildout for larger projects that meet the relevant thresholds provided in California Water Code Section 10912. The Green Building Code requires an overall 20% reduction in residential indoor potable water use (24 CCR Part 11, Section 4.303.1) and a 20% reduction in indoor potable and wastewater use for non-residential buildings (24 CCR Part 11, Section 5.303.2 and 5.303.4). These reductions would occur relative to the baselines for typical appliances and fixtures provided in the Code. Collectively, these policies and laws would apply to all new water consuming land uses that would occur under buildout. The increase in water consumption at buildout would be relatively small in relation to existing water use, as described above. Because projects occurring under buildout would be required to demonstrate adequate and reliable water supplies and to consider the impact of new water consuming land uses in relation to existing and future demand, this impact is considered **less than significant.**

IMPACT 4.14-5 Increased Demand for Solid Waste Disposal and Compliance with Solid Waste Requirements. *Buildout of the 2030 General Plan would accommodate an increase in population and commerce. This would result in an associated increase in solid waste streams of approximately 82,125 tons of solid waste per year, conservatively estimated. Because available capacity can meet this demand, no new facilities would need to be constructed to serve 2030 General Plan buildout. For these reasons this impact would be* ***less than significant****.*

Buildout of the 2030 General Plan could increase the population of unincorporated Yuba County by up to 100,000 individuals at full buildout, with an associated increase in solid waste streams. Based on EPA's estimated individual solid-waste generation rate of 4.5 pounds per day per person (EPA 2008:1), buildout could generate an additional 225 tons of solid waste per day (82,125 tons per year). This estimate is conservative (high) because recycling and waste diversion reduces this amount and is likely to increasingly reduce the waste stream that is sent to landfills in the future as more restrictive regulations require diversion of larger fractions of the waste stream.

The primary landfill that serves unincorporated portions of Yuba County is the Ostrom Road site. In addition, the facility provides solid waste disposal services to both municipalities and commercial customers from Sutter, Butte, Nevada, and Colusa counties. The Ostrom Road Landfill is owned and operated by Recology. CalRecycle

reports that this facility has a maximum permitted throughput of 3,000 tons per day and has a total maximum permitted capacity of 41,822,300 cubic yards (90% capacity remaining, CalRecycle 2010c).

The average daily throughput at this facility is approximately 750 tons per day, with a "typical day" or modal throughput of approximately 900 tons per day (Phil Graham, pers. comm. 2010). Because the estimated increase in throughput associated with buildout of the 2030 General Plan is estimated to increase this amount by only 225 tons per day, the increase in solid waste disposal demand would be within the daily throughput capacity of this facility (975 tons on average and 1,125 tons on a "typical day). Based on available information, it appears the Ostrom Road site has adequate capacity to serve buildout of the 2030 General Plan.

Relevant Policies and Actions of the 2030 General Plan

The following policy and action from the 2030 General Plan is applicable to solid waste:

- **Policy CD12.4:** The County will approve new development projects only if adequate capacity exists to accommodate solid waste demand, including processing, recycling, transportation, and disposal.

- **Action CD12.1: Facility Planning.** Following adoption of the General Plan, as funding allows, the County will seek to draft and/or update long range facility plans for relevant County departments. The Community Development and Services Agency will provide detail on population growth assumptions for different parts of the County to assist with the facility planning effort. It is anticipated that joint-use and operation opportunities would arise from a coordinated facility planning process that involves multiple County departments. The County should identify and prioritize discrete projects in the facilities master plan. Facility master plan projects would be a part of the County's ongoing capital improvements programming and the subject of grant applications. For example, the County should coordinate facility master plan updates with applications for the US Department of Agriculture's Rural Development low-interest loan and grant programs for rural parts of the County.

    - Related Goals: Goal CD12
    - Agency/Department: Community Development and Services Agency; Administrative Services Department; Library Department
    - Funding Source: Impact fees; federal and state funds; General Fund
    - Time Frame: Update facility master plans by 2015

Conclusion

Buildout of the 2030 General Plan would increase local generation of solid waste. Existing capacity exists to serve this increase in demand. In addition, under 2030 General Plan policy, new projects may only be approved if sufficient capacity to dispose of solid waste exists at the time the new project is subject to review. Existing regulations also require diversion of solid waste. The 2030 General Plan does not conflict with these regulations. Buildout under the 2030 General Plan is not anticipated to require the construction of new landfills. The impact is considered **less than significant**.

Mitigation Measure

No mitigation is required.

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4.15 ENERGY

This section describes the supply and use of energy in unincorporated Yuba County (the County), as well as local actions to conserve energy and use it more efficiently.

The California Environmental Quality Act (CEQA) Guidelines (Appendix F) require that EIRs analyze energy conservation consistent with Public Resources Code section 21100(b)(3). According to the Guidelines, energy impacts that have already been analyzed need not be repeated in later EIRs and that EIRs do not need to address "lifecycle emissions," such as those embedded in the production of building materials used in projects. Lifecycle emissions under CEQA would normally represent "emissions beyond those that could be considered indirect effects of a project as that term is defined in section 15358 of the State CEQA Guidelines" (Natural Resources Agency 2009).

The energy impacts of land use development and related activities that could occur under the 2030 General Plan are important to analyze under CEQA since motor vehicle use, energy production, land development, and other human activities result in direct and indirect emissions and elevated concentrations of greenhouse gases (GHGs) in the atmosphere. See section 4.7 – Climate Change of this EIR, which comprehensively addresses GHG emissions impacts attributable to the 2030 General Plan.

The County's energy conservation goals are closely related to local economic development strategy in the 2030 General Plan (see the Natural Resources Element for details). The 2030 General Plan establishes that the County intends, through energy conservation policies and programs, to reduce ongoing household and business energy costs and create advantages for local employment development activity. During the 2030 General Plan time horizon, the County will have the opportunity to target, attract, retain, and grow businesses whose products and services are related to renewable energy or energy conservation. The 2030 General Plan establishes that the County encourages renewable energy educational programs, construction of renewable energy production facilities, coordination with other agencies, local agricultural interests, local colleges, and other stakeholders. The County intends to promote the use of agricultural wastes for fuel and power production, particularly to support agricultural operations and agricultural industries. The 2030 General Plan also notes that the County has the opportunity to benefit from local hydroelectric energy development and use during the 2030 General Plan time horizon.

This section of the EIR analyzes energy-related impacts attributable to policies and implementation measures under the 2030 General Plan. First is a description of the existing regulatory and environmental setting, then the County's methodology and thresholds of significance, and finally, impact analysis and mitigation.

4.15.1 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal legislation and regulations related to energy efficiency are highlighted below.

Beginning in the late 1990s, Congress introduced a tax subsidy on the production of renewable wind-generated electricity, known as the Production Tax Credit.

Congress also periodically directs federal agencies to use increasing amounts of renewable energy or otherwise aid private companies in developing wind energy. One example is the U.S. Department of Energy's Wind Powering America initiative, which, among other tasks, has created Wind Working Groups in each state with a wind resource.

National Energy Act

The National Energy Act of 1978 was a legislative response by the U.S. Congress to the 1973 energy crisis. It includes the following statutes:

- Public Utility Regulatory Policies Act (PURPA) (Public Law 95-617)
- Energy Tax Act (Public Law 95-318)
- National Energy Conservation Policy Act (NECPA) (Public Law 95-619)
- Power Plant and Industrial Fuel Use Act (Public Law 95-620)
- Natural Gas Policy Act (Public Law 95-621)

Public Utility Regulatory Policies Act (PURPA)

PURPA was passed by Congress in 1978 as part of the National Energy Act to promote greater use of renewable energy. This law created a market for non-utility electric power producers to permit independent power producers to connect to their lines and to pay for the electricity that was delivered. Although PURPA is a federal law, implementation was left to the states and a variety of regulatory regimes developed.

Energy Tax Act

The Energy Tax Act was also passed by Congress in 1978 as part of the National Energy Act. It was a response to the 1973 oil crisis and promoted fuel efficiency and renewable energy through taxes and tax credits.

National Energy Conservation Policy Act (NECPA)

NECPA is a statute signed into law in 1978 as part of the National Energy Act. NECPA requires utilities to provide residential consumers with energy conservation audits and other services to encourage slower growth of electricity demand. NECPA was amended in 1985 by the Energy Policy and Conservation Act Amendments of 1985 (Public Law 99-58).

Federal Energy Management Program

The U.S. Department of Energy's Federal Energy Management Program works to reduce the cost and environmental impact of the federal government by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at federal sites.

Energy Policy Act

The Energy Policy Act of 1992, recent executive orders, and presidential directives require federal agencies to meet a number of energy and water management goals, among other requirements. Federal agencies were directed to reduce their energy use by 35% by 2010 in comparison to 1985 levels. Federal agencies rely on effective coordination and sound guidance to help meet this requirement. The Federal Energy Management Program reports agencies' progress annually, manages interagency working groups, and offers policy guidance and direction. The Energy Policy Act was amended in 2005 (Public Law 109-190) to increase the supply of energy primarily through subsidies.

Federal Energy Regulatory Commission (FERC)

FERC regulates and oversees energy industries in the economic, environmental, and safety interests of the American public. FERC is the federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, and oil pipeline rates. FERC also reviews and authorizes

liquefied natural gas terminals, interstate natural gas pipelines, and non-federal hydropower projects. Production of electricity is overseen by the states; however, FERC has jurisdiction over certain matters (FERC 2006).

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California's Renewable Portfolio Standards (RPS), established in 2002 by Senate Bill (SB) 1078 (Chapter 516, Statutes of 2002), requires electricity providers to procure an annual increase of at least 1% of their electricity supplies from renewable resources so as to achieve a 20% renewable mix by no later than 2017. The Energy Action Plan, approved by California Energy Commission (CEC), the California Public Utilities Commission (CPUC), and the California Power Authority (CPA), accelerated the 20% target date to 2010.

State CEQA Guidelines

Section 15126.4 (a)(1) of the CEQA Guidelines states that an EIR shall describe feasible measures which could minimize significant adverse impacts, including, where relevant, inefficient and unnecessary consumption of energy.

CEQA Guidelines Appendix F, Energy Conservation, provides guidance for EIRs regarding potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing the inefficient, wasteful, and unnecessary consumption of energy. In addition, though not described as thresholds for determining the significance of impacts, Appendix F seeks inclusion of information in the EIR addressing the following environmental impacts:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

California Energy Commission (CEC)

Established in 1974 by the Warren-Alquist Act (Public Resources Code Section 25000 et seq.), CEC is the state's primary energy policy and planning agency. The commission has five major responsibilities: forecasting future energy needs and keeping historical energy data, licensing thermal power plants 50 megawatt (MW) or larger, promoting energy efficiency through appliance and building standards, developing energy technologies and supporting renewable energy, and planning for and directing the state response to an energy emergency.

California offered generous tax subsidies in the early 1980s for renewable power development. The state also ordered utilities to not only buy electricity from independent power generators, but also directed utilities to set a price and offer standard contracts. California's subsidies and the standard offer contracts launched the commercial wind industry in the country.

In 2003, the CEC released a report on renewable resource development summarizing technical potential and projected development from 2003 to 2017 (CEC 2005d). The goal was to provide some preliminary statewide estimates for increasing renewable generation based on new resource assessments. The renewable resource report

summarizes accelerated renewable energy needs to meet the statewide Energy Action Plan RPS goal of 20% by 2010, although it does not account for infrastructure improvements or operational enhancements needed to increase the use of renewable resources.

Title 24 (California Energy Code)

The California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings), provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances.

The Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy-efficiency measures.

California Green Building Standards Code

The California Building Standards Code is published in its entirety every three years by order of the California Legislature. The California Legislature delegated authority to various State agencies, boards, commissions and departments to create building regulations to implement the State's statutes. These building regulations or standards have the same force of law, and generally apply to all new building construction in California. A city, county, or city and county may establish more restrictive standards reasonably necessary because of local climatic, geological or topographical conditions.

On July 17, 2008, the California Building Standards Commission adopted the California Green Building Standards Code for all new construction statewide. A voluntary implementation period was intended to give builders, local governments, and communities' time to adapt to the new rules. The Code sets targets for energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including eco-friendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels.

Updates to the California Green Building Standards Code in 2010 take effect on January 1st, 2011. The updated Code sets minimum standards for all new structures as part of a broad effort to significantly reduce California's carbon emissions. Key mandatory measures for residential buildings include:

- Reducing indoor water use within buildings by 20 percent.
- Diverting 50 percent of construction waste from landfills.
- Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA Phase II emission limits where applicable. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Using building finish materials that emit low levels of volatile organic compounds.

Key mandatory measures for nonresidential buildings include:

- using building finish materials that emit low levels of volatile organic compounds;

- increasing a structure's system efficiencies by using building commissioning;
- if the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 100 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack;
- for buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of motorized vehicle parking capacity, with a minimum of one space;
- reducing indoor water use within buildings by 20 percent;
- reducing wastewater by 20 percent;
- diverting 50 percent of construction waste from landfills; and
- provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.

The updated Code also has a two-tiered system for jurisdictions that wish to adopt codes that go beyond the State mandatory provisions for energy use and potable water use, parking for clean-air vehicles, cool roofs, construction waste diversion, recycling, and other topics.

State of California Energy Action Plan

In 2003, the three key energy agencies in California— the CEC, the CPA, and the CPUC— jointly adopted an Energy Action Plan (EAP) that listed goals for California's energy future and set forth a commitment to achieve these goals through specific actions. In 2005, the CPUC and the CEC jointly prepared the EAP II to identify the further actions necessary to meet California's future energy needs. EAP II describes the priority sequence for actions to address increasing energy needs, also known as "loading order." The loading order identifies energy efficiency and demand response as the state's preferred means of meeting growing energy needs. After cost-effective efficiency and demand response, the state is to rely on renewable sources of power and distributed generation, such as combined heat and power applications. To the extent that efficiency, demand response, renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, the EAP II supports the use of clean and efficient fossil-fired generation. The plan recognizes that concurrent improvements are required to the bulk electricity transmission grid and distribution facility infrastructure to support growing demand centers and the interconnection of new generation, both on the utility and customer side of the meter. The EAP II identifies key actions to be taken in all of these areas in order to meet the state's growing energy requirements.

California Global Warming Solutions Act of 2006 (Assembly Bill 32)

In September 2006, Governor Schwarzenegger signed Assembly Bill (AB) 32 (Chapter 488, Statutes of 2006) which enacted Sections 38500–38599 of the California Health and Safety Code. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in greenhouse gas (GHG) emissions and a cap on statewide GHG emission, requiring the reduction of statewide GHG emissions to 1990 levels by 2020, enforceable by a statewide cap on GHG emissions phased in, starting in 2012. The regulatory and reporting mechanisms contained in AB 32 are relevant to subsequent regulations that affect the content and use of EIRs, such as Senate Bill (SB) 375 (described below).

To implement the cap, AB 32 directs the Air Resources Board (ARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 requires a quantified cap on GHG emissions representing 1990 emissions levels and the changes needed to get to 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 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. The State's policies on land use and transportation are important for this EIR section because, as noted in the 2030 General Plan, "transportation accounts for …the largest energy-consuming sector by far…and…[t]ransportation and land use planning techniques that reduce vehicle miles traveled (VMT) represent a tremendous opportunity for Yuba County to decrease energy use… Energy efficiency measures incorporated into new construction and retrofitting of existing structures can also conserve energy and save money for households, businesses, and civic uses throughout the County" (see Natural Resources Element for County's energy policies).

SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) to address GHG reduction targets in the context of that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. The reduction targets for the Sacramento region, which includes Yuba County, are 7 percent by 2020 and 16 percent by 2035. ARB is charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

This bill also extends the minimum time period for the Regional Housing Needs Allocation (RNHA) cycle, which establishes regional and local housing planning objectives, to create a closer match with the timelines for revising RTPs (for the MPOs affected by the bill). Revisions to CEQA create process streamlining advantages for certain projects that are consistent with an approved SCS or APS. Residential or mixed-use projects consistent with the SCS/APS and that incorporate mitigation measures from relevant prior CEQA documents are not required to reference, describe, or discuss growth-inducing impacts or impacts of cars and light-duty truck trips on climate change or on the regional transportation network.

"Transit priority projects," as defined in this legislation, and future RTPs would be exempt from CEQA review. Transit priority projects that do not qualify for a complete exemption could be subject to environmental review under a Sustainable Communities Environmental Assessment (SCEA), which is envisioned to be similar to the process under CEQA for a negative declaration.

4.15.2 ENVIRONMENTAL SETTING

The generating capacity of a unit of energy is expressed in megawatts (MW) or kilowatts (kW). One MW provides enough energy to power roughly between 750 and 1,000 California homes, depending on location, energy source, and energy efficiency of the homes being served, among other factors. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).[1]

ELECTRICITY USE

California uses 265,000 GWh of electricity per year. Consumption is growing at a rate of two percent annually. Since the early 1970s, electricity consumption per capita in California has stayed nearly constant, while rising steadily for the US as a whole. California consumes 40% less electricity per person compared to the national average. (Sudarshan et. al. 2008).

[1] MWh = 1,000 kWh and GWh = 1,000 MWh).

ELECTRICITY SOURCES

Natural gas is the main source for electricity generation in California. Natural gas-fired power plants account for about 47 percent of California's electricity generation, followed by coal (16 percent), nuclear (15 percent), hydroelectric (10 percent), and renewable (14 percent). The State uses 2 trillion cubic feet of natural gas per year. Eighty-five percent of natural gas consumed in California is provided from sources outside the state. Roughly 10 to 20 percent of the State's energy is provided by hydroelectric power that is subject to significant annual variations.

Yuba County receives its electricity from Pacific Gas & Electric Company (PG&E), a natural gas and electric utility. PG&E receives 39 percent of its electricity from natural gas-fired power plants, 22 percent from nuclear, 16 percent from hydroelectric, 14 percent from renewable resources, and 8 percent from coal (Table 4.15-1). PG&E operates the Narrows I Powerhouse at Englebright Dam, capable of generating 50 MW of electricity, which can then be distributed to PG&E customers.

Table 4.15-1
Electricity Sources for PG&E and California (Percentages)

Electricity Sources	PG&E	California
Natural Gas	39	47
Nuclear	22	15
Large Hydroelectric	16	10
Coal	8	16
Renewable	14	14

Sources: PG&E 2010; CEC 2010

In 2008, PG&E's retail customers purchased 81,935 GWh of electricity. Of that amount, 25,481 GWh were generated by PG&E's own natural gas, hydroelectric and nuclear facilities, as well as small amounts of fuel oil, diesel and solar energy. The remainder was purchased under contracts or from the open market.

According to the CEC's Energy Consumption Data Management System, a total of 504 million kWh of electricity was consumed in Yuba County in 2009 (including incorporated and unincorporated areas) (CEC 2010). This is an increase of 2.4% from 2006, when a total of 492 million kWh of electricity was consumed.

ELECTRICITY GENERATION

Yuba County contains facilities for generating electricity, primarily hydroelectric facilities. In addition to PG&E's Englebright Dam facility (providing 50 MW of electricity), public agencies operate electric-generation facilities, but none of them supply electricity to customers: all of the electricity generated at each of these facilities is wholesaled to PG&E, which then distributes electricity to customers within Yuba County.

The Yuba County Water Agency (YCWA) owns four powerhouses on the Yuba River Watershed. The powerhouses and their generation capacity include (YCWA 2010):

- New Colgate – 340 MW,
- Narrows 2 – 55 MW,
- Deadwood Creek – 2 MW, and
- Fish Release – 150 kW.

The South Feather Water and Power Agency (SFWPA) also own and maintain electric-generation facilities. SFWPA facilities are capable of generating up to 120 megawatts (MW) of electricity with the following components: Woodleaf Powerhouse, Forbestown Powerhouse, Kelly Ridge Powerhouse, and Kelly Ridge Photovoltaic Facility, all located on the South Fork Feather River, and Sly Creek Powerhouse, located on Sly Creek.

Browns Valley Irrigation District also operates a hydroelectric facility capable of generating one MW of electricity at a constant head of water on an annualized basis at Virginia Ranch Dam at Collins Reservoir. The actual amount of power that BVID is able to generate in any given year depends on the amount of water stored in Collins Reservoir that BVID is able to run through the Virginia Ranch Dam Powerhouse.

Natural Gas Use

According to the CEC's Energy Consumption Data Management System, a total of 13 million therms of natural gas was consumed in Yuba County in 2009 (including incorporated and unincorporated areas) (CEC 2010). This is a decrease of approximately 6% from 2006, when a total of 14 million kWh of natural gas was consumed.

4.15.3 Environmental Impacts and Mitigation Measures

Methodology

Energy consumption in the County is a direct product of land use patterns, employment patterns, building energy efficiency, individual habits, and various environmental factors. This impact analysis examines the effect of land use patterns, building construction, and building operations envisioned in the 2030 General Plan on energy consumption and examines the increased energy demand and need for additional energy infrastructure to serve future population growth with implementation of the proposed 2030 General Plan.

Thresholds of Significance

For the purpose of this analysis, the following applicable thresholds of significance have been used to determine whether implementing the proposed project would result in a significant impact. These thresholds of significance are based on Appendix F of the State CEQA Guidelines. An impact on energy resources or energy conservation is considered significant if implementation of the proposed project would do any of the following:

- Develop land uses and patterns causing wasteful, inefficient, and unnecessary consumption of energy; or
- Result in the need for new systems or substantial alterations to electrical, natural gas, or communication systems infrastructure, the construction or operation of which would have significant impacts.

Impact Analysis

IMPACT 4.15-1 Effects on Energy Consumption from Land Use Locations and Patterns. *Implementation of the 2030 General Plan would result in an increased demand for energy. New residential, commercial, industrial, and civic uses will increase local energy demands. However, the policies and actions of the General Plan that guide growth and development are designed to avoid wasteful, inefficient, and unnecessary consumption of energy. This impact would be* ***less than significant****.*

Although implementation of the 2030 General Plan would result in an increase in demand for energy, the General Plan itself contains many policies and actions to increase energy efficiency and reduce the energy demand from what it would be with more traditional, less energy-efficient development patterns. Land use patterns can significantly affect energy consumption in either a positive or negative manner. The transportation sector makes up the single largest consumer of energy in California, accounting for 41 percent of the state's total energy

demand, and nearly all of this energy is provided by petroleum (CEC 2007a). The location, density, mix of land uses, and quality of the multi-modal transportation system is directly related to the amount of travel and transportation-related energy demands. The high levels of VMT in California are often attributed to the distribution of land uses and development patterns, which have more separation between different types of land uses (CEC 2007b). When land uses are not mixed and development patterns have lower densities, people usually become dependent on automobiles for access to jobs and services (U.S. EPA 2001). Compact development can also greatly reduce transportation-related energy demands by locating residences near shopping and work centers and providing multiple transportation opportunities (e.g., bike, foot).

The 2030 General Plan's land use strategy of focusing development primarily within the Valley Growth Boundary and promoting infill, mixed-use development, and a multi-modal circulation system that facilitates walking, biking and transit use, all are factors that relate very closely to energy efficiency and avoiding the wasteful, inefficient, and unnecessary consumption of energy.

The 2030 General Plan Land Use Diagram calls for development to be focused within the Valley Growth Boundary on undeveloped land, as well as infill and redevelopment in areas already developed. Limited development could occur outside of the boundary in rural communities. The majority of new development under the 2030 General Plan would occur within the Valley Growth Boundary. The County expects the following benefits of the Valley Growth Boundary:

- Support development patterns that can be provided cost-effective infrastructure and public facilities;
- Protect important natural resources, rural landscapes, air and water quality, farmland, and other important open space;
- Promote urban and suburban revitalization;
- Stimulate development patterns that support walking, biking, & public transit; and,
- Help eliminate leapfrog and incomplete, piecemeal-type developments by allowing for comprehensive planning.

Compliance with energy efficient components of the California Building Code would also increase energy efficiency of projects constructed under the 2030 General Plan. All development would be required to comply with the current energy performance standards found in Title 24, resulting in reductions in energy demand.

Relevant Policies and Actions of the 2030 General Plan

According to Appendix F of the CEQA Guidelines, energy related mitigation may include siting, orientation, and design to minimize energy consumption; transportation energy measures; water conservation; solid-waste reduction; alternate fuels (particularly renewable ones); and renewable energy systems. The 2030 General Plan includes these types of measures and others, promoting efficient land use that would reduce transportation-related energy use, requiring energy conservation measures in building design and site planning, and addressing both environmental and economic effects of energy development and use:

- **Policy NR7.1.** New developments shall address energy conservation in landscaping methods, materials, and design.
- **Policy NR7.2.** New buildings shall meet state standards for energy efficiency and should provide for renewable energy development and use, to the greatest extent feasible.
- **Policy NR7.3.** New developments should be designed to take advantage of passive or natural summer cooling and winter solar access.

- **Policy NR7.4.** New developments should provide street and lot orientation and lot dimensions that facilitate the use of solar energy.

- **Policy NR7.5.** New developments within the Valley Growth Boundary should orient the majority of buildings so that the longer axis of the building, also known as the ridge line, is oriented east-to-west, in order to maximize the potential for passive solar heating in the winter and to minimize heat gain from the afternoon summer sun.

- **Policy NR7.6.** New developments should consider energy conservation in building-site orientation and construction, with articulated windows, roof overhangs, appropriate insulation materials and techniques, and other architectural features that improve passive interior climate control.

- **Policy NR7.7.** Shade trees or other appropriate plantings should be used in new developments to protect buildings from unwanted solar gain in summer months. Using deciduous trees on the southern side of structures is encouraged to allow cooling in the summer and solar gain in winter. Short front setbacks are encouraged to allow shade trees planted in the public right-of-way to provide summertime shading.

- **Policy NR7.8.** New buildings should emphasize passive and natural lighting systems in architectural design to conserve electricity.

- **Policy NR7.9.** New developments proposing parking lots shall incorporate shade trees or shade structures to provide a minimum of 50 percent shading (at maturity, where trees are used).

- **Policy NR7.10.** The County will seek regional, state, and federal funding for making energy efficiency improvements to existing buildings on a voluntary basis with interested property owners and improvements to the public realm.

- **Policy NR7.11.** The County and Yuba County Water Agency should explore opportunities related to future access to hydroelectric power, energy provision, strategic use of local energy resources for employment development, and other programs that have dual environmental-economic benefits.

- **Policy NR7.12.** The County will encourage financing programs designed to facilitate the installation of renewable energy systems.

- **Action NR7.1. Energy Efficiency Retrofits in Buildings and the Public Realm.** The County will proactively track and apply for regional, state, and federal funding to be used for energy efficiency improvements and renewable energy systems installation in existing buildings and the public realm (public rights-of-way, etc.). The County will seek regional, state, and federal funding for energy efficient systems, energy-efficient appliances, insulation, energy-efficient doors and windows, and other improvements. Any programs to assist property owners with making energy efficiency improvements to their buildings or other property shall be on a voluntary basis with interested property owners only. The County will update zoning and development standards, as well as permit processes to encourage the use of renewable energy systems that are sited and designed to ensure public safety and reduce aviation conflicts.

    - Related Goals: Goal NR2, Goal NR7, Goal CD15, Goal HS5
    - Agency/Department: Administrative Services
    - Funding Source: Grant funding, low-interest loans, impact fees, General Fund, and other appropriate funding sources

- Time Frame: Ongoing, as funding is available

- **Policy CD1.1:** Urban and suburban development in the unincorporated County not related to agriculture, mining, or some natural or cultural resource-oriented purpose is prohibited in valley areas outside the Valley Growth Boundary.

- **Policy CD1.3:** Urban land use designation/s will not be assigned within the Planning Reserve area unless the County determines that these lands are needed to fulfill either the County's regional housing needs allocation or accommodate job-generating developments needed to achieve the County's jobs-housing goals.

- **Policy CD1.4:** New developments proposing urban land uses will not be approved within the Planning Reserve area until the County assigns the appropriate General Plan land use designation/s and approves zoning and development standards consistent with the Community Development Element.

- **Policy CD2.1:** The County will encourage infill development and redevelopment of vacant and underutilized properties within existing unincorporated communities.

- **Policy CD2.2**: The County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment.

- **Policy CD2.3:** The County will support reinvestment in Linda and Olivehurst that increases local shopping, job, and housing opportunities.

- **Policy CD2.4:** The County will maintain flexible development standards, infrastructure standards, and impact fees that promote infill development and promote lot consolidation for redevelopment, where necessary.

- **Policy CD2.5:** The County will prioritize public spending on infrastructure within infill areas in order to induce reinvestment, remove blight, and reduce poverty.

- **Policy CD4.1:** Employment and Commercial Centers shall be developed in coordination with local transit provider/s to ensure proper placement and design of transit stops and accommodate public transit for both employees and patrons.

- **Policy CD4.2:** Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.

- **Policy CD5.1:** Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks, and other civic uses.

- **Policy CD5.2:** Valley Neighborhoods should provide compact development patterns that conserve land and place homes in close proximity to destinations.

- **Policy CD5.4:** New developments within the Valley Growth Boundary shall provide a highly connected travel network that supports all local travel modes.

- **Policy CD7.3:** The County will encourage – through entitlement, streamlining, flexibility in development standards, fee structures, and other incentives – infill development in vacant or underutilized sections of Mixed-Use Corridors.

- **Policy CD7.4:** Developments in Mixed-Use Corridors should have pedestrian-friendly property frontages with buildings built close to the street frontage.

- **Policy CD8.1:** New developments should be designed to provide direct and convenient access to nearby parks, trails, commercial and public services, and transit stops.

- **Policy CD8.2:** Valley Neighborhood developments and residential portions of Employment Village areas shall provide relatively short block lengths and continuity of streets in order to facilitate convenient pedestrian, bicycle, and vehicle movement.

- **Policy CD17.1:** New developments shall be designed to facilitate safe and convenient travel by pedestrians, bicyclists, transit users, and drivers.

- **Policy CD17.2:** The County will coordinate approval of projects and plans with local transit providers to ensure that transit service is provided for work, shopping, school, and other types of trips within the Valley Growth Boundary.

- **Policy CD17.3:** The County will coordinate with Yuba College to provide housing and commercial services within walking and bicycling distance of the Linda campus and plan for convenient and safe pedestrian, bicycle, and transit options for students attending Yuba College.

- **Policy CD17.4:** The County will provide incentives to businesses that sponsor transit routes or create their own travel demand management programs, which may include, but are not limited, to streamlined permitting, and reduction of parking requirements.

- **Policy CD19.1:** The County will promote mixed-use, infill development and redevelopment in order to reduce dependence on the private automobile.

- **Policy CD19.4:** The County will plan its investments and condition new developments to provide pedestrian, bicycle, and transit facilities designed to provide multi-modal connections within neighborhoods, within unincorporated communities, and between communities and cities in the County.

- **Policy CD19.5:** New developments shall include the construction or pro-rata funding of transportation infrastructure that includes a connected and integrated system of bicycle and pedestrian facilities.

- **Policy CD19.6:** New development shall accommodate safe and frequent crosswalks along roadways, with more frequent crossings in areas expected to have higher pedestrian traffic.

- **Policy CD19.10:** The County will collaborate with Yuba-Sutter Transit and other regional transit providers to ensure transit stops are accommodated in the context of new development and redevelopment.

- **Policy CD20.2:** New developments in the Valley Growth Boundary shall arrange roads in an interconnected block pattern, so that local pedestrian, bicycle, and automobile traffic do not have to use Arterials to circulate within the neighborhood. The maximum average block length in new subdivisions approved in the Valley Growth Boundary should be approximately 450 feet. Smaller block sizes should be used around Neighborhood Centers, Community Centers, and Employment Centers.

- **Policy CD20.7:** The County will seek frequent street and trail connections between new residential developments and established Valley Neighborhoods.

Conclusion

With the energy efficient design elements and energy conservation measures included in the 2030 General Plan, including ongoing cooperation with PG&E and local agencies the produce or manage renewable energy production, and with implementation of State building and energy efficiency standards, development under the

2030 General Plan would not result in inefficient, excessive, or unnecessary consumption of energy. The impact is **less than significant**.

Mitigation

No mitigation is required.

IMPACT 4.15-2 **Increased Energy Demand and Need for Additional Energy Infrastructure.** *Implementation of the2030 General Plan would increases energy demand and would result in the need to extend services and infrastructure to new users in Yuba County. Policies of the 2030 General Plan, as well as existing regulations and project-level review would reduce energy demand. However, the future energy demand would require construction and operation of energy-related facilities that would have* ***potentially significant*** *impacts.*

Projects accommodated under the 2030 General Plan would lead to increased population, housing, non-residential development, and jobs in the unincorporated County. This land use change would, in turn, increase the need for energy and communication infrastructure. Energy demand would be anticipated to increase for the unincorporated County during implementation of the 2030 General Plan. Energy is consumed for heating, cooling, and electricity in homes and businesses; for public infrastructure and service operations; and for agriculture, resource extraction, industry, commercial, and a variety of rural uses.

PG&E, the utility that currently supplies the County with electricity and natural gas services, periodically updates its "load" forecasts to ensure the reliability of its electricity and gas services. As implementation of the 2030 General Plan would occur over a 20 year period, the projected incremental electric and gas demand would be incorporated into PG&E's forecasts.

The demand for and use of energy within unincorporated Yuba County would occur with implementation of the 2030 General Plan. Buildout under the 2030 General Plan would result in increased electricity demand from approximately 282 million kWh per year to 348 million kWh per year by 2030, or an increase of 23.4% over 2008 levels. The natural gas demand under buildout of the 2030 General plan is estimated to increase approximately 1.0 million Therms per year, or 12.5% between 2008 and 2030 (Table 4.15-2).

Table 4.15-2
Energy Demand

Energy	2008	2020	2030	% Change 2008 to 2030
Electricity (kWh per year)	282,000,000	318,000,000	348,000,000	23.4
Natural Gas (Therms per year)	8,000,000	8,000,000	9,000,000	12.5

Note: Industrial natural gas demand growth rates assumed to be the same as commercial natural gas demand growth rates.
Source: Current demand data from John Bohman, PG&E, Personal correspondence to George Lu, AECOM, March 25, 2010.
Source: Growth rates from Energy Information Administration. 2010. Pacific Region. Available: http://www.eia.doe.gov/oiaf/aeo/supplement/supref.html

Actual electricity demand would vary substantially according to the types of operations within buildings, type of construction materials used in a building, whether buildings are reused or built anew, the efficiency of all electricity consuming devices within a building, and the local climate.

Private and public purveyors of energy resources, including Pacific Gas & Electric (PG&E), which provides electricity and natural gas to Yuba County, have established energy conservation programs to encourage consumers to adopt energy conservation habits, install energy efficient appliances in their homes, and reduce energy consumption during peak demand periods.

As growth occurs in accordance with the 2030 General Plan, new development will require additional electric infrastructure including new distribution lines and transformers. Individual development projects proposed in accordance with the 2030 General Plan will be required to assess project impacts during the environmental review process to ensure that PG&E has sufficient electric supplies and infrastructure to meet demand. The size, location, and types of facilities required to serve development is not knowable at this time, but would be determined in the context of development proposals.

PG&E would also be involved with new developments and projects proposing to construct additional natural gas infrastructure as necessary to meet demand pursuant to implementation of the 2030 General Plan. Individual development projects proposed in accordance with the 2030 General Plan will be required to assess project impacts during the environmental review process to ensure that PG&E has sufficient natural gas supplies and infrastructure to meet demand. Gas mains and distribution pipelines would be required in order to serve the needs of new development. The size, location, and types of facilities required to serve development is not knowable at this time, but would be determined in the context of development proposals.

Relevant Policies and Actions of the 2030 General Plan

Policies and actions of the 2030 General Plan would assist Yuba County in providing efficient and reliable electricity and natural gas service. The 2030 General Plan includes the following policies and implementation strategy to reduce energy demand and the associated need for infrastructure extensions:

- **Policy NR7.1:** New developments shall address energy conservation in landscaping methods, materials, and design.
- **Policy NR7.2:** New buildings shall meet state standards for energy efficiency and should provide for renewable energy development and use, to the greatest extent feasible.
- **Policy NR7.3:** New developments should be designed to take advantage of passive or natural summer cooling and winter solar access.
- **Policy NR7.4:** New developments should provide street and lot orientation and lot dimensions that facilitate the use of solar energy.
- **Policy NR7.5:** New developments within the Valley Growth Boundary should orient the majority of buildings so that the longer axis of the building, also known as the ridge line, is oriented east-to-west, in order to maximize the potential for passive solar heating in the winter and to minimize heat gain from the afternoon summer sun.
- **Policy NR7.6:** New developments should consider energy conservation in building-site orientation and construction, with articulated windows, roof overhangs, appropriate insulation materials and techniques, and other architectural features that improve passive interior climate control.
- **Policy NR7.7:** Shade trees or other appropriate plantings should be used in new developments to protect buildings from unwanted solar gain in summer months. Using deciduous trees on the southern side of structures is encouraged to allow cooling in the summer and solar gain in winter. Short front setbacks are encouraged to allow shade trees planted in the public right-of-way to provide summertime shading.
- **Policy NR7.8:** New buildings should emphasize passive and natural lighting systems in architectural design to conserve electricity.
- **Policy NR7.10:** The County will seek regional, state, and federal funding for making energy efficiency improvements to existing buildings on a voluntary basis with interested property owners and improvements to the public realm.

- **Policy NR7.11:** The County and Yuba County Water Agency should explore opportunities related to future access to hydroelectric power, energy provision, strategic use of local energy resources for employment development, and other programs that have dual environmental-economic benefits.

- **Policy NR7.12:** The County will encourage financing programs designed to facilitate the installation of renewable energy systems.

- **Action NR7.1: Energy Efficiency Retrofits in Buildings and the Public Realm.** The County will proactively track and apply for regional, state, and federal funding to be used for energy efficiency improvements and renewable energy systems installation in existing buildings and the public realm (public rights-of-way, etc.). The County will seek regional, state, and federal funding for energy efficient systems, energy-efficient appliances, insulation, energy-efficient doors and windows, and other improvements. Any programs to assist property owners with making energy efficiency improvements to their buildings or other property shall be on a voluntary basis with interested property owners only. The County will update zoning and development standards, as well as permit processes to encourage the use of renewable energy systems that are sited and designed to ensure public safety and reduce aviation conflicts.

    - Related Goals: Goal NR2, Goal NR7, Goal CD15, Goal HS5
    - Agency/Department: Administrative Services
    - Funding Source: Grant funding, low-interest loans, impact fees, General Fund, and other appropriate funding sources
    - Time Frame: Ongoing, as funding is available

The 2030 General Plan includes the following policies and implementation strategy to ensure that energy infrastructure is coordinated and provided as development occurs:

- **Policy CD13.1:** Growth should be phased from developed areas and existing infrastructure outward in a logical, efficient manner, and in a way that avoids premature conversion of agricultural lands, changes in rural character, and unnecessary loss of other land-based natural resources.

- **Policy CD13.2:** The County will not induce growth by supporting the provision of services or infrastructure in areas that are not planned for development.

- **Policy CD14.1:** The County will support regional electricity, water, wastewater, water conservation, and other agreements, where cost-effective and environmentally sustainable.

- **Policy CD14.4:** The County will coordinate with special districts, cities, LAFCo, SACOG, Caltrans, joint powers authorities, and other relevant agencies to provide efficient local and regional infrastructure, public facilities, and public services.

- **Policy CD15.2:** New developments shall provide for their fair-share cost of providing infrastructure, facilities, and services to serve such development.

- **Policy CD15.3:** New developments will be required to designate lands in appropriate locations, sizes, and free of constraints to accommodate public facilities and infrastructure needed to serve such development and/or pay a fair-share fee for land acquisition.

- **Policy CD15.12:** The County will require any proposed electrical transmission lines to be located and designed in a way that reduces agricultural and other environmental impacts.

Conclusion

The policies described above would reduce local energy demand and would promote opportunities for increased production in ways that reduce the depletion of non-renewable resources. Additionally, 2030 General Plan policies would ensure that energy infrastructure is coordinated and planned as growth occurs. Federal, state, and local regulations and policies would be implemented and would ensure that sufficient energy supplies are available to serve the needs of the County. The development and operation of energy facilities would be subject to 2030 General Plan policies and actions intended to reduce aesthetics, air quality, biological, climate change, cultural, noise, hydrology, geology and soils, and other impact areas would also apply to new construction, expansion, and extension of local energy facilities. However, energy use and demand would substantially increase as a consequence of future growth associated with implementation of the 2030 General Plan. The construction of new energy facilities and the operation of energy production facilities to support 2030 General Plan development is anticipated to have **potentially significant** impacts.

Technical sections of this EIR evaluate the effects of construction activities relative to specific environmental issue areas, such as biological resources, air quality, etc., at a programmatic level of detail, as is appropriate for a general plan. These sections comprehensively address direct impacts of 2030 General Plan implementation, as well as indirect effects related to changes needed to support General Plan implementation, such as the construction and operation of new energy facilities.

The 2030 General Plan includes policies and actions, and this EIR includes mitigation measures, where necessary, to reduce or avoid impacts. Please refer to the topic-specific subsections of Section 4.0 of this EIR for more information.

The County's policies and actions referenced throughout this EIR would reduce impacts associated with construction and operation of needed energy facilities. By adhering to the policies proposed in the 2030 General Plan, as well as all applicable State and federal requirements pertaining to energy facilities construction and operation, impacts associated with construction and operation of energy facilities to meet 2030 General Plan demands would be reduced.

Despite mitigating policies and actions and the application of necessary mitigation measures, construction and operation of new or expanded energy production and delivery facilities may result in significant environmental effects.

Mitigation Measure

No mitigation beyond compliance with State and federal regulations and incorporation of 2030 General Plan policies and actions is available. The County has included throughout the 2030 General Plan all feasible measures available to mitigate such impacts. The impact is considered **significant and unavoidable**.

5 ALTERNATIVES TO THE PROPOSED PROJECT

5.1 INTRODUCTION

An EIR is required to contain a discussion and analysis of a reasonable range of alternatives to the project, or to the location of the project, that could feasibly attain the basic project objectives (State CEQA Guidelines Section 15126.6[a]). Section 15126.6(a) of the State CEQA Guidelines requires EIRs to describe:

> "…a range of reasonable alternatives to 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."

The State CEQA Guidelines further require that the alternatives be compared to the proposed project's environmental impacts and that the "no project" alternative be considered (CEQA Guidelines Section 15126.6[e]). In defining "feasibility" (e.g., "…feasibly attain most of the basic objectives of the project…"). State CEQA Guidelines Section 15126.6(f)(1) states, in part:

> 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.

The environmental impacts of alternatives are required to be compared to the proposed project's environmental impacts. This process helps decision makers to consider whether a different project design, location, or other variation on the proposed project would have environmentally superior results. The CEQA Guidelines provide guidance on defining and analyzing alternatives (Section 15126.6[b]):

> "… 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."

5.1.1 PROJECT OBJECTIVES

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in CEQA Guidelines Section 15126.6(a). As noted elsewhere in this EIR, the "project," as described in the CEQA guidance summarized above, is the 2030 General Plan. As noted in Section 3 of this EIR, "Project Description," the General Plan objectives include:

- Proactively direct long-term development in the unincorporated County according to the General Plan Update Vision, Goals, and Strategies.
- Revitalize existing communities, neighborhoods and primary transportation corridors.

- Offer a variety of housing types to meet "lifecycle" needs (young adulthood through retirement), freedom of choice, and affordability to local workers.
- Protect agricultural lands, rural landscapes, air and water quality, and natural resource areas that prove to be positive characteristics of Yuba County.
- Strive for a balance between jobs and housing—both numerically and demographically—by promoting jobs for our residents.
- Promote and encourage new commercial and industrial development to balance the recent residential development, generate revenues, and create local jobs and services for residents.
- Through efficient infrastructure planning and prudent financing mechanisms, keep impact fees as low and competitive as possible in order to attract employment opportunities to the County.
- Promote existing growth areas as the engines of the economy by focusing on existing cities, downtown areas, and primary corridors.
- Continue to promote our recreational and tourism opportunities.
- Encourage retail, services, and jobs conveniently located for residents in order to reduce travel demand, reduce vehicle miles traveled and associated air pollution, lower household transportation costs, and reduce transportation infrastructure costs.
- Encourage the ability for future incorporation and/or annexation of unincorporated areas by establishing realistic and manageable growth boundaries.
- Focus on build out of the partially built existing specific plans and promote modification to those plans consistent with the vision and goals of the General Plan when opportunities arise.
- Preserve foothill community boundaries that will continue to enhance and allow for open space, grazing lands, deer herds and oak woodlands which define the rural character of the foothills and the County as a whole.
- Guide long-term development and conservation within the County's rural communities, in order to make them more environmentally and economically sustainable places.
- Protect prime agricultural lands, rural landscapes, and other natural resources.

5.2 ALTERNATIVES EVALUATED IN THE GENERAL PLAN UPDATE PROCESS

During the process of updating the County's General Plan, there were two distinct sets of alternatives considered by the public and decision makers. These alternatives analyses are summarized below.

5.2.1 GENERAL PLAN ALTERNATIVES

The County considered a range of land use and circulation alternatives for the 2030 General Plan. This process touched on many environmental issues, although social and economic issues were also involved. The discussion of 2030 General Plan alternatives is distinct from the alternatives analysis presented in this EIR, although there may be overlap with certain concepts examined during the Update process. Like the General Plan alternatives, the

EIR alternatives involve different amounts of land subject to development. Both sets of alternatives include different levels growth (in terms of population and employment added).

The primary difference between General Plan and EIR alternatives has to do with their purpose. General Plan alternatives are designed to create contrast among various development and conservation concepts for the purpose of exploring different policy directions and emphasis early in the General Plan process. General Plan alternatives provide the platform for a wide ranging discussion of pros and cons of different conceptual approaches to managing land use change, resource conservation, transportation, local economy, and other key General Plan policy topics. EIR alternatives are developed specifically to address, and reduce, potentially significant impacts of the proposed project (in this case, the 2030 General Plan).

5.2.2 GENERAL PLAN EIR ALTERNATIVES

The focus for alternatives analysis in this EIR is whether different locations, amounts, or design of development would reduce potentially significant impacts attributable to the project. The County has considered a range of alternatives designed to reduce one or more potentially significant impacts associated with General Plan implementation. Exhibits in this section conceptually depict EIR alternatives. Please refer to Table 5-1, below, which summarizes development potential under each alternative and the 2030 General Plan. Please refer to the Project Description section of this EIR (Section 3) for a narrative description and graphic illustration of the 2030 General Plan.

The 2030 General Plan could add between 74,000 and 100,000 residents, 29,700 to 40,400 housing units, and 50,000 to 67,000 jobs. Alternative 1 has the second highest assumptions with regard to new population and employment, followed by Alternative 4. Alternative 2 and 3 have the lowest assumptions relative to new population and employment.

Table 5-1
Population and Jobs Added per Alternative

Alternative	Population Added	Housing Units Added	Jobs Added
2030 General Plan	74,000–100,000	29,700–40,400	50,000–67,000
1 – No Project	80,000–90,000	34,000–35,000	40,000–50,000
2 – Growth Scenario 1	28,000–32,000	14,000–15,000	14,000–16,000
3 – SACOG Blueprint	15,000–17,000	6,000–8,000	18,000–19,000
4 – Growth Scenario 2	36,000–45,000	16,000–17,000	21,000–25,000

- **Alternative 1. No Project: Buildout of the 1996 General Plan.** This alternative assumes that the 2030 General Plan would not be implemented and instead the County would build out as provided in the 1996 General Plan.

- **Alternative 2. Growth Scenario 1.** This alternative would have a smaller, more compact overall development footprint compared to the 2030 General Plan. This alternative describes land use change that would be anticipated for unincorporated areas if the county grew at a rate similar to high growth rates experienced in places such as Placer County during the 1990s and between 2000 and 2009. Development under this alternative would occur in areas with access to existing water, wastewater, transportation, and drainage facilities. This alternative would place a higher proportion of housing within close proximity to destination land uses, such as retail, services, and jobs. With the more compact footprint and a greater focus on infill development and redevelopment, public transit, bicycling, and walking will be viable for a greater proportion of residents for meeting daily travel needs.

- **Alternative 3. Blueprint Preferred Alternative.** The Sacramento Area Council of Governments (SACOG) Board of Directors adopted the Blueprint Preferred Scenario in December 2004. The Blueprint represents an approach to land use and transportation investments that promotes more compact, mixed-use development, access to transit, improves air quality, and preserves open space, as an alternative to low-density and dispersed development patterns. SACOG used the Blueprint Preferred Scenario to guide preparation of the 2035 Metropolitan Transportation Plan, which identifies priority regional transportation investments. This alternative is guided by the level and mix of development in unincorporated Yuba County included in the Blueprint Preferred Scenario. Relative to the project, this alternative includes a reduced amount of population and employment growth. The land use mix with this alternative is similar to the 2030 General Plan. This alternative reduces the overall footprint of development compared to the 2030 General Plan.

- **Alternative 4**. **Growth Scenario 2.** Like Alternatives 2 and 3, this alternative would have a smaller, more compact overall development footprint compared to the 2030 General Plan. This alternative describes land use change that would be anticipated for unincorporated areas if the county grew at a high rate between present and 2030, including buildout of some areas along the Highway 65 corridor between Ostrom Road and South Beale Road.

5.3 ALTERNATIVES REJECTED FOR FURTHER EVALUATION

Although the County considered a variety of approaches to land use and transportation as a part of the General Plan Update process, there were no other alternatives specifically developed for consideration in the context of this EIR. As discussed below, the alternative selected by the County represent a reasonable range designed to reduce or avoid a range of potentially significant impact associated with the 2030 General Plan.

5.4 ALTERNATIVE 1. NO PROJECT (1996 GENERAL PLAN)

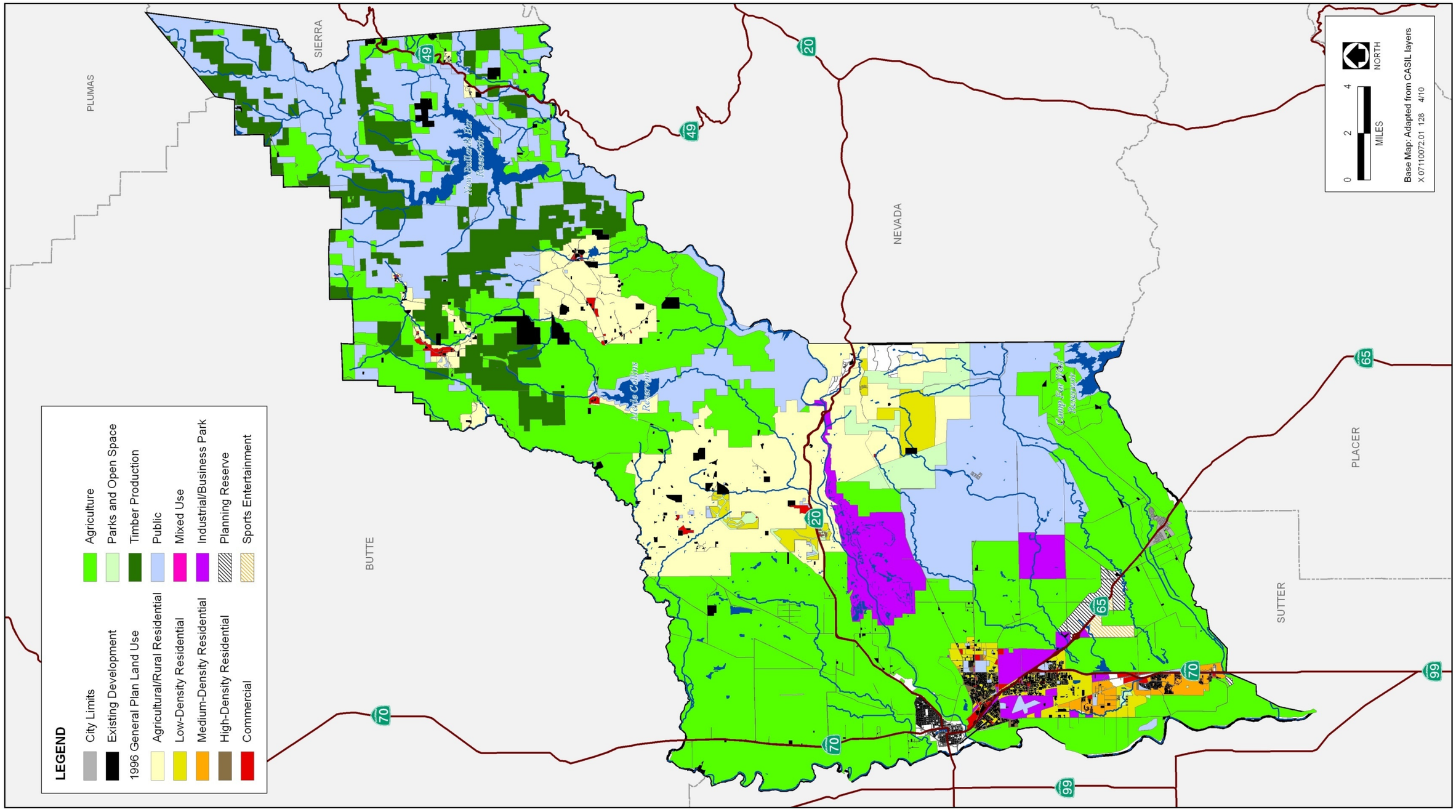
The No Project Alternative (Alternative 1) assumes that the 2030 General Plan would not be implemented, and that the County would build out as anticipated under the existing 1996 General Plan. Alternative 1 would add 80,000 to 90,000 residents and 34,000 to 35,000 housing units to the unincorporated County.[1]

This alternative includes very large areas of land for employment development. The total number of jobs would depend on the County's ability to attract employment based on local advantages (labor, markets, energy, water, etc). However, for the purposes of this analysis, it is assumed based on the 1996 General Plan that this alternative could accommodate as many as 40,000 to 45,000 new jobs at full buildout.

The 1996 General Plan was designed to allow development in most of the County's unincorporated urban and rural communities (see Exhibit 5-1), including a series of Community Boundary Areas (CBA), Community Plan Areas, and Specific Plan areas. Voters also approved the "Sports and Entertainment Zone," for expansive sports, entertainment, and related uses. Plan areas include:

- Rackerby CBA,
- Camptonville CBA,
- Log Cabin CBA,
- Brownsville-Challenge CBA,
- Oregon House-Dobbins CBA,
- Loma Rica-Browns Valley CBA,
- Wheatland CBA,
- River Highlands Community Plan,

[1] This estimate does not include growth in Wheatland, since these alternatives are focused on addressing impacts of unincorporated county growth. Please refer to Chapter 6.0 of this EIR, which comprehensively addresses cumulative impacts, including those related to Wheatland growth.



Source: Yuba County GIS 2007, Adapted by AECOM 2010

Alternative 1, No Project Alternative (1996 General Plan) **Exhibit 5-1**

- Olivehurst Avenue Specific Plan,
- East Linda Specific Plan,
- North Arboga Study Area,
- Plumas Lake Specific Plan (as amended), and
- Spring Valley Specific Plan.

This alternative involves a greater amount of land subject to development in the rural and foothills portions of the County compared to the proposed 2030 General Plan, due mostly to the large areas in the River Highlands Community Plan Area identified for development.

Most of the Highway 65 corridor had already been identified by the 1996 General Plan for development, although the No Project Alternative has a smaller area identified as "Planning Reserve" along the Highway 65 corridor compared to the 2030 General Plan. The 1996 General Plan also included a large area north of the Highway 65 corridor for "Research and Development" use, which is not included in the 2030 General Plan.

5.5 ALTERNATIVE 2. GROWTH SCENARIO 1

Alternative 2 was developed to analyze the impacts of development of portions of the Valley Growth Boundary closest to existing infrastructure and development. Relative to the 2030 General Plan, this alternative would have a smaller development footprint and would assume roughly the same gross density and land use mix as the 2030 General Plan. Both this alternative and the 2030 General Plan would accommodate the full range of housing types mixed in with destination uses, such as schools, small parks, neighborhood-serving retail and services, a wide range of public and quasi-public uses, and professional offices. This alternative would also include schools, parks, and other supportive land uses located throughout the developed portions of the County.

This alternative was designed to reduce the impacts associated with construction of utilities and facilities needed to serve growth. Alternative 2 was also designed as a way to reduce impacts related to greenhouse gas emissions. This alternative was also meant to reduce conversion of agricultural land, reduce air quality and noise impacts from transportation, and impacts related to aesthetic changes to rural open space areas, biological resource impacts, exposure of structures and people to areas of high wildfire risk, impacts to potentially sensitive cultural resource areas, and impacts to water quality and hydrology.

Consistent with the County's project objectives for the 2030 General Plan, land use change assumptions were developed to ensure that future development needs could be accommodated under a land use diagram to implement Alternative 2. The County assumes Alternative 2 would grow at approximately 1.74% annually between present and 2030 (see Exhibit 5-2). While this alternative would accommodate a very high growth rate, the overall amount of development would be substantially less than what is anticipated under full buildout of the 2030 General Plan. In order to settle on an assumed growth rate for this alternative, the County examined its own growth rate. Between 1990 and 2009, the County grew at an average rate of 1.53%. The County also examined growth rates of nearby and comparable counties, including: Butte; El Dorado; Kings; Madera; and Placer. Among these counties, Placer had the highest growth rate between 1990 and 2009 **(1.74%).**

To ensure this alternative can address future growth needs, the County selected this highest comparable growth rate – 1.74% for the purposes of analysis under this alternative. With this growth rate, Alternative 2 would add 15,000 to 16,000 people to unincorporated Yuba County by 2020 and between 28,000 and 32,000 people by 2030.

The Sacramento Area Council of Governments (SACOG) has released draft population and employment projections for 2020 and 2035 (CCSCE and SACOG 2010). The six-county region expects to add 350,159 people between 2008 and 2020. Growth between 2020 and 2035 is expected to increase, with the region expected to add 908,732 between 2020 and 2035. Unincorporated Yuba County accounted for 2.36% of the total SACOG region population in 2008. If the unincorporated County has the same share of projected growth as its share of the current regional population, there would be 8,270 people added by 2020 and 21,463 people added between 2008

and 2035. If the unincorporated County captured 20% more of regional growth than its current share of the population, there would be 25,756 people added between 2008 and 2035. If the unincorporated share of growth were 30% above the existing population share, the County would add 27,902 people to unincorporated areas between 2008 and 2035. As noted, this share of growth (roughly 30,000 people added between 2008 and 2035) is similar to that calculated above using an ambitious assumed linear growth rate through 2030.

The County also examined jobs/housing ratios for a wide range of counties – some with greater proportions of rural development, some with urbanizing unincorporated areas (like Yuba County), and some with existing established urbanized unincorporated areas (also like Yuba County). Counties examined included: Napa; Sacramento; Placer; Sonoma; San Joaquin; Stanislaus; Imperial; Shasta; Solano; Kings; Tulare; Butte; Madera; Merced; El Dorado; Nevada; Lake; and Kern. The median number of jobs to housing units in these counties is 1.01. The average jobs/housing ratio is 0.95. The average plus one standard deviation is 1.15.[2] Reflective of the County's General Plan goals, this alternative uses the highest of these options for a jobs/housing ratio – 1.15. Assuming this jobs/housing ratio for new growth, the County would add roughly 6,000–8,000 jobs between present and 2020 and 14,000–16,000 jobs between present and 2030. The assumption for employment growth, as with population growth, is for the purposes of alternatives analysis. Neither the 2030 General Plan, nor this alternative is attempting to predict future growth. The County is intentionally providing some surplus in the 2030 General Plan in order to avoid artificially bidding up land costs to accommodate growth needs during this time horizon. This alternative is also designed to accommodate growth needs in the unincorporated County without trying to predict exactly where and how much growth may be realized between now and 2030.

5.6 ALTERNATIVE 3. SACOG BLUEPRINT PREFERRED SCENARIO

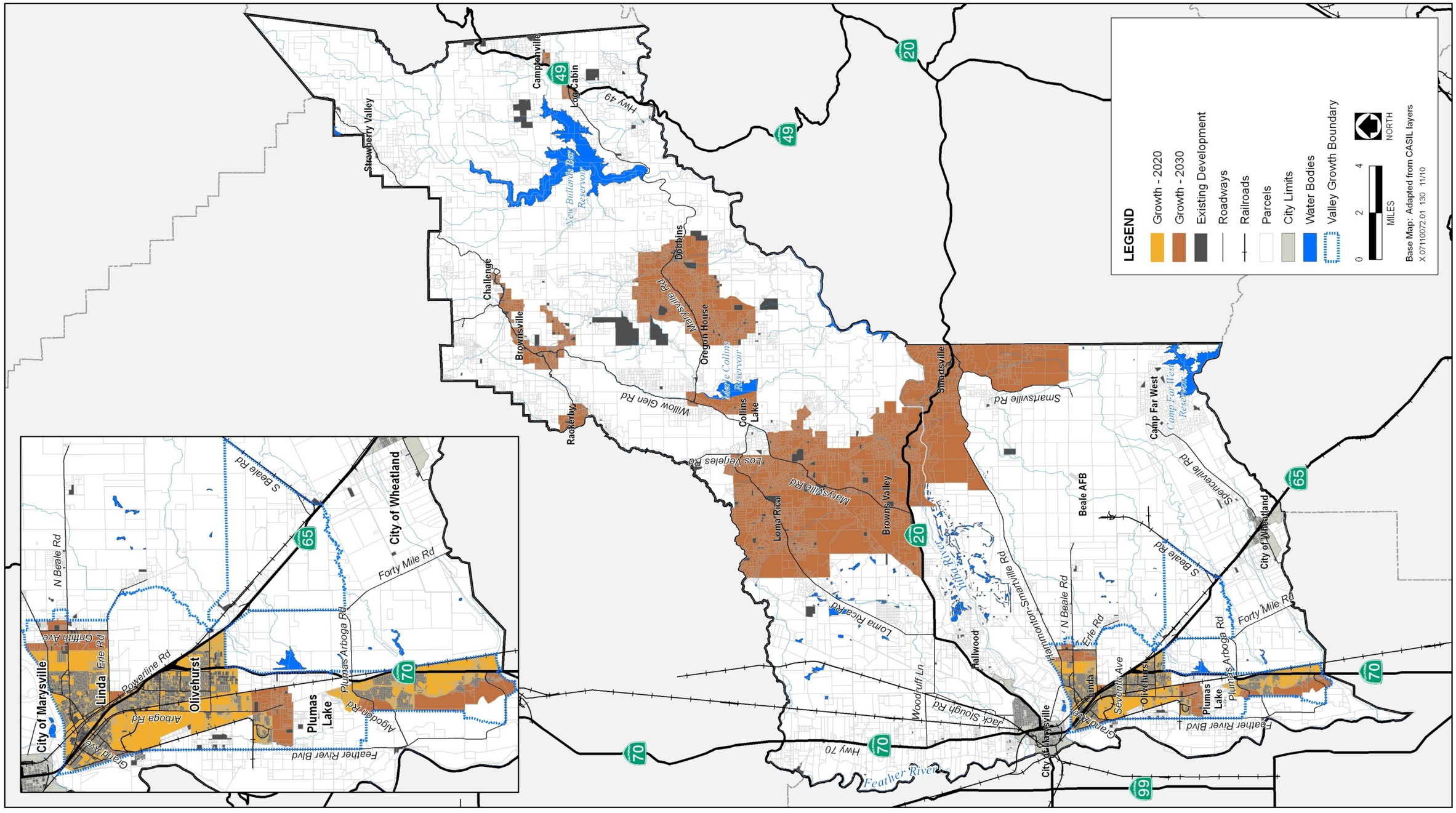
Alternative 3 was developed to analyze the differential environmental impacts that would result if the County were to develop consistent with the level and mix of development identified for unincorporated areas under the SACOG Blueprint Preferred Scenario. This alternative assumes a total added population of 15,000 to 17,000. This alternative assumes the addition of approximately 18,000 to 19,000 jobs (see Exhibit 5-3).

Relative to the 2030 General Plan, this alternative would have a smaller development footprint and would assume roughly the same gross density as with the 2030 General Plan. This alternative was designed to reduce the impacts associated with construction of utilities and facilities needed to serve growth. Alternative 3 was also designed as a way to reduce air quality impacts (including those attributable to greenhouse gas emissions). This alternative was also meant to reduce conversion of agricultural land, reduce noise impacts from transportation, and reduce impacts related to aesthetic changes to rural open space areas.

This alternative was designed to reduce the impacts associated with construction of utilities and facilities needed to serve growth. Alternative 3 was also designed as a way to reduce the impacts of population growth in excess of regional air quality attainment planning and metropolitan transportation planning efforts and reduce effects related to greenhouse gas emissions. This alternative was also meant to reduce conversion of agricultural land, reduce air quality and noise impacts from transportation, and reduce impacts related to aesthetic changes to rural open space areas. This alternative was also selected to reduce impacts related to biological resource impacts, exposure of structures and people to areas of high wildfire risk, potentially sensitive cultural resource areas, and water quality and hydrology.

To develop this alternative, the County consulted data summaries from SACOG on housing units, relative levels of infill versus greenfield development, jobs, mix of housing types, mix of job types, and other key statistics. The County also considered conceptual diagrammatic representations of the Blueprint Preferred Scenario. However, since the Blueprint Preferred Scenario is not a land use plan per say, the County's design of this alternative varies somewhat from the visual depiction of the Blueprint Preferred Scenario for the unincorporated County published

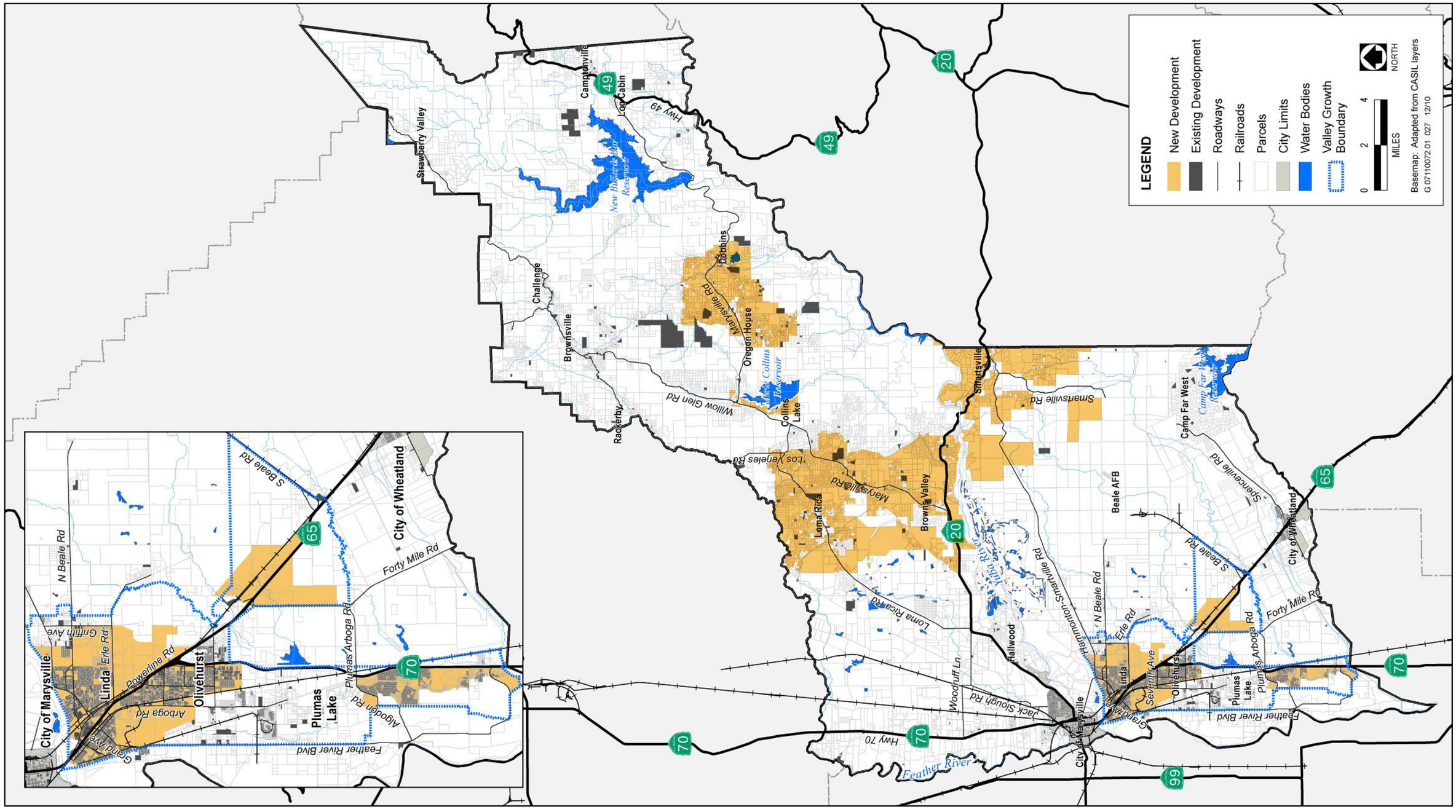
[2] "Standard deviation" is a statistical measure of the dispersion of a set of data. In this case, the County determined the average spread of jobs to housing ratios and added this to the average jobs-housing ratio of these comparison counties. This statistical application is designed to ensure that this alternative would analyze a high, but reasonable jobs-housing ratio.



Source: Yuba County GIS 2007, Adapted by AECOM 2010

Alternative 2, Growth Scenario 1

Exhibit 5-2



Source: Yuba County GIS 2007, Adapted by AECOM 2010

Alternative 3, SACOG Blueprint Preferred Scenario

Exhibit 5-3

in SACOG documents. Adjustments were made to the Preferred Scenario diagram to create better consistency between this alternative and the project objectives, and to create a more meaningful comparison between the project (2030 General Plan) and this alternative. Also, since the Blueprint Preferred Scenario land use change estimates are for 2050, further adjustments were needed to make this alternative more comparable with the Blueprint Preferred Scenario at 2030.

The Blueprint Preferred Scenario for unincorporated Yuba County includes a similar level of development. The Blueprint Preferred Scenario provided estimates of housing and job growth for Plumas Lake and the rest of the unincorporated County. The Blueprint Preferred Scenario included 29,984 new jobs and 17,791 new housing units between 2000 and 2050. For the purposes of drafting Alternative 3, the actual development activity between 2000 and 2010 was taken into account. The balance of Blueprint Preferred Scenario growth was calculated on a pro-rata basis for the General Plan horizon (present through 2030). The resulting level of population and employment growth was applied to estimates of development capacity in Yuba County to identify geographic areas within the County that would be subject to land use change under this alternative.

5.7 ALTERNATIVE 4. GROWTH SCENARIO 2

Relative to full buildout of the 2030 General Plan, this alternative would have a smaller overall development footprint. However, with inclusion of new growth areas along the Highway 65 corridor, the development pattern in this Alternative would be less compact compared to Alternatives 2 and 3, and would require substantial infrastructure extension and expansion beyond that needed under Alternatives 2 or 3.

Alternative 4 was designed to reduce conversion of agricultural land, reduce air quality and noise impacts from transportation, and impacts related to aesthetic changes to rural open space areas, biological resource impacts, exposure of structures and people to areas of high wildfire risk, impacts to potentially sensitive cultural resource areas, and impacts to water quality and hydrology.

Alternative 4 was developed to analyze the differential environmental impacts that would result if the County were to experience high and sustained rates of growth through 2030. This alternative assumes that between present and 2030, the unincorporated County would add between 36,000 and 45,000 people and between 21,000 and 25,000 jobs. The very ambitious growth assumptions outlined in Alternative 2 were incorporated also into Alternative 4. In addition, some areas along the Highway 65 corridor between South Beale Road and Ostrom Road were assumed to develop (see Exhibit 5-4).

The overall land use mix in Alternative 4 is similar to that in the 2030 General Plan. Both Alternative 4 and the General Plan are designed to accommodate the full range of housing types mixed in with destination uses, such as schools, small parks, neighborhood-serving retail and services, a wide range of public and quasi-public uses, and professional offices. Destination land uses would be located and designed to be convenient to the local population. Alternative 4, as with the 2030 General Plan, would have schools, parks, and other supportive land uses located throughout the developed portions of the unincorporated County.

5.8 ALTERNATIVES EVALUATION

This is a program EIR, which evaluates the overall impacts of implementation of the 2030 General Plan. The analyses presented throughout Chapter 4 of this EIR do not examine the effects of site-specific projects that may occur within the overall umbrella of this program in the future. The nature of general plans is such that many proposed policies are intended to be general, with details to be worked out during implementation. As a result, many of the impacts and mitigation measures in this EIR can be described only in general or qualitative terms.

The alternatives analysis is less detailed still, compared to the analyses presented throughout Chapter 4, consistent with CEQA Guidelines Section 15126.6. The analysis that follows compares a series of alternatives to the impacts of the 2030 General Plan to allow for a meaningful evaluation, but not at an equal level of analysis as that

provided throughout the balance of this EIR for the 2030 General Plan. Although a matrix format would be sufficient under the CEQA Guidelines [Section 15126.6(d)], the analysis presented below is in narrative format and is more detailed than is minimally required. Where a certain grouping of alternatives would have similar impacts relative to the 2030 General Plan, these impacts are grouped together and discussed in a single paragraph.

5.8.1 AESTHETICS

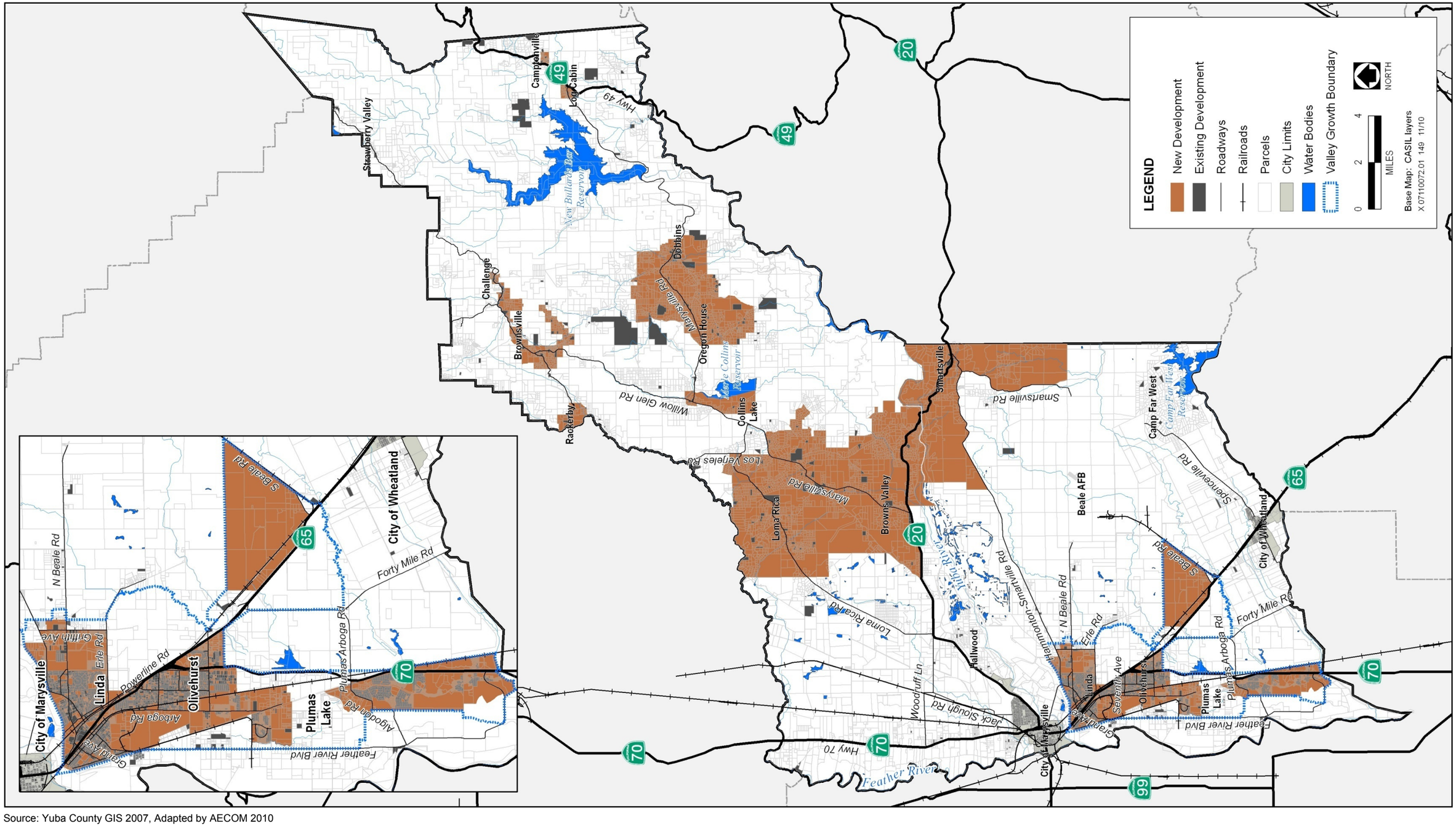
Grassland, riparian forests, oak woodlands, and agricultural landscapes are important scenic resources in the County, as recognized in both the existing 1996 General Plan and the 2030 General Plan. Yuba County contains varying topography and land cover that provides many different types of views and scenic vistas. Prominent aesthetic resources visible within Yuba County include the Sutter Buttes, Sierra Nevada foothills and mountains, the valley floor, expansive agricultural lands, rivers and river valleys, and lakes and reservoirs.

Development under the 2030 General Plan would result in significant and unavoidable impacts to aesthetic resources as a result of land conversion from land to urban uses in the valley portions of the County, the expansion of rural communities onto grasslands and oak woodlands in the foothill and mountain areas, and the introduction of sources of light and glare. Future development anticipated under the 2030 General Plan could potentially block or result in changes to certain scenic views.

Alternative 1 would result in a slightly greater impact to important visual resources, such as the County's agricultural land and riparian forests, compared to the 2030 General Plan. Additionally, Alternative 1 would have a more dispersed development footprint with a greater amount of overall acreage of land subject to development, including rural and foothill portions of the County, where there are important visual resources today. Alternative 1 would have similar impacts to the 2030 General Plan with regard to blockage of scenic views as experienced from public rights-of-way. While the 2030 General Plan would add areas for development along the State Route 65 corridor, which could block certain views of the Sutter Buttes and the Sierra Nevada foothills that would not be blocked under Alternative 1, Alternative 1 includes a greater level of development in areas between State Route 20 and Beale Air Force Base, where scenic views may be available today along public rights-of-way. With a similar level and extent of development, light and glare impacts would be similar between Alternative 1 and the 2030 General Plan. Impacts to aesthetic resources would be significant and unavoidable under Alternative 1, as with the 2030 General Plan.

Alternative 2 would result in a similar acreage impact to oak woodlands as the 2030 General Plan, but would have a reduced impact on annual grasslands. Alternative 2 would have a more compact footprint than the 2030 General Plan, which would result in less visual intrusion into woodland and grassland areas, which represent important visual resources of the County. Alternative 2 would also reduce impacts related to blockage of existing views that may be considered scenic by the public, with the reduced development footprint and reduced level of development along public rights-of-way. Similarly, the substantially reduced development footprint and overall level of development light and glare impacts would be reduced, as compared with the 2030 General Plan. While the overall impact to visual resources would be reduced under Alternative 2, impacts to aesthetic resources would remain significant and unavoidable.

Alternative 3 would have a reduced impact on aesthetic resources compared to the 2030 General Plan, because it would have a smaller development footprint and would focus new development in areas adjacent to existing development. The strategy of focusing land use change adjacent to already developed areas would reduce impacts to visual resources such as agricultural landscapes, oak woodlands, grasslands, and riparian forests. Alternative 3 would have a reduced impact to existing visual character in valley, foothills, and mountainous portions of the County, which each have their own important visual resources. Alternative 3 would also reduce impacts related to blockage of existing views that may be considered scenic by the public, with the reduced development footprint and reduced level of development along public rights-of-way. The substantially reduced development footprint and overall level of development light and glare impacts would be reduced, as compared with the 2030 General Plan. Impacts to aesthetic resources would be still be significant and unavoidable, however.



Source: Yuba County GIS 2007, Adapted by AECOM 2010

Alternative 4, Growth Scenario 2

Exhibit 5-4

Alternative 4 would result in a similar acreage impact to oak woodlands as the 2030 General Plan, but would have a slightly reduced impact on annual grasslands. Alternative 4 would have a more compact footprint than the 2030 General Plan, which would result in less visual intrusion into remaining woodland and grassland areas. Alternative 4 would also reduce impacts related to blockage of existing views that may be considered scenic by the public, with the reduced development footprint and reduced level of development along public rights-of-way. With the smaller development footprint and reduced level of development, light and glare impacts would be reduced, as compared with the 2030 General Plan. While the overall impact to visual resources would be reduced under Alternative 4, impacts to aesthetic resources would remain significant and unavoidable.

5.8.2 AGRICULTURAL AND FOREST RESOURCES

The 2030 General Plan would result in significant and unavoidable impacts to farmland due to the permanent conversion of approximately 5,700 acres of farmland classified as Prime, Farmland of Statewide Importance, and Unique Farmland. Full buildout of the 2030 General Plan could also convert roughly 38,200 of grazing land to a developed use. New development under the 2030 General Plan, particularly residential development, that encroaches into agricultural areas could lower productivity, increase costs, and otherwise impair agricultural operations. Implementation of the 2030 General Plan could adversely affect some timberland areas in Rural Community Boundary Areas. Table 5-2 provides a comparison of farmland conversion among the proposed project and the four alternatives.

Table 5-2
Farmland - Existing and Farmland Remaining after Development of 2030 General Plan and Alternatives

Farmland Type	Existing	2030 General Plan		Alternative 1		Alternative 2		Alternative 3		Alternative 4	
		Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Prime Farmland	41,370	38,090	92	39,046	94	40,320	97	40,763	99	40,197	97
Farmland of Statewide Importance	10,975	10,851	99	10,783	98	10,965	100	10,945	100	10,965	100
Unique Farmland	32,604	30,748	94	28,441	87	32,140	99	31,155	96	29,850	92
Total Prime + Statewide + Unique	84,949	79,267	93	78,269	92	83,425	98	82,863	98	81,013	95
Grazing	141,638	97,806	69	94,447	67	103,434	73	103,718	73	103,009	73
Total All Farmland (including Grazing)	226,587	177,495	78	172,716	76	186,859	82	186,581	82	184,022	81

Source: Farmland Mapping and Monitoring Program 2008

Compared to the 2030 General Plan, Alternative 1 preserves less farmland overall, but would preserve more Prime Farmland. The 2030 General Plan would preserve more Unique Farmland than Alternative 1. Alternative 1 would have greater impact compared to the 2030 General Plan for Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. Alternative 1 would involve the same level of development adjacent to ongoing cultivation and therefore indirect agricultural impacts would be similar. Alternative 1 would involve land use change in the same foothill and mountain areas that involve timberland areas and therefore these impacts would be similar, as well, when compared with the 2030 General Plan.

Alternatives 2, 3, and 4 would all preserve substantially more farmland than the 2030 General Plan. Alternatives 2 and 4 would preserve roughly 97% of the existing Prime Farmland, while the 2030 General Plan would preserve approximately 92%. Alternative 3 would preserve 99% of the existing Prime Farmland. Each of the alternatives would preserve similar percentages of the existing Farmland of Statewide Importance (98 to 100%). The 2030

General Plan would preserve less Unique Farmland than Alternatives 2 and 3. Examining only Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, Alternatives 2 and 3 reduce impacts the most compared with the 2030 General Plan, each preserving 98% of these types of land. Alternatives 2, 3, and 4 would reduce the level of development adjacent to ongoing cultivation and therefore indirect agricultural impacts would be reduced, when compared to the impacts anticipated under the 2030 General Plan. Alternatives 2, 3, and 4 could involve land use change in the same foothill and mountain areas that involve timberland areas and therefore these impacts would be similar, as well, when compared with the 2030 General Plan.

Despite the differences among the alternatives relative to the amount of farmland converted versus preserved, all would involve hundreds of acres of conversion. Therefore, the impact related to loss of Important Farmland would be considered a significant and unavoidable for all four alternatives. However, the severity of the impact would be substantially reduced with Alternatives 2, 3, and 4.

5.8.3 AIR QUALITY

Under the 2030 General Plan, land use change in Yuba County would result in long-term, operational emissions of criteria air pollutants that affect regional air quality. The 2030 General Plan would accommodate additional population and employment development that would generate emissions not accounted for in the current applicable air quality plan. Buildout of the 2030 General Plan would continue to conflict with current air quality planning efforts. This impact is considered significant and unavoidable.

Alternative 1 is the current General Plan. Although buildout of this alternative would involve operational emissions of criteria above Feather River Air Quality Management District (FRAQMD) significance thresholds, the existing General Plan is considered in existing air quality attainment planning efforts. Therefore, Alternative 1 would reduce impacts related to consistency with attainment planning efforts compared to the 2030 General Plan. However, Alternative 1 would generate greater vehicle miles traveled (VMT) compared to the 2030 General Plan. If the County did not implement the 2030 General Plan and instead the 1996 General Plan were built out, VMT would increase by approximately 11% compared to the 2030 General Plan. Since transportation is the dominant source of criteria air pollutant emissions, long-term operational impacts of Alternative 1 would be increased compared with the 2030 General Plan.

Alternatives 2, 3, and 4 all involve substantially reduced levels of development and therefore would not conflict with air quality attainment efforts to the extent that the 2030 General Plan would. Alternative 2 would reduce VMT by roughly 45% compared to the 2030 General Plan, while Alternative 4 would reduce VMT by approximately 41%. It is anticipated that Alternative 3 would involve a similar reduction in VMT compared to the 2030 General Plan. Along with a reduction in other sources of long-term emissions (stationary and area sources), Alternatives 2, 3, and 4 would substantially reduce long-term, operational air quality impacts compared to the 2030 General Plan.

However, the County anticipates that FRAQMD significance thresholds for operational impacts would still be exceeded and therefore impacts would still be significant and unavoidable.

The 2030 General Plan would result in the emissions of criteria air pollutants and precursors resulting from construction activities exceeding FRAQMD's significance thresholds. Because of the large amount of development and potential for simultaneous construction of multiple sites, the nonattainment status, and modeled emissions that exceed applicable thresholds, implementation of the 2030 General Plan would have significant and unavoidable short-term, construction-related air quality impacts.

Short-term construction related emissions of criteria air pollutants would be slightly greater under Alternative 1 compared to the proposed Specific Plan with the larger footprint for development. Alternative 1 is anticipated to involve a greater amount of earth-moving related construction activities and associated air quality impacts.

With the substantially reduced development footprint and level of building construction anticipated under Alternatives 2, 3, and 4, the short-term air quality impacts would be reduced compared to the 2030 General Plan. However, each of these alternatives still involves large areas of land that could be subject to earth moving and many areas where building construction and other construction activities would take place. It is possible that several construction projects could happen simultaneously under each of these alternatives and therefore the impact would still be considered significant and unavoidable.

Under the 2030 General Plan, local mobile-source emissions of carbon monoxide (CO) would not be expected to substantially contribute to emissions concentrations that would exceed the 1-hour ambient air quality standard of 20 (parts per million (ppm) or the 8-hour standard of 9 ppm. As a result, this impact would be less than significant.

Alternative 1 would involve a similar level of development compared to the 2030 General Plan and therefore, the level of traffic generated under this alternative would not cause substantial CO concentrations, even with the slightly higher VMT. With the substantially reduced level of land use change anticipated under Alternatives 2, 3, and 4, there would no substantial concentrations of CO.

Emissions of TACs during project construction under the 2030 General Plan (e.g., emissions from on-site heavy-duty diesel equipment) and from project operation under the 2030 General Plan (e.g., emissions from both on-site and off-site area, stationary, and mobile sources) could generate substantial pollutant concentrations near sensitive receptors. This impact is considered significant and unavoidable under the 2030 General Plan.

For Alternative 1, the level, location, and type of development is similar to the 2030 General Plan where it relates to this impact area. The impact of each of the alternatives (2, 3, and 4) is similar to the 2030 General Plan in this respect. Although the level of development is greatly reduced under Alternatives 2, 3, and 4, there is still the potential for sensitive receptors to develop near sources of toxic air contaminants – both stationary and mobile. The reduced development footprint and reduced level of development under Alternatives 2, 3, and 4 may expose fewer sensitive receptors to substantial pollutant concentrations, but the impact would still be considered significant and unavoidable.

Implementation of the 2030 General Plan could result in the exposure of sensitive receptors to emissions of objectionable odors. This impact is considered significant and unavoidable under the 2030 General Plan.

Odor impacts associated with each of the alternatives (2, 3, and 4) would be similar to the 2030 General Plan. Although the level of development is greatly reduced under Alternatives 2, 3, and 4, there is still the potential for sensitive receptors to develop near sources odors. The reduced development footprint and reduced level of development under Alternatives 2, 3, and 4 may expose fewer sensitive receptors to odor sources, especially sources of odors associated with agricultural operations, but the impact would still be considered significant and unavoidable. For Alternative 1, the level, location, and type of development is similar to the 2030 General Plan where it relates to odor impacts.

5.8.4 BIOLOGICAL RESOURCES

The 2030 General Plan would result in significant impacts to special status wildlife, wildlife movement and migratory patterns, and to sensitive habitats, due to large scale land conversion, and the lack of mandatory conservation measures and designated protected areas. Although policies and actions included throughout the 2030 General Plan would substantially reduce impacts, certain biological resource impacts are considered significant and unavoidable. Alternative 1 would result in similar impacts to wildlife with development allowed in thousands of acres of potential wildlife habitat. The overall development footprint of Alternative 1 is slightly larger than that of the 2030 General Plan. Much of this difference is explained by additional land anticipated for development under Alternative 1 in the River Highlands Community Plan Area, which is located south of State Route 20 and just west of the Nevada County border. This area includes oak woodlands. Alternative 1 could also

potentially involve greater land use change in areas with riparian, riverine, and wetlands habitats. Overall, Alternative 1 would have an increased impact to biological resources compared to the 2030 General Plan.

Alternatives 2, 3, and 4 are all similar to one another in the relative level of impact to biological resources. These alternatives would result in the conversion of wildlife habitat, as would the 2030 General Plan. However, many of the areas that would be developed are within and adjacent to existing urban development. Under Alternatives 2, 3, and 4, there would be a reduced loss of oak woodland habitat and reduced level of development in areas with riparian, riverine, and wetlands habitats. Because the footprint of new development would be reduced under these alternatives compared to the 2030 General Plan, the impacts described above would be similar, but on a smaller scale and in areas that are less likely to support special status wildlife and plant species and sensitive habitats. Habitat modification would still occur as part of Alternatives 2, 3, and 4, but the scale of impacts would be reduced. The impacts to biological resources would remain significant and unavoidable under Alternatives 2, 3, and 4, but the level of impact to biological resources would be reduced.

5.8.5 CULTURAL RESOURCES

Because the density of cultural resources in the County is relatively high, there is a reasonable potential construction activities associated with buildout of the 2030 General Plan would result in disturbance of identified and previously unidentified cultural resources. This would be a significant and unavoidable impact. Many of these resources are likely to qualify as historical resources or unique archaeological resources under CEQA or historic properties. Ground-disturbing activities would take place primarily within the Valley Growth Boundary and Rural Community Boundary Areas.

Alternative 1 would result in a similar amount of ground disturbance as with the 2030 General Plan, and therefore would have a similar potential to result in significant and unavoidable impacts due to disturbance of undiscovered archaeological resources. Alternative 1 would include a greater level of development south of State Route 20 and just west of the Nevada County border in an area with relatively higher levels of prehistoric sensitivity compared to the 2030 General Plan. The risk of damage to potentially significant cultural resources could be considered to be elevated somewhat under Alternative 1 for this reason. Potential impacts to historic resources would be similar.

Alternatives 2, 3, and 4 would result in less ground disturbance than the 2030 General Plan and would have a less potential for disturbance of archaeological resources than would the 2030 General Plan. However, each of these alternatives would involve substantial development activity in expansive areas of Yuba County. Based on known significant cultural resources in the unincorporated County, these alternatives could potentially disturb cultural resources, resulting in a significant and unavoidable impact, even as the level of risk is reduced compared to the 2030 General Plan. Potential impacts to historic resources would be similar.

5.8.6 GEOLOGY, SOILS, MINERAL RESOURCES, AND PALEONTOLOGICAL RESOURCES

Implementation of the proposed policies and actions of the 2030 General Plan and implementation of existing regulations would reduce the impacts of buildout of the 2030 General Plan on mineral resources, but it is still possible that development of the County's Rural Community Boundary Areas could preclude extraction of important County mineral resources along the Yuba River. The impact is considered significant and unavoidable for the 2030 General Plan. Similarly, implementation of the policies and actions of the 2030 General Plan would reduce the impacts of buildout of the 2030 General Plan on paleontological resources. However, because the County cannot guarantee that construction and development activities would avoid impacts to paleontological resources, the impact is considered significant and unavoidable. Impacts related to seismic groundshaking, soils limitations, erosion, and septic suitability would be less than significant with application of existing regulations, as well as policies and actions of the 2030 General Plan.

Alternative 1 provides for a similar level and location of development as does the 2030 General Plan. Therefore, this alternative would have similar impacts related to mineral resources and disturbance of paleontological resources. Impacts would remain significant and unavoidable under Alternative 1. Alternative 1 would involve development in areas with similar challenges related to soils limitations (erosion, shrink-swell potential, etc.). With a reduced level of development, seismic related impacts would be somewhat reduced (although these impacts are also less than significant under the 2030 General Plan).

Alternatives 2, 3, and 4 all involve reduced development potential and a smaller overall development footprint, when compared to the 2030 General Plan. Certain foothills and mountainous portions of the County with severe erosion potential would subject to a reduced level of development under Alternatives 2, 3, and 4. With a substantially reduced development footprint in valley portions of the County under Alternatives 2, 3, and 4, impacts to potentially significant paleontological resources would be reduced, when compared with the 2030 General Plan, even as impacts would remain significant and unavoidable. Since Alternatives 2, 3, and 4 assume reduced levels of development, seismic related impacts would be somewhat reduced (although these impacts are also less than significant under the 2030 General Plan).

5.8.7 GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE

The 2030 General Plan would accommodate land use change that would increase greenhouse gas (GHG) emissions and would represent a cumulatively considerable contribution of GHG emissions to those produced globally that together contribute to the cumulatively significant impact of global climate change. Climate change is expected to result in a variety of effects that could potentially impact Yuba County, including alterations to agricultural production, changes to terrestrial and aquatic ecosystems, increased energy demand, decreased water supply, increased risk of flooding, and increased frequency and intensity of wildfire. These impacts are significant and unavoidable under the 2030 General Plan.

The 2030 General Plan would emit GHG emissions at a higher rate than is needed statewide to achieve the State's GHG reduction targets for 2020 (achieve 1990 emissions by 2020). New development under full buildout of the 2030 General Plan would generate GHG emissions at a rate of 9.40 metric tons (MT) of carbon dioxide equivalent (CO_2e) per capita and 5.69 MT CO_2e per service population (population + employment).

Under the 2030 General Plan, the County would not meet the GHG-per-SP benchmarks derived for the year 2020, which are established to be between 4.36 and 4.6 MT of CO_2e per SP. The 2030 General Plan includes detailed guidance for a Greenhouse Gas Reduction Plan (Action HS5.1) and a program to assist farmers with voluntary GHG emissions reductions strategies (Action HS5.2). However, the County cannot guarantee at this time that the implementation of these actions would reduce below the established significance thresholds. New development accommodated under the 2030 General Plan would not accomplish Yuba County's "fair share" of GHG emissions reductions needed statewide to achieve California's 2020 GHG target established under AB 32. This impact of the 2030 General Plan is significant and unavoidable.

Transportation emissions are the predominant source of GHG emissions for the 2030 General Plan, for the State of California, and for most development plans and projects. Under Alternative 1, VMT would be approximately 11% higher than that attributable to the 2030 General Plan. Therefore, mass GHG emission from Alternative 1 would be increased compared with the 2030 General Plan. With higher VMT and lower population and employment assumptions, Alternative 1 would have higher per-service population GHG emissions.

Alternatives 2, 3, and 4 all involve substantially reduced levels of development and therefore would involve decreased mass emissions of GHG at buildout, when compared to the 2030 General Plan. Alternative 2 would reduce VMT by roughly 45% compared to the 2030 General Plan, while Alternative 4 would reduce VMT by approximately 41%. It is anticipated that Alternative 3 would involve a similar reduction in VMT compared to the 2030 General Plan. Other sources of GHG emissions, such as electricity generation, natural gas, wastewater

conveyance and treatment, solid waste would also be reduced under Alternatives 2, 3, and 4, compared to the 2030 General Plan.

Alternatives 2, 3, and 4 are anticipated to generate roughly 4 MT CO_2e per service population (population + employment). This is less than the rate of GHG emissions required at the statewide level to achieve State mandates for GHG emissions. Therefore, the GHG emissions impact of Alternatives 2, 3, and 4 would be less than cumulatively considerable, while the impact of the 2030 General Plan would be cumulatively considerable.

New development under Alternative 1 would be potentially exposed to the same impacts of climate change as would the 2030 General Plan, including alterations to agricultural production, changes to terrestrial and aquatic ecosystems, increased energy demand, decreased water supply, increased risk of flooding, and increased frequency and intensity of wildfire.

New development under Alternatives 2, 3, and 4 would be potentially exposed to the same impacts of climate change as would the 2030 General Plan, including alterations to agricultural production, changes to terrestrial and aquatic ecosystems, increased energy demand, decreased water supply, increased risk of flooding, and increased frequency and intensity of wildfire. However, with the reduced assumptions for the level of development under these alternatives, Alternatives 2, 3, and 4 would expose fewer residents and employees to future altered conditions associated with climate change.

5.8.8 HAZARDS AND HAZARDOUS MATERIALS

Implementation of 2030 General Plan policies, in combination with existing federal and state regulations, would reduce the potential impacts related to the routine transportation of hazardous materials, interference with an adopted emergency plan, exposure of structures to urban or wildland fires, and public health hazards from development on a known hazardous materials site to a less-than-significant level.

Alternative 1 would be subject to the same existing regulations as would the 2030 General Plan. Alternative 1 would involve a similar level and type of development as would the 2030 General Plan, and therefore the County would anticipate similar impacts related to transportation of hazardous materials, emergency plans, and hazardous materials sites. Alternative 1 would involve somewhat more development in areas of moderate, high, and severe wildfire risk, when compared with the 2030 General Plan. Overall, hazards and hazardous materials impacts under Alternative 1 would have the same conclusions with regard to significance as the 2030 General Plan, even with the slightly higher fire risk.

Alternatives 2, 3, and 4 propose a similar mix of land uses within a smaller footprint compared to the 2030 General Plan. With a similar land use mix, and with the same hazardous conditions associated with regional hazardous materials transport, Beale Air Force Base-related hazards, and similarly industrial mix, the County would anticipate similar types of impacts related to transportation of hazardous materials, emergency plans, and hazardous materials sites. However, with the substantially reduced development footprint and the substantially reduced amount of development, these impacts would be proportionally reduced. There would be a reduced level of transportation of hazardous materials and fewer residents placed in locations that could be exposed in the case of accidental upset, for example. With the reduced development footprint, it is less likely that developments accommodated under Alternatives 2, 3, and 4 would involve residual hazardous materials. These alternatives would also reduce the level of residential development in foothills and mountainous portions of the County, compared to the 2030 General Plan, which would reduce wildfire risk, when compared with the 2030 General Plan. Since impacts related to hazards and hazardous materials are less than significant for the 2030 General Plan, no significant impacts are avoided with these alternatives compared to the 2030 General Plan.

5.8.9 HYDROLOGY AND WATER QUALITY

Impacts on Hydrology and Water Resources, including violation of water quality standards, erosion and sedimentation, construction-related water quality impacts, interference with groundwater recharge, levee failure, dam failure, and the potential for flooding from increased stormwater runoff would be less-than-significant as a result of implementation of the 2030 General Plan.

Alternative 1 would involve a slightly larger development footprint than would the 2030 General Plan and therefore would have increased impacts related to erosion, construction-related impacts, and interference with groundwater recharge. Levee and dam failure impacts would be reduced under Alternative 1 with the reduced number of housing units assumed to be developed. With a similar level and character of development, it is anticipated that impacts related to water quality standards would be basically the same as anticipated under the 2030 General Plan, particularly since Alternative 1 would be subject to the same existing regulations as would development accommodated under the 2030 General Plan.

Alternatives 2, 3, and 4 propose a similar mix of land uses on a smaller development footprint. The same types of impacts would be anticipated, but on a smaller scale. These alternatives would have a reduced impact related to erosion and sedimentation, construction-related impacts, interference with groundwater recharge, and increased stormwater runoff, since less earth disturbance would occur and since development would occur on a smaller overall footprint. These alternatives assume reduced levels of residential development and therefore impact related to flooding, levee failure, and dam failure would be reduced. However, since impacts related to hydrology and water quality are less than significant for the 2030 General Plan, no significant impacts are avoided with these alternatives, when compared to the 2030 General Plan.

5.8.10 LAND USE, PLANNING, POPULATION, AND HOUSING

The 2030 General Plan does not propose land use changes and infrastructure planning elements that would divide any established communities. There are no inconsistencies between the 2030 General Plan and other relevant plans, actions, and regulations that would result in any substantial adverse physical effects under CEQA other than those already addressed comprehensively and mitigated as appropriate throughout this EIR. Because the Yuba-Sutter Regional NCCP/HCP has not been adopted and there is no other natural community conservation plan in effect, there is no impact. The level of population and job growth that could potentially be accommodated under the 2030 General Plan is greater than that accommodated under the existing 1996 General Plan. The level of job growth included in the 2030 General Plan is substantially more than current forecasts would indicate. If this level of job growth is realized, it is possible that population growth near future job centers could be induced, beyond that which is included under land use assumptions used for analysis under this EIR. Implementation of the 2030 General Plan could be considered growth inducing. This impact is considered potentially significant. The 2030 General Plan does not propose to displace substantial numbers of housing or people necessitating the construction of replacement housing elsewhere. However, it is possible that some housing could be removed during buildout. This impact is significant and unavoidable under the 2030 General Plan.

Alternative 1 would not substantially divide any existing communities and would not have any additional conflicts with policies, plans, or regulations adopted to reduce environmental impacts. These impacts would be similar, when compared with the 2030 General Plan. The level of population and employment growth assumed under Alternative 1, like the 2030 General Plan, would be beyond that currently forecast for 2030, but not to the extent of that included in full buildout of the General Plan. Therefore, impacts related to growth inducement would be reduced, but the impact conclusion would not change. Alternative 1 would not propose to displace substantial numbers of housing or people, but this would be a possibility with respect to projects that could be developed under the long-term implementation of Alternative 1. Impacts would be similar to those anticipated for the 2030 General Plan.

Alternatives 2 and 4 would not substantially divide any existing communities and would have similar levels of impact related to conflicts with policies, plans, and regulations adopted to reduce environmental impacts. The level of population and employment growth assumed under Alternatives 2 and 4 would be beyond that currently forecast for 2030 by the California Department of Finance, Caltrans, and SACOG, but not to the extent of that included in full buildout of the General Plan. Therefore, impacts related to growth inducement would be reduced, but the impact conclusion would not change. Alternatives 2 and 4 would not propose to displace substantial numbers of housing or people, but this would be a possibility with respect to projects that could be developed under the long-term implementation of these alternatives and therefore these impacts would be similar to those anticipated under the 2030 General Plan.

Alternative 3 would not substantially divide any existing communities and would have similar levels of impact related to conflicts with policies, plans, and regulations adopted to reduce environmental impacts. The level of population and employment growth assumed under Alternative 3 would be more consistent with current forecasts for unincorporated Yuba County and therefore, the impact related to growth inducement would be reduced to a **less-than-significant** level. Alternative 3 would not propose to displace substantial numbers of housing or people, but this would be a possibility with respect to projects that could be developed under the long-term implementation of this alternative.

5.8.11 NOISE AND VIBRATION

The County anticipates a substantial increase in vehicular traffic along various County roadways under the 2030 General Plan, which could expose existing or planned sensitive uses to unacceptable levels of transportation noise. This is a significant and unavoidable impact of the 2030 General Plan. Another significant and unavoidable impact related to 2030 General Plan implementation is the increase in ambient noise levels. Construction-related noise, vibration impacts, and impacts related to airport noise would be less than significant under 2030 General Plan policies and actions.

Noise related impacts under Alternative 1 would be greater than the impacts identified for the 2030 General Plan, since VMT would be greater for Alternative 1 compared to the 2030 General Plan. Construction noise impacts under Alternative 1 would be similar those anticipated for the 2030 General Plan, with a similar level and extent of development assumed. While there would be greater earth-moving activities under Alternative 1, there would be more building construction under the 2030 General Plan. Alternative 1 would reduce somewhat the level of development adjacent to railroads, when compared to the 2030 General Plan, which would reduce vibration-related impacts. Airport noise related impacts under Alternative 1 would be somewhat reduced compared to the 2030 General Plan since Alternative 1 does not anticipate the same level of infill and revitalization in and around the Yuba County Airport as does the 2030 General Plan and since Alternative 1 does not anticipate noise-sensitive land uses as near Beale Air Force Base as anticipated under the 2030 General Plan. Significance conclusions would not change, however.

VMT would be substantially reduced under Alternatives 2, 3, and 4, and therefore traffic noise impacts would be substantially reduced. However, it is still possible that noise-sensitive uses may be exposed to unacceptable noise levels attributable to transportation sources under these alternatives and therefore significance conclusions would not change. Construction noise impacts under Alternatives 2, 3, and 4 would be substantially reduced compared to the 2030 General Plan, with a substantial reduction in the amount of site preparation work and building construction. Alternatives 2, 3, and 4 would reduce the level of development adjacent to railroads, when compared to the 2030 General Plan, which would reduce vibration-related impacts. Airport noise related impacts under Alternatives 2, 3, and 4 would be reduced compared to the 2030 General Plan since these alternatives would not lead to development of noise-sensitive land uses as near Beale Air Force Base. Significance conclusions would not change, however.

5.8.12 PUBLIC SERVICES AND FACILITIES

The 2030 General Plan policies would ensure that police and fire facilities and services would be funded and constructed, as needed, to serve new development. Policies identified in the 2030 General Plan are intended to ensure that new neighborhoods include conveniently-located schools to serve new population and that there is funding available via impact fees on new development to expand or construct new school facilities. The policies and actions of the 2030 General Plan would guide the provision of library services, ensuring that future needs are met and encouraging joint-use provisions of service that could result in efficiencies and reduced environmental impacts associated with constructing facilities. Impacts of the 2030 General Plan on fire, police services, schools, and libraries are considered less-than-significant. The 2030 General Plan identifies the County's policy approach to ensuring adequate provision of parkland as the County grows, but the County cannot unilaterally implement this policy and implementation of the framework. Because the County cannot guarantee the full implementation of parkland and recreational policies and actions, and because it is possible that parkland and recreational facilities may not be provided at an adequate rate to avoid overuse of existing facilities, this impact is considered significant and unavoidable.

Under Alternative 1, impacts related to public services would be anticipated to be similar to those identified for the 2030 General Plan, based on a similar increase in population that would occur under buildout. Since impacts related to fire and police protection, libraries, and schools would be less than significant for the 2030 General Plan, no significant impacts related to these services are avoided with these alternatives compared to the 2030 General Plan. Under Alternative 1, as with the 2030 General Plan, the County would not be able to guarantee the provision of parkland such that no deterioration to existing facilities would occur, since the County is not the parkland provider throughout the unincorporated areas.

Alternatives 2, 3, and 4 would reduce the need for public services and facilities during buildout of the General Plan and therefore would reduce impacts associated with providing these services. However, these alternatives would still involve substantial population growth and the County would not be able to guarantee the provision of parkland such that no deterioration to existing facilities would occur, since the County is not the parkland provider throughout the unincorporated areas. Since impacts related to fire and police protection, libraries, and schools would be less than significant for the 2030 General Plan, no significant impacts related to these services are avoided with these alternatives compared to the 2030 General Plan.

5.8.13 TRANSPORTATION AND TRAFFIC

The 2030 General Plan would increase travel demand within the unincorporated County and nearby areas indirectly through accommodating land use change that would generate and attract new trips. The 2030 General Plan would result in greater levels of traffic on most County roadways, when compared to existing conditions. Full buildout of the 2030 General Plan could increase VMT by roughly 500%, compared to existing conditions. VMT estimates likely overestimate the 2030 General Plan's actual VMT. This is because the VMT calculations were derived from a traditional travel demand model, which does not consider a number of factors that are incorporated into this General Plan that reduce VMT including: shifts in travel to transit, bike, and walk modes, improved local street connectivity, and mixed-use projects.

The 2030 General Plan includes other policies that will act to reduce VMT, but are difficult to quantify, such as travel demand management, increased density, shared parking, and workforce housing. Extensive research has shown that the above planning techniques can reduce vehicle trips, increase non-automobile mode share, reduce trip lengths, and reduce VMT. Increases in density and development intensity are correlated with reduced vehicle travel (on a per unit or square foot basis). Mixing complementary uses in a neighborhood setting increases internal trip "capture." Many different urban design approaches are used to increase transportation connectivity and provide high-quality bicycle, pedestrian, and transit facilities, increasing the attractiveness of non-automobile modes of travel. Access to regional destinations involves the strategic placement of land uses near regional attractions. A wide array of 2030 General Plan policies and actions incorporate these concepts. The 2030 General

Plan is anticipated to have significant impacts related to other jurisdictions' roadways and California Department of Transportation (Caltrans) facilities. Alternatives 1, 2, and 4 are also evaluated in Section 4.13 of this EIR, "Transportation and Traffic." Please see that section of the EIR for more detail. Full buildout of the 2030 General Plan could lead to significant impacts related to congestion in areas near at-grade railroad crossings.

Neither the 2030 General Plan nor any of the alternatives would have significant impacts related to change in air traffic patterns, emergency access, or conflicts with policies that are supportive of pedestrian, bicycle, or transit mobility.

Alternative 1 would generate VMT that would be approximately 11% higher than the 2030 General Plan, despite the greater amount of population and employment contemplated in the 2030 General Plan. This is due to the better balance of land uses (homes, destinations, and jobs) included in the 2030 General Plan. Alternative 1 would generate VMT that is approximately 27% higher than the 2030 General Plan per capita plus employment. Alternative 1 would result in reduced impacts relative to other jurisdictions' roadways, but significant impacts would still occur. Alternative 1 would increase the level of impact on some Caltrans' facilities, but decrease impacts to other facilities. Most freeway/highway segments affected by projects developed under the General Plan would have the same level of service (LOS) regardless of whether Alternative 1 or the 2030 General Plan were implemented. Alternative 1 is anticipated to have similar impacts related to congestion near at-grade railroad crossings.

Alternative 2 would generate approximately 45% less VMT than would the 2030 General Plan. Alternative 2 would result in reduced impacts relative to other jurisdictions' roadways, although there could still be impacts that adjacent jurisdictions could consider significant and to which Alternative 2 would contribute. Therefore, the County assumes that the impact would remain significant under Alternative 2, as with the 2030 General Plan. Alternative 2 would substantially decrease traffic volumes on Caltrans' facilities, but there would still be exceedance of Caltrans' desired levels of service and therefore significant impacts would remain. Alternative 2 would have reduced impacts related to congestion near at-grade railroad crossings, but the implementation of this alternative would not change the significance conclusion for this impact.

Alternative 3 would generate roughly 50 to 70% less VMT than would the 2030 General Plan. Alternative 3 would result in reduced impacts relative to other jurisdictions' roadways, although it is possible that there could still be impacts that adjacent jurisdictions could consider significant and to which Alternative 3 would contribute. Therefore, the County assumes that the impact would remain significant under Alternative 3, as with the 2030 General Plan. Alternative 3 would substantially decrease traffic volumes on Caltrans' facilities, but the County anticipates that there could still be exceedance of Caltrans' desired levels of service to which Alternative 3 would contribute, and therefore significant impacts would remain. Alternative 3 would have substantially reduced impacts related to congestion near at-grade railroad crossings, but the implementation of this alternative would not change the significance conclusion for this impact.

Alternative 4 would generate approximately 41% less VMT than would the 2030 General Plan. Alternative 4 would result in reduced impacts relative to other jurisdictions' roadways, although there could still be impacts that adjacent jurisdictions could consider significant and to which Alternative 4 would contribute. Therefore, the County assumes that the impact would remain significant under Alternative 4, as with the 2030 General Plan. Alternative 4 would substantially decrease traffic volumes on Caltrans' facilities, but there would still be exceedance of Caltrans' desired levels of service and therefore significant impacts would remain. Alternative 4 would have reduced impacts related to congestion near at-grade railroad crossings, but the implementation of this alternative would not change the significance conclusion for this impact.

5.8.14 UTILITIES AND SERVICE SYSTEMS

Implementation of the above mitigation would assist in ensuring that sufficient service capacity is available to serve future growth projected in the 2030 General Plan and avoid issues related to wastewater treatment

requirements. By adhering to the policies proposed in the 2030 General Plan, as well as the above requirement mitigation and existing regulations, the impact is considered less than significant. By adhering to the policies proposed in the 2030 General Plan, as well as all applicable requirements pertaining to water supply, wastewater treatment, and septic systems, the County could minimize impacts associated with construction of new wastewater treatment facilities or extension of existing facilities or infrastructure. Despite mitigating policies and actions and the application of necessary mitigation measures, construction and operation of new or expanded water delivery and wastewater conveyance and treatment infrastructure to serve the 2030 General Plan buildout may result in significant and unavoidable environmental effects. Implementation of the 2030 General Plan would accommodate development that would increase water demand but the County's water conservation policies, requirements to confirm water supply prior to development for large projects, and avoid impacts to high groundwater recharge areas would ensure a less-than-significant impact. Buildout under the 2030 General Plan is not anticipated to require the construction of new landfills.

Under implementation of Alternative 1, the same basic mix of land uses would be anticipated with the same expected wastewater treatment needs. Existing regulations would apply to both development under Alternative 1 and development under the 2030 General Plan and therefore impacts related to wastewater treatment capacity would be similar. Buildout of Alternative 1 would result in demand for water supply, wastewater treatment, and septic systems similar to the 2030 General Plan. With the greater amount of land subject to development in the rural and foothills portions of the County compared to the 2030 General Plan, impacts would be potentially greater due to the need to extend infrastructure and services to a broader area. With a reduced level of development (albeit over a larger footprint), water demand and solid waste generation is expected to be reduced under Alternative 1 compared with the 2030 General Plan.

Alternatives 2, 3, and 4 would have overall smaller development footprints, and would have a smaller population at buildout. Therefore, the need for new infrastructure to provide water supply, wastewater treatment, and septic systems would not be as great as needed for the 2030 General Plan, and the extent of the area to be served would be smaller, lessening the impacts associated with construction compared to the 2030 General Plan. Despite the reduction in impacts, the County anticipates that infrastructure development needed to serve Alternatives 2, 3, and 4 could result in significant impacts. Under implementation of Alternatives 2, 3, and 4, the same basic mix of land uses would be anticipated with the same expected wastewater treatment needs. Existing regulations would apply to development under Alternatives 2, 3, and 4 and development under the 2030 General Plan and therefore impacts related to wastewater treatment capacity would be similar. With a reduced level of development under Alternatives 2, 3, and 4, water demand and solid waste generation is expected to be substantially reduced compared with the 2030 General Plan.

5.8.15 ENERGY

Implementation of the 2030 General Plan would increase energy demand. New residential, commercial, industrial, and civic uses that could be developed under the 2030 General Plan would increase local energy demand. However, the policies and actions of the General Plan that guide growth and development are designed to avoid wasteful, inefficient, and unnecessary consumption of energy and the impact for the 2030 General Plan is less than significant. Implementation of the2030 General Plan would result in the need to extend services and infrastructure to new users in Yuba County, resulting in significant and unavoidable impacts.

Alternative 1 is anticipated to reduce slightly the need for energy infrastructure compared to the 2030 General Plan, based on the reduced development potential. Unlike the 2030 General Plan, Alternative 1 would not be anticipated to include the focus on compact development that can reduce transportation-related energy demand by locating residences near shopping and work centers and providing multiple transportation opportunities. Since the transportation sector is the single largest consumer of energy in California, accounting for 41 percent of the state's total energy demand, the policies and actions in the 2030 General Plan that reduce travel demand would also reduce local energy demand. Therefore, with respect to energy conservation efforts, Alternative 1 would have somewhat increased impacts, when compared with the 2030 General Plan.

Alternatives 2, 3, and 4 all are designed to involve a smaller, more compact overall development footprint with housing within close proximity to destination land uses, such as retail, services, and jobs. With the more compact footprint and a greater focus on infill development and redevelopment, public transit, bicycling, and walking would be viable for a greater proportion of residents for meeting daily travel needs. These alternatives also involve a substantially reduced overall level of development, which would reduce demand for electricity and natural gas and reduce the level of impact associated with service extensions and other infrastructure components needed to meet this demand.

5.9 SUMMARY OF COMPARATIVE EFFECTS OF THE ALTERNATIVES

Table 5-3 provides a summary comparison of the environmental impacts of the alternatives, as presented in the environmental analysis above, to the environmental impacts of the 2030 General Plan (the proposed project). The environmental impacts of the 2030 General Plan are addressed in detail throughout this EIR.

Alternative 1 would generally increase impacts compared to those anticipated for the 2030 General Plan, while Alternatives 2, 3, and 4 would reduce impacts for all topics.

For Land Use, Population, and Housing impacts, Alternative 3 would result in one significant impact becoming less than significant. Where GHG emissions impacts associated with the 2030 General Plan would be cumulatively considerable, these impacts for Alternatives 2, 3, and 4 would be less than cumulatively considerable.

Table 5-3
Comparison of Environmental Impacts of Alternatives to the 2030 General Plan

Environmental Topic	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Aesthetic Resources	Greater	Lesser	Lesser	Lesser
Agricultural Resources	Greater	Lesser	Lesser	Lesser
Air Quality	Greater	Lesser	Lesser	Lesser
Biological Resources	Greater	Lesser	Lesser	Lesser
Cultural Resources	Greater	Lesser	Lesser	Lesser
Geology, Soils, Minerals, and Paleontological Resources	Similar	Lesser	Lesser	Lesser
Greenhouse Gas Emissions/Climate Change	Greater	Lesser	Lesser	Lesser
Hazards and Hazardous Materials	Greater	Lesser	Lesser	Lesser
Hydrology and Water Resources	Greater	Lesser	Lesser	Lesser
Land Use, Population and Housing	Lesser	Lesser	Lesser	Lesser
Noise and Vibration	Greater	Lesser	Lesser	Lesser
Public Services and Facilities	Similar	Lesser	Lesser	Lesser
Transportation and Circulation	Greater	Lesser	Lesser	Lesser
Utilities and Service Systems	Greater	Lesser	Lesser	Lesser
Energy	Similar	Lesser	Lesser	Lesser
Total	11 Greater 3 Similar 1 Lesser	0 Greater 15 Lesser	0 Greater 15 Lesser	0 Greater 15 Lesser

5.10 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In addition to the discussion and comparison of impacts of the alternatives to the 2030 General Plan, CEQA requires that an "environmentally superior" alternative among the alternatives considered be selected and that the reasons for such selection be disclosed. In general, the environmentally superior alternative is the alternative that would generate the fewest or least severe adverse impacts.

For the purposes of this EIR, Alternative 3 is environmentally superior. Alternative 3 would reduce environmental impacts, compared to the 2030 General Plan, for each of the 15 environmental topic areas analyzed in this section.

As shown in the analysis throughout this section, Alternatives 2 and 4 would also reduce impacts in the same number of topic areas as Alternative 3 (15 topic areas). In addition to the impacts that would be reduced without changing the impact conclusion, Alternative 3 would also result in two impact areas becoming less than significant (Land Use, Population, and Housing + Greenhouse Gas Emissions).

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6 OTHER CEQA CONSIDERATIONS

This chapter addresses other California Environmental Quality Act (CEQA) considerations that are required as part of an EIR. These considerations are:

- Cumulative Impacts (Section 6.1);
- Growth-Inducing Impacts (Section 6.2);
- Significant Irreversible Environmental Changes (Section 6.3); and
- Significant Unavoidable Environmental Effects (Section 6.4).

6.1 CUMULATIVE EFFECTS

Section 15130 of the State CEQA Guidelines requires the analysis of all cumulatively considerable impacts resulting from a proposed project. Section 15355 defines a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts can originate from one project or from separate projects. Cumulative impacts result when two or more impacts of a project combine and increase the severity or significance of either impact. Cumulative impacts can also be created when impacts from separate projects combine to make a compound impact that is more severe than the impacts would have been had the projects occurred in isolation.

This chapter identifies cumulative impacts that could be created as a result of implementation of the 2030 General Plan. Pursuant to Section 15130 of the State CEQA Guidelines, "(t)he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone." According to State guidance, the discussion in this section is guided by the standards of practicality and reasonableness and focuses on the cumulative impacts to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

The cumulative analysis examines impacts of the 2030 General Plan taken together with other past, present, and probable future projects producing related impacts. This chapter examines the cumulative effects of the 2030 General Plan combined with impacts resulting from buildout of plans for Marysville, Wheatland, Yuba City, adjacent counties, other nearby cities, and other related projects and plans in the region. The analysis in this section includes two important parts:

1. a determination of whether the long-term impacts of all related past, present, and future plans and projects would cause a cumulatively significant impact; and

2. a determination as to whether implementation of the 2030 General Plan would have a "cumulatively considerable" contribution to any significant cumulative impacts.

Effects related to greenhouse gas emissions are inherently cumulative in nature. A detailed discussion of effects of the 2030 General Plan related to greenhouse gas emissions is presented in Section 4.7 of this EIR.

6.1.1 METHODS OF ANALYSIS

For the purposes of evaluating cumulative impacts, the State CEQA Guidelines allow the use of two alternative methods to determine the scope of projects to be considered:

- **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 lead agency (in this case, Yuba County).

- **Regional growth projections method**—A summary of projections contained in adopted general plans or related planning documents, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

This analysis uses the regional growth projections method (sometimes called "the plan method"). The analysis examines population, housing, and employment growth projections for jurisdictions in Yuba, Sutter, Butte, Nevada, and Placer Counties.

6.1.2 GEOGRAPHIC SCOPE

The geographic scope that could be affected by the proposed project varies depending on the issue topic. The geographic area associated with different environmental effects was used to define the area considered for cumulative impacts. The cumulative geographic scope for air pollutant impacts, such as those related to emissions of ozone precursors, is very broad, encompassing large areas within the same air basin. The cumulative geographic scope for stationary source noise impacts, on the other end of the spectrum, is relatively narrow, since noise attenuates substantially with distance, making impacts more localized.

The environmental impact analysis throughout this EIR occurs at the countywide scale and, over the long term, describes environmental impacts of implementing the 2030 General Plan. Chapter 4 of this EIR presents an analysis of countywide environmental effects over a long period of time, allowing the County to take into account certain cumulative environmental effects. Significance conclusions, mitigation measures, and 2030 General Plan policies and actions that would reduce impacts of implementation of the 2030 General Plan would often, but not always, reduce cumulative impacts.

Table 6-1 provides information on the geographic scope considered for cumulative impacts on different resource areas addressed in this EIR.

Table 6-1
Geographic Scope of Cumulative Impacts

Issue Area	Geographic Area
Aesthetic Resources	Yuba County
Agricultural Resources	Sacramento Valley
Air Quality	Sacramento Valley Air Basin; odor impacts are localized
Biological Resources	Yuba County and the Sacramento Valley
Climate Change	Global, regional, and local (project site and vicinity) (See Section 4.7 for detailed discussion of this impact area)
Cultural Resources	Yuba County, Sacramento Valley, portions of the foothills – the cumulative scope for cultural resources depends on the type and scientific significance of potential finds; for resources related to mining history, the cumulative scope could include other portions of the foothills in California affected by gold rush activity, for example.
Geology, Soils, Minerals, and Paleontological Resources	Valley Growth Boundary, rural communities, and directly adjacent areas – effects are generally localized; paleontological resources are considered at a broader scale reflecting the extent of the Modesto Formation, which is considered a paleontologically sensitive rock unit that extends throughout the Sacramento and San Joaquin Valleys
Hydrology and Water Quality	Sacramento Valley Groundwater Basin
Land Use	Regional development anticipated in Yuba County adjacent counties (Placer, Sutter, Butte, and Nevada counties).

Table 6-1 Geographic Scope of Cumulative Impacts	
Issue Area	Geographic Area
Noise and Vibration	Effects are generally localized; traffic noise impacts occur along local, Countywide, and regional roadways affected substantially by 2030 General Plan traffic
Parks and Open Space	Valley Growth Boundary, rural communities, and directly adjacent areas – depends on specific impact as effects are generally localized
Public Health and Hazards	Valley Growth Boundary, rural communities, and directly adjacent areas – depends on specific impacts as effects are generally localized
Population, Housing, and Employment	Yuba County and adjacent counties (Placer, Sutter, Butte, and Nevada counties).
Utilities and Service Systems	Valley Growth Boundary, rural communities, and directly adjacent areas – depends on specific service or utility
Transportation and Circulation	Regional and local facilities affected by 2030 General Plan land use and traffic

6.1.3 REGIONAL GROWTH PROJECTIONS

In order to understand the related present and future plans that would have related cumulative impact to those anticipated in the 2030 General Plan, the County has collected information on existing and projected future population and employment for surrounding areas. Table 6-2 lists the estimated population, number of households, and number of jobs in Yuba County and the surrounding counties, and in the incorporated cities and the projections for the same in 2030 or 2035. Just as the County would expect to grow substantially during the General Plan time horizon, there is also growth anticipated in adjacent areas.

Table 6-2
Estimated and Projected Population, Housing, and Employment—2009 and 2035

Jurisdiction	Population		Housing Units		Jobs	
	2010	2035*	2010	2035*	2005***	2035*
Sutter County						
Live Oak	8,791	14,028	2,427	4,831	1,140	2,712
Yuba City	65,372	94,571	22,706	35,777	22,642	38,441
Unincorporated Sutter County	24,991	25,667	8,639	9,313	4,377	8,643
Sutter County Total	99,154	134,266	33,772	49,921	28,159	49,796
Yuba County						
Marysville	12,867	13,336	5,019	5,977	7,854	9,720
Wheatland	3,558	23,056	1,215	8,490	634	4,699
Unincorporated Yuba County	56,955	118,106	22,010	42,834	13,165	25,260
Yuba County Total	73,380	154,498	28,244	57,301	21,019	39,679

Table 6-2
Estimated and Projected Population, Housing, and Employment—2009 and 2035

Jurisdiction	Population		Housing Units		Jobs	
	2010	2035*	2010	2035*	2005***	2035*
Placer County						
Auburn	13,578	17,985	6,041	7,868	8,153	8,525
Colfax	1,993	4,246	875	1,813	1,081	1,925
Lincoln	41,111	112,209	17,804	40,904	7,994	38,427
Loomis	6,743	8,336	2,462	3,228	3,762	4,822
Rocklin	56,019	69,155	21,397	26,700	15,405	27,262
Roseville	115,781	172,500	47,190	72,789	60,167	100,402
Unincorporated Placer County	111,877	186,278	54,913	75,936	35,089	66,313
Placer County Total	347,102	570,709	150,682	229,238	131,651	247,676
Butte County						
Biggs	1,787	3,997	634	1,397		--
Chico	88,228	127,212	37,159	52,860	--	--
Gridley	6,454	13,170	2,449	4,923	--	--
Oroville	14,687	28,582	6,393	12,203	--	--
Paradise	26,310	33,667	12,789	16,134	--	--
Unincorporated Butte County	84,302	114,687	37,199	49,749	--	--
Butte County Total*	221,768	321,315	96,623	137,266	88,714	123,539
Nevada County						
Nevada County Total	98,680	123,940	51,013	--	--	--

*: Projections for Butte County jurisdictions are for 2030, not 2035.
*** Existing jobs are from SACOG for 2005.
*** Existing job figure for Butte County is from 2006.
Sources: DOF 2007 and 2010, SACOG 2008, BCAG 2006

6.1.4 CUMULATIVE EFFECTS OF THE 2030 GENERAL PLAN

AESTHETIC RESOURCES

Development in Sutter County, Butte County, Nevada County, and Yuba County cities would cause substantial changes to the exiting visual character. Important visual resources present in Yuba County (agricultural lands, views of the Sutter Buttes and the Sierra Nevada, waterways, etc.) would be affected by land use change under the cumulative scenario by related projects and plans. There is a **significant** cumulative aesthetics impact.

As development occurs in the unincorporated County and surrounding areas, substantial changes in visual conditions would continue as open viewsheds are replaced by urban development. Increased urban development would also lead to increased nighttime light and glare in the region and more limited views of the night sky and sky glow effects, and would disrupt the rural nature of the area. The effect of these changes, when considering the related projects, on aesthetic resources from past and planned future projects is a cumulatively **significant** impact.

Assessment of visual quality is a subjective matter and reasonable people may differ as to the aesthetic value of the open space and grazing lands in the unincorporated County, and whether development of urban uses would constitute a substantial degradation of the existing visual character or quality of the County and its surroundings. Implementation of the 2030 General Plan would substantially alter the visual or aesthetic character within the Valley Growth Boundary, rural communities, and directly adjacent areas by converting agricultural lands and open space to developed urban uses.

The 2030 General Plan includes all feasible mitigation in the form of policies and actions. Beyond these, there is no mechanism to allow implementation of the 2030 General Plan and the related projects while avoiding the conversion of open space and agricultural use to urban development. No feasible mitigation is available to completely mitigate impacts on visual resources associated with the conversion of agricultural land and open space to urban development, impacts on views of scenic vistas (including views of agricultural landscapes and the Sutter Buttes), and contribution to light and glare; there is no mechanism to allow implementation of development projects while avoiding the conversion of the local viewsheds from agricultural land uses and open spaces to urban development.

As noted in the 2030 General Plan, drafting of the general plan update was guided by the vision to protect agricultural lands, rural landscapes, air and water quality, and natural resource areas that prove to be positive characteristics of Yuba County, and that are important to maintaining quality of life for citizens of Yuba County.

The County's aesthetic priorities are described in the Natural Resources Element, Visual Resources Goals NR 9, NR 10 and NR 11. The Natural Resources Element goals and policies address conservation of locally-important visual resources, as well as maintaining view corridors for important regional visual resources, such as the Sutter Buttes.

Among other visual resources noted in the 2030 General Plan area are large native trees found with the riparian forest habitat along the Feather River and Bear River, there are scattered native trees and large nonnative trees along roadsides and agricultural fields throughout the County that contribute to the local and regional aesthetic character. The 2030 General Plan includes implementing actions to develop a tree preservation ordinance to preserve oak woodlands, oak trees, and other large trees (Action NR 10.1).

The County's land use policies to encourage infill development and redevelopment of vacant and underutilized properties within existing unincorporated communities have visual as well as air quality benefits. The County will seek funding for design and implementation of air quality, noise, and visual buffers along regional transportation routes. The County will coordinate with regional transportation agencies and drainage districts to find opportunities to use these same buffer areas for natural drainage conveyance, multi-modal transportation routes, visual buffering, community gardens, and for other useful public purposes.

Despite the range of policies and programs in the 2030 General Plan that would reduce or avoid adverse aesthetics impacts throughout Yuba County, urban development of agricultural lands and open space would occur. Growth and development in adjacent counties (Sutter County, Butte County, Nevada County, and Placer County) would involve similar conversion of former agricultural lands, open space, and elements of the rural landscape. Cumulative aesthetics impacts are considered **significant**.

Given the large scale of this development and the rural nature of the regional setting, the impacts on visual resources from implementing projects accommodated under the 2030 General Plan is **cumulatively considerable**. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

AGRICULTURAL AND FOREST RESOURCES

Conversion of Important Farmland in the Sacramento Valley is a **significant** cumulative impact resulting from urbanization. The cumulative loss of forestland through development in the region is considered a **significant** cumulative impact, also. There are no properties protected by Williamson Act contracts in Yuba County and, therefore, no cumulatively considerable contribution to any impact related to the Williamson Act. See Section 4.2 of this EIR for more detail.

Implementation of the 2030 General Plan would permanently convert Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, located in Yuba County to nonagricultural, urban and built up uses. As described in Section 4.2, Agricultural Resources, the Proposed Project, at buildout in 2030, would result in the conversion of approximately 5,683 acres of Prime, Statewide Important or Unique Farmlands. The 2030 General Plan would also combine with past, present, and future development within the Sutter, Butte, and Yuba County farming areas and larger Sacramento Valley region to convert Important Farmland to urban use. The 2030 General Plan includes policies and actions to balance the need for development with the need to protect the County's ongoing agricultural heritage and economic base. The 2030 General Plan Land Use Diagram calls for development to be focused within the Valley Growth Boundary, with limited development outside of the boundary. This Valley Growth Boundary effectively establishes long-term agricultural areas within valley portions of the unincorporated County to be conserved for ongoing agricultural activities (see Policy CD1.1, Policy CD1.2, and Policy CD1.3). The Land Use Diagram also maps Rural Community boundaries for the unincorporated communities, which are mostly located in the foothill and mountain portions of the County, which will serve a similar function in directing any development to areas within Rural Community Boundary Areas and preserving open space areas, including those serving an agricultural purpose.

However, the direct conversion of agricultural land would contribute to the incremental decline of Important Farmland in the region and result in the irreversible conversion of this agricultural land. The loss of Important Farmland is a **cumulatively considerable** impact when considered in connection with the significant cumulative losses that would occur through implementation of the proposed project, past farmland conversions, and planned future development.

Much of the County's forest lands are located on protected federal lands, which would preclude major development from affecting those lands. Most of the development anticipated under implementation of the 2030 General Plan would occur within the Valley Growth Boundary rather than in the foothills and mountains, where the County's forest resources are located. Policies and actions in the 2030 General Plan would reduce adverse impacts to forest lands. Rural development under the 2030 General Plan would be focused within a series of Rural Community Boundary Areas, which include a minor amount of timberland. As noted, in Section 4.2, Agricultural Resources, there is the potential for the conversion of approximately 245 acres of timberland. For the period from 2006 to 2008 applications for rezoning of land designated timberland production zone (TPZ) affected a total of 3,340 acres in Butte County and 597.5 acres in Placer County (CDF 2009).

Project objectives include planning proactively for long-term development and conservation within Yuba County's rural communities, in order to make them more environmentally and economically sustainable places. Another objective of this project is to maintain the existing Rural Community Boundary Areas, which are reflected in the existing (1996) General Plan. The forest land areas that could potentially be affected by implementation of the General Plan are within the existing (1996) Rural Community Boundary Areas. The conversion of forestland in Yuba County combined with timberland conversion in adjacent counties as a result of rural community development and rural subdivisions is a **significant** cumulative impact.

The 2030 General Plan, while maintaining existing (1996) rural community boundaries, would make a **considerable contribution** to this significant cumulative impact. Other than the policies and actions included in the General Plan, there is no additional feasible mitigation available to address this potentially significant impact. This impact is **significant and unavoidable**.

AIR QUALITY

Air quality in the region does not meet State of California standards. Construction and operation of projects accommodated under regional plans could have a long-term impact on a region's emission profile and ability to attain and maintain NAAQS and CAAQS. The cumulative effects from short- and long-term criteria pollutants generated from the proposed 2030 General Plan, combined with related projects, creates a **significant** cumulative impact.

Feather River Air Quality Management District (FRAQMD) significance thresholds are intended to be used to judge whether or not the subject project would have a cumulatively considerable impact. Ozone precursor thresholds are set at a level that would, with compliance, prevent further deterioration of ambient air quality and a regionally cumulative significant impact (e.g., worsened status of non-attainment). Particulate matter thresholds for use at the project level were designed to represent the emission levels above which a project's individual emissions would result in a cumulatively considerable contribution to the region's existing air quality conditions. Construction-related and operational criteria air pollutant emissions associated with General Plan buildout would exceed FRAQMD significance thresholds. Therefore, the 2030 General Plan would have a **cumulatively considerable** contribution to air pollutants in the region. All feasible mitigation is included as policies and actions of the 2030 General Plan and compliance with existing standards (including FRAQMD standard construction mitigation). This impact is **significant and unavoidable**.

Implementation of the new General Plan would result in less-than-significant CO-related air quality impacts from local mobile sources. Since the model used in the traffic analysis is a regional transportation model, this is representative of the cumulative condition. Therefore, the impact would also be **less than significant** on a cumulative basis.

Toxic air contaminants (TACs) are considered in land use planning in association with sensitive land uses. Projects and plans throughout the region would contribute roadway and railway traffic that could occur near sensitive receptors, resulting in a **significant** cumulative impact. Sensitive land uses or sensitive receptors are people or facilities that generally house people (e.g., schools, hospitals, residences, etc.) that may experience adverse effects from unhealthful concentrations of air pollutants. There are numerous types of these receptors throughout Yuba County, particularly concentrated near populated areas. Operational activities that require the use of diesel-fueled vehicles for extended periods, such as commercial trucking facilities or delivery/distribution areas, may generate diesel particulate matter (DPM) emissions near sensitive receptors. Although commercial and industrial uses that would be developed under the 2030 General Plan have not been specifically identified, it is likely that commercial uses that could be developed under the 2030 General Plan would have tenants that would require large delivery and shipping trucks that use diesel fuel. The General Plan includes policies that would require buffers between sensitive land uses and sources of TACs. The General Plan anticipates that the review and conditioning of projects, including buffering and other measures to promote compatibility of adjacent land uses, would be formalized through updates to County Codes. Despite the implementation of 2030 General Plan policies and actions, existing regulations, it is possible that sensitive land uses may be exposed to substantial TAC concentrations. Growth in roadway and railroad traffic under the 2030 General Plan, combined with regional growth in the cumulative scenario could represent a significant cumulative impact. The County considers the contribution of the 2030 General Plan to be **cumulatively considerable**. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

Exposure to odors that occurs under the 2030 General Plan is not anticipated to combine with regional sources of odors in a way that would generate cumulatively considerable impacts. Odor impacts are generally localized and do not combine with odor impacts in nearby jurisdictions to increase the severity of impacts. There is **no significant** impact.

See Section 4.7 of this EIR for the discussion of Greenhouse Gas impacts of the General Plan, including potentially cumulative impacts. The County's greenhouse gas reduction plan describes the County's strategy for

compliance with AB 32-related requirements and the related air quality, transportation, public investment benefits and strategy for compliance with state and federal legislation.

BIOLOGICAL RESOURCES

Past development in Yuba County, ranging from conversion of land to agricultural production to recent expansion of urban development, has resulted in a substantial loss of native habitat to other uses. This land conversion has benefited a few species, such as those adapted to agricultural, urban, and rural-scale developed uses, but the overall effect on native plants, animals, and habitat has been negative. Although many future projects and plans included in the cumulative scope of this analysis would be required to mitigate those impacts, in compliance with the California Environmental Quality Act, Federal Endangered Federal Species Act, California Endangered Species Act, and other state, local, and federal statutes, many types of habitats and species are provided no protection. Therefore, it can be expected that the net loss of native habitat for plants and wildlife, agricultural lands, and open space areas that support important biological resources in Yuba County and related areas will continue. The cumulative loss of habitat for special status species, such as habitat for riparian and aquatic species (e.g., California red-legged frog, giant garter snake, and western yellow-billed cuckoo) have already resulted in drastic declines in numbers of these species. This is a **significant cumulative impact**. Please refer to Section 4.4 of this EIR for more details.

Implementing the 2030 General Plan could result in further loss of special status species and their habitat. Continued development of natural resources areas will result in the incremental decline in the amount of habitat remaining to support special-status species and sensitive natural communities. The 2030 General Plan would contribute to an ongoing decline of special status species and habitats.

The cumulative conversion of habitat for development and agricultural use has resulted in the reduction in populations of twenty-five plant species in Yuba County that have been listed as special status. Special-status plants that occur in vernal pool complex could be affected by development under the 2030 General Plan. Furthermore, habitat modification and fragmentation as a result of development that could occur under the 2030 General Plan could degrade habitat quality to a degree that it no longer supports special-status plant populations.

The 2030 General Plan policies and actions require avoidance of impacts to special-status species and their habitats. The Natural Resources Element also designates various types of open space, including open space required to protect critical habitat and other important biological resources. Therefore, the 2030 General Plan's contribution to a significant cumulative impact would be reduced by implementing the General Plan policies and actions. However, it may not be feasible to completely avoid direct and indirect impacts, while still allowing full build out of the designated land uses and therefore the 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

In Yuba County, most established riparian vegetation occurs along the largest rivers; the Feather River, Yuba River, and Bear River, and south Honcut Creek. Important riparian corridors also occur along Dry Creek and other tributaries to Honcut Creek and the Yuba River. Riparian vegetation is present in the surrounding region along the Sacramento River and in the Sutter Bypass. Agricultural, residential, and industrial water use and land development have resulted in **a significant cumulativ**e reduction in the extent of riparian habitats in the County and surrounding region. Implementing Action NR 5.3, which requires private and public projects to provide setbacks to protect riparian habitat as a condition of project approvals, is expected to substantially reduce impacts on riparian habitats. However, complete avoidance may not be possible while still allowing full build out of the designated land uses. Therefore, the 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

The complex array of habitats in Yuba County and adjacent counties supports abundant and diverse fauna because large tracts of land are covered by habitats known to have outstanding value for wildlife, such as mixed coniferous forests and oak woodlands. Migratory bird species use these forests for breeding during summer months and rice fields in the northern Sacramento Valley, including western Yuba County and Sutter County are also considered important wildlife habitat because of their position in the Pacific Flyway, the westernmost of North America's four flyways, or migration routes. Conversion of agricultural lands and forests and woodlands for developed land uses in the region has resulted in a **significant cumulative impact** to wildlife that are dependent upon these habitats. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

The policies and programs of the 2030 General Plan would avoid, minimize, and/or compensate for potential adverse effects to migratory wildlife and habitat used in wildlife movement. These policies include protection for anadromous fish habitat, deer ranges and migratory habitat, and riparian habitat which is commonly used by various wildlife species for migration. However, avoidance of migratory routes and potential migratory habitat is not mandatory and the 2030 General Plan does not identify or designate any land specifically for migratory habitat conservation. Therefore, the extent to which significant impacts would be reduced by implementing the General Plan policies cannot be known in advance of specific project designs. Complete avoidance would not be possible while still allowing full build out of the designated land uses. Therefore, the 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

The alteration of the hydrologic condition supporting long-term soil saturation and conversion to other uses, primarily agriculture, has resulted in a **significant cumulative impact** to freshwater emergent wetlands in Yuba County and the surrounding region. These habitat types are considered sensitive by the California Department of Fish and Game (DFG) and also typically fall under the jurisdiction of the U.S. Army Corps of Engineers, pursuant to the Federal Clean Water Act.

Implementing the 2030 General Plan could result in the loss of freshwater emergent wetland and vernal pool complex with vernal pools and swales. Implementing the General Plan policies and actions listed above, along with the additional mitigation measures, is expected to reduce significant impacts on wetland and other waters of the United States requiring delineation and avoidance of these habitats to the maximum extent feasible, establishment of wetland habitat buffers, and by providing compensation for unavoidable impacts in a manner that would ensure no net loss of overall wetland habitat in the County. Complete avoidance would not be possible while still allowing full build out of the designated land uses. Therefore, the 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

The County anticipates that implementation of the Yuba-Sutter Natural Community Conservation Plan (NCCP)/ Habitat Conservation Plan (HCP) would reduce cumulative biological resources impacts. The Yuba-Sutter NCCP/HCP is a cooperative planning effort intended to:

- continue economic growth and community development;
- retain the economic vitality of the local agricultural community;
- maintain recreation, hunting, fishing, and other public uses of the local open space;
- simplify and expedite land use and conservation planning in the plan area;
- protect threatened and endangered species; and
- preserve plant and wildlife communities.

The Yuba-Sutter Regional NCCP/HCP will provide an opportunity to mitigate potential impacts to biological resources that may occur through implementation of the General Plan. The NCCP/HCP is still in draft form as of the writing of this document, but the County anticipates that it will be finalized and adopted before the 2030

General Plan is fully implemented. 2030 General Plan policies and actions to ensure compliance with the NCCP/HCP, once adopted. There is **no cumulative** impact.

Climate change impacts could involve disruption for biological resources. In California, the timing and amounts of water released from reservoirs and diverted from streams are constrained by their effects on various native fish, especially those that are listed under the federal and state endangered species acts as threatened or endangered. Several potential hydrological changes associated with global climate change could influence the ecology of aquatic life in California and have several negative effects on cold-water fish. If climate change raises air temperature by just a few degrees Celsius, this change could be enough to raise the water temperatures above the tolerance of salmon and trout in many streams, favoring instead non-native fish, such as sunfish and carp. Unsuitable summer temperatures would be particularly problematic for many of the threatened and endangered fish that spend summers in cold-water streams, either as adults, juveniles, or both. In short, climate change could significantly affect threatened and endangered fish in California. It could also cause non-threatened and non-endangered fish to reach the point where they become designated as such (DWR 2006). The degree to which the 2030 General Plan could contribute to a significant cumulative climate-change related biological resources impact is unknown at this time.

CULTURAL RESOURCES

Cultural resources in the region generally consist of prehistoric sites, historic sites, historic structures, and isolated artifacts. During the 19th and 20th centuries, localized urbanization and intensive agricultural use in the region caused the destruction or disturbance of numerous prehistoric sites, while many structures now considered to be historic were erected. From the latter half of the 20th century to the present, prehistoric and historic structures have been disturbed and destroyed. During this period, the creation and enforcement of various regulations protecting cultural resources have substantially reduced the rate and intensity of these impacts. However, even with these regulations, cultural resources are still degraded or destroyed as cumulative development in the region proceeds. Development of projects and plans assumed in the cumulative scenario has the potential to result in the discovery of undocumented subsurface cultural resources or unmarked historic-era or prehistoric Native American burials. However, these potential impacts would not increase in severity in consideration of cumulative projects.

Cumulative gains in population, households, and jobs would require a commensurate increase in infrastructure, capital facilities, services, housing, and commercial uses in Yuba County, its incorporated cities, and areas adjacent counties. Each of these increases carries with it a corresponding increase in the magnitude of ground disturbance and the construction of new buildings and structures and other site development activities. The impact on archaeological deposits, human remains, and paleontological resources would be substantial given the past extent of urban development, and anticipated gains in population, jobs, and housing. There is a **significant** cumulative impact to cultural resources.

Due to the nature of cultural resources, adverse impacts are site-specific and need to be determined on a project-by-project basis. The incorporation of standard measures addressing the response when undocumented resources are discovered would address this potential impact. The proposed policies of the 2030 General Plan constitute mitigation available to reduce impacts on cultural resources due to development in the unincorporated County. With implementation of General Plan policies and actions, in addition to other applicable state regulations, the impacts of the 2030 General Plan would be reduced. However, with the level of development and earth disturbance accommodated under the 2030 General Plan, it is possible that significant cultural resources could be affected. The impact is considered **cumulatively considerable**. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

GEOLOGY AND SOILS

Cumulative impacts on geology and soils would be less than significant based on the application of goals, policies, and actions incorporated into the 2030 General Plan, as described in Section 4.6, "Geology, Soils, Mineral Resources, and Paleontological Resources."

Cumulative gains in population, households, and jobs in the areas included within the cumulative scenario would require a commensurate increase in infrastructure, capital facilities, services, housing, and commercial uses. Each of these increases carries with it a corresponding increase in the amount of ground disturbance resulting from the construction of new buildings and structures and other site development activities. However, each individual project considered in this cumulative analysis must meet building code requirements, as well as the requirements of local policies (i.e., grading and erosion control plans). Therefore, there would be no additive effect and the 2030 General Plan will have a **less than cumulatively considerable** impact related to seismic and soil hazards.

The cumulative loss of access to mineral resources is a **significant** cumulative impact resulting from encroachment by development into areas with mineral resources.

Implementation of the proposed policies and actions of the 2030 General Plan and implementation of existing regulations for SMARA Mineral Resource Zones, would reduce the impacts of buildout of the 2030 General Plan on mineral resources. Nonetheless, it is possible that development of the County's Rural Community Boundary Areas could preclude extraction of important County mineral resources along the Yuba River. One of the key objectives of the 2030 General Plan is to proactively guide development of rural areas of the County, including those that could be within areas of important mineral resources. The County has included all feasible mitigation as a part of the 2030 General Plan. The 2030 General Plan would have a **cumulatively considerable** contribution to a significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

A records search of the University of California Museum of Paleontology's Paleontology Collections database did not identify any previously recorded fossil localities. However, certain portions of the County are underlain by Pleistocene-age alluvial deposits, which are considered paleontologically sensitive. The fact that vertebrate fossils have been recovered throughout the Sacramento and San Joaquin Valleys in these sediments suggests that there is a potential for uncovering additional similar fossil remains during construction-related earthmoving activities. Development under the cumulative scenario could adversely affect these resources, resulting in a **significant** cumulative impact.

Implementation of the policies and actions of the 2030 General Plan would reduce the impacts of buildout of the 2030 General Plan on paleontological resources. Work stoppage is required where resources are discovered. Consultation with a paleontologist and measures to avoid further impact would be required. However, the County cannot guarantee that construction and development activities would avoid impacts to paleontological resources. Therefore, the 2030 General Plan would have a **cumulatively considerable** contribution to a significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

GREENHOUSE GAS EMISSIONS

Greenhouse gas (GHG) emissions have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Global climate change has the potential to result in sea level rise (resulting in flooding of low-lying areas), to affect rainfall and snowfall (leading to changes in water supply), to affect temperatures and habitats (affecting biological resources), and to result in many other adverse effects.

The proper context for addressing this issue in an EIR is within an assessment of cumulative impacts. Although it is unlikely that development projects that could occur under the 2030 Yuba County General Plan will, by themselves, contribute significantly to global climate change, cumulative emissions from many projects under many such plans could impact global GHG concentrations and the climate system. Global GHG emissions represent a **significant** cumulative impact.

Some major GHG emission sectors can be affected by local government actions, while others cannot. GHG emission sectors such as transportation and electricity will be regulated by the implementation of state-wide emission reduction programs (e.g., vehicle emissions standards, renewable energy portfolio standards). Legislation already in effect will achieve state-wide reductions of GHG emissions associated with electricity production, industry, and other sources. It is anticipated that future legislation and regulations at the state and federal levels would further reduce GHG emissions, with different reduction potential available for each sector.

Land use and building patterns resulting from local government development policies can affect VMT, water use, wastewater generation, solid waste generation, and building energy use. Future residents, employees, and visitors in projects accommodated under the 2030 General Plan would drive vehicles that generate GHG emissions.

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) to address GHG reduction targets in the context of that MPO's Regional Transportation Plan (RTP).

The GHG reduction target for the Sacramento Area Council of Governments (SACOG) Area, of which Yuba County is a part, is 7% per capita by 2020 and 16 % per capita by 2035. Both targets are expressed as percent per capita below 2005 levels. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets.

The County recognizes in the 2030 General Plan that transportation is the largest source of GHGs in Yuba County and California, and that land use and transportation planning to reduce vehicular travel is needed to achieve GHG reduction goals, especially since, given the predominance of transportation as a source of GHG emissions, improvements in building energy efficiency and other GHG emissions sectors can be overwhelmed by increases in VMT. The County also recognizes that effectiveness of a local GHG reduction program for a growing area like Yuba County is contingent on development patterns and transportation systems that reduce emissions from the transportation sector. The County has measured the relative local GHG efficiency, with results presented in Section 4.7.

Because the 2030 General Plan would generate higher GHG emissions per service population than is needed at the state level to achieve the AB 32 target, and since a substantial quantity of GHG emissions would be generated though buildout of the General Plan, this impact is considered a **cumulatively considerable** contribution to the significant cumulative impact of global climate change.

In addition to GHG emissions from implementation of the 2030 General Plan, another cumulative impact of climate change includes increased global average temperatures (global warming) through the intensification of the greenhouse effect, and associated changes in local climatic conditions. Areas of the unincorporated County could experience increased average temperatures; modifications to the timing, amount, and form (rain vs. snow) of precipitation; changes in the timing and amount of runoff; reduced water supply; deterioration of water quality; elevated sea level; and other **significant** cumulative impacts.

Policies and actions in the 2030 General Plan would reduce the extent and severity of climate change–associated impacts by proactively planning for changes in climate and conditions, and providing methods for adapting to these changes. Impact of climate change on Yuba County would occur during a time span far beyond the buildout of the 2030 General Plan. The 2030 General Plan proposes all feasible mitigation to respond and adapt to foreseeable impacts of climate change in the form of General Plan policies and actions, but the efficacy of the

County's policy approach for dealing with the local effects of climate change is unknowable at this time. For the purposes of this EIR, the impact is considered **significant and unavoidable** and the County's contribution is **cumulatively considerable**.

A detailed discussion of GHG emissions resulting from the 2030 General Plan is provided in Section 4.7, Climate Change.

HAZARDS AND HAZARDOUS MATERIALS

Buildout of the 2030 General Plan would increase the quantity and intensity of development of unincorporated areas of the County. With implementation of General Plan policies and actions, along with the application of existing regulations, projects developed under the 2030 General Plan would result in less-than-significant impacts related to routine transport, use, and disposal of hazardous materials; interference with an adopted emergency response plan; exposure of structures to urban or wildland fires; and public health hazards from development on a known hazardous materials site.

Under cumulative conditions, implementation of the 2030 General Plan, in conjunction with growth planned in surrounding jurisdictions, is not anticipated to present a public health hazard to residents. Projected growth both in the unincorporated County and in surrounding jurisdictions would involve storage, use, disposal, and transport of hazardous materials to varying degrees during construction and operation. Impacts from these activities are reduced since the storage, use, disposal, and transport of hazardous materials is extensively regulated by various federal, state, and local laws, regulations, and policies. Health and safety impacts associated with the past or current uses of a proposed project site usually occur on a project-by-project basis, rather than in a cumulative manner. Individual development projects in the County and in surrounding jurisdictions would implement and comply with existing hazardous materials laws, regulations, and policies. There is **no significant** cumulative impact.

The 2030 General Plan includes generalized land use designations and it is not possible to know if any proposed operations would involve hazardous materials either on-site or would require hazardous materials related activities off-site. The 2030 General Plan contains policies relating to hazardous materials use, transport, and emergency response that would require consideration of hazardous materials issues in the land use planning process.

Implementation of current state and federal regulations, as well as the policies of the 2030 General Plan may not prevent all potential releases of hazardous materials, but would serve to minimize both the frequency and the magnitude, if such a release occurs. In combination with existing federal and state regulations, these policies would also reduce the potential impacts of the routine transportation of hazardous materials in the County. Therefore, the 2030 General Plan would **not make a considerable contribution** to any significant cumulative impact related to transport of hazardous materials.

HYDROLOGY AND WATER QUALITY

As discussed in Section 4.9, "Hydrology and Water Resources," land uses and development consistent with the 2030 General Plan would result in less-than-significant impacts related to violation of water quality standards, erosion and sedimentation, construction-related water quality impacts, interference with groundwater recharge, flood hazards, and dam failure.

The 2030 General Plan would potentially combine with development in the region to create **significant** cumulative hydrologic and water resource impacts. However, the General Plan's Public Health & Safety Element policies are designed to reduce the rate of runoff, filter out pollutants, and/or facilitate groundwater infiltration. These policies and actions are designed to meet the NPDES MS4, Title 22, California Toxics Rule (CTR), and Basin Plan water quality objectives described in "State Plans, Policies, Regulations, and Laws" in Section 4.9 of

this EIR. Construction activities are required in order to conform with the SWRCB statewide NPDES stormwater permit for general construction activity, and any other necessary site-specific WDRs or waivers under the Porter-Cologne Act (see "State Plans, Policies, Regulations, and Laws" in Section 4.9), as well as Yuba County Department of Public Works Design Standards and Codes and Ordinances that regulate construction discharges (see "Regional And Local Plans, Policies, Regulations, And Ordinances" above).

Implementation of existing regulations and laws, along with the policies and actions of the 2030 General Plan would reduce the 2030 General Plan's contribution to this potentially significant cumulative impact to water quality. The 2030 General Plan would have a **less than cumulatively considerable** contribution to a significant cumulative impact related to water quality impacts assuming application of existing regulations and policies and actions of the 2030 General Plan.

Development and land use change in Yuba County and in the surrounding region could result in additional impervious surfaces, and the diversion of groundwater to surface water through subsurface drainage features or localized dewatering measures. As a result, levels of groundwater recharge in the underlying groundwater basin would decline. Reductions in groundwater recharge in a given area could affect groundwater levels and the yield of hydrologically connected wells. This is considered a **significant cumulative impact**.

2030 General Plan policies would be implemented in coordination with the Yuba County Groundwater Management Plan on a regional level to ensure conjunctive use, perennial yield, and avoidance of groundwater overdraft within the County and in surrounding areas that are hydrologically connected to it. This would also be the case with the Integrated Regional Water Management Plan (IRWMP), which includes providing groundwater management to protect and utilize the groundwater resources in a sustainable manner. With incorporation of 2030 General Plan policies, the Yuba County Groundwater Management Plan, and the IRWMP, the 2030 General Plan would have a **less than cumulatively considerable** contribution to a significant cumulative impact.

Much of the floodplain area of Yuba County and adjacent Sutter County is protected by levees along the Feather River, Yuba River, Bear River, and Honcut Creek. Riverine flooding can overwhelm the integrity of the local or regional levee system. When levees fail, people and structures are exposed to inundation, and death, injury, or loss of property can result. Development planned in the 2030 General Plan would place additional people and structures behind levees designed to protect against flooding. This is a potentially **significant** cumulative impact.

Adoption and implementation of the proposed policies in the 2030 General Plan, as well as existing state and local regulations, would reduce the risk for people and structures involving flooding that could result from failure of a levee. The potential for failure of a levee would remain, but state law, state regulations, and federal regulations are designed to reduce flood risk to an acceptable level (e.g. 200-year flood protection). Policy HS1.5 requires that the County commit to participation in the TRLIA and YCWA IRWMP ongoing efforts for levee certification, as well as compliance with state law related to flood protection for urbanized areas. Policies HS1.7 and HS1.8 require that the County utilize the best available flood hazard information when developing in floodplains, and Policy HS1.9 requires the County to demonstrate compliance with state and federal flood standards prior to approval of any development. According to this policy, levees must be certified pursuant to FEMA 100-year standards and 200-year standards with the implementation of recent changes in state law. With implementation of the 2030 General Plan policies and actions, the 2030 General Plan would make a **less than cumulatively considerable** contribution to a significant cumulative impact.

It is difficult to assess implications of climate change for flood frequency, in large part because of the absence of detailed regional precipitation information from climate models and because human settlement patterns and water-management choices can substantially influence overall flood risk. Still, increased amounts of winter runoff could be accompanied by increases in flood event severity and warrant additional dedication of wet season storage space for flood control as opposed to supply conservation. This need to manage water storage facilities to handle increased runoff could in turn lead to more frequent water shortages during high water demand periods. It is recognized that these impacts would result in increased challenges for reservoir management and balancing the

competing concerns of flood protection and water supply. The General Plan's contribution to any significant cumulative flood hazard impact is unknown at this time.

Global climate change could affect surface water quality. A combination of a reduction in precipitation, the shift in volume and timing of runoff flows, and the increased temperature in lakes and rivers could affect a number of natural processes that eliminate pollutants in water bodies. For example, the overall decrease in stream flows could potentially concentrate pollutants and prevent the flushing of contaminants from point sources. Considerable work remains to determine the potential effect of global climate change to water quality as it effects Yuba County. Beyond this, a significance determination for cumulative climate-change related hydrology and water quality impacts would be speculative.

LAND USE, HOUSING, AND POPULATION

Compliance with goals and policies in the 2030 General Plan would ensure that development pursuant to the 2030 General Plan would not disrupt or divide established communities. The 2030 General Plan policy diagrams would accommodate development in and adjacent to existing communities, but these policy diagrams do not include improvements that would divide existing communities. The 2030 General Plan does not identify new infrastructure improvements that would be located in a way that would divide an established community. There is **no significant** cumulative impact.

Impacts involving adopted land use plans or policies and zoning generally would not combine to result in cumulative impacts. The determination of significance for impacts related to these issues, as described by Appendix G of the State CEQA Guidelines, is whether a project would conflict with any applicable land use plan or policy adopted for the purpose of avoiding or mitigating environmental impacts. Such a conflict is site-specific; it is addressed on a project-by-project basis. Indirect effects from those plans and policies adopted for the purpose of avoiding or mitigating environmental impacts, can lead to physical environmental impacts, which are considered in the appropriate sections of this EIR.

The State CEQA Guidelines Section 15125(d) requires that an EIR analyze the potential for inconsistencies between the project, in this case implementation of the 2030 General Plan, and other relevant plans, programs, regulations, and agencies with some authority over the project. The General Plan was designed to be consistent with a number of relevant plans and policies.

- **Yuba County Local Agency Formation Commission.** Yuba County Local Agency Formation Commission (LAFCo is responsible for annexations and detachments of lands to cities and special districts, as well as the formation and dissolution of cities, special districts, and spheres of influence. The County is required to work with LAFCo during the annexation process to ensure that municipal services are provided to newly annexed areas. This would ensure consistency with LAFCo policies. The 2030 General Plan policies further ensure the County's coordination with Yuba LAFCo during future annexations.

- **Sacramento Area Council of Governments Blueprint.** The Sacramento Area Council of Governments (SACOG) Preferred Blueprint Scenario, referred to as the Blueprint, is a voluntary framework for regional transportation and land use planning that was developed to aid the jurisdictions in the six-county greater Sacramento area in guiding development through 2050. The Blueprint is intended to suggest different development patterns and density in the future compared to past trends in part to provide for more efficient public facilities and infrastructure, to reduce vehicle miles traveled (VMT) regionally, to reduce air pollutant emissions, and reduce other environmental impacts. The 2030 General Plan includes substantially more development than anticipated under the Preferred Blueprint Scenario for the unincorporated County. The 2030 General Plan includes goals, policies, and actions that promote Blueprint principles, including the promotion of more public transportation and use of bicycles and non-motorized forms of transportation; providing many types of housing to meet the needs of all residents, rather than focusing solely on single-family, large-lot, detached residential development; promoting more compact development; redevelopment of

vacant or underutilized parcels and using existing roadway systems, and public facilities; creating neighborhood and civic centers with mixed uses to provide neighborhood services to residential areas; and preserving natural features and systems. Goals and policies that promote the seven smart growth principles of the Blueprint are found throughout the 2030 General Plan.

- **Metropolitan Transportation Plan (MTP).** In 2008, SACOG approved the Metropolitan Transportation Plan (MTP) 2035 for the six-county region. The MTP is a 28-year plan for transportation improvements needed in the region to accommodate projected population and economic growth. The MTP makes connections between transportation needs, land use, and air quality on a regional level, and provides guidance for cooperative planning between different local jurisdictions. The 2030 General Plan uses the same principles outlined in the MTP for regional transportation planning.

There are no inconsistencies between the 2030 General Plan and other relevant plans, actions, and regulations that would result in any substantial adverse physical effects under CEQA other than those already addressed comprehensively and mitigated as appropriate throughout this EIR. The 2030 General Plan would have a less that cumulatively considerable contribution with any adopted land use plans, policies, and legislation meant to reduce environmental impacts. The 2030 General Plan would not conflict with an adopted habitat conservation plan or natural community conservation plan. There is **no significant** cumulative impact.

General plans in the region, along with specific plans that are outside the development assumptions from local general plans, would potentially accommodate substantially greater population and employment growth compared to regional forecasts and planning efforts. Population and employment growth beyond those included in local and regional land use and transportation plans could induce population growth, which could have a **significant** cumulative impact.

Implementation of the 2030 General Plan would accommodate an increase in population, housing, and employment within unincorporated Yuba County. Increases in land availability for residential development could directly induce population growth. Additionally, increases in land designated for industrial and commercial uses could indirectly induce population growth by increasing the number of jobs in the County. The purpose of the 2030 General Plan is to provide a framework for development and conservation in unincorporated Yuba County. The 2030 General Plan contains all feasible mitigation in the form of policies and actions that provide an orderly growth framework for unincorporated Yuba County. The County has designed the 2030 General Plan to balance land uses in order to avoid growth inducement elsewhere. However, the 2030 General Plan could accommodate a substantially greater population and employment growth than is included in existing forecasts and plans. If this level of job growth is realized, it is possible that population growth near future job centers could be induced. The amount of new development anticipated as a part of the 2030 General Plan exceeds growth anticipated for unincorporated Yuba County included in regional population and employment forecasts, SACOG's MTP, air quality attainment planning, and other regional plans. The 2030 General Plan would have a **cumulatively considerable** contribution to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

Regional growth could displace existing housing and population, requiring the construction of housing elsewhere, representing a **significant** cumulative impact.

The 2030 General Plan provides overarching guidance for development and conservation. The 2030 General Plan does not propose to remove existing housing or displace existing population or housing units. However, it is possible that areas designated for development could involve removal of existing housing. The 2030 General Plan proposes policies and actions that facilitate development opportunities on vacant land, underutilized parcels, and through infill and redevelopment. The 2030 General Plan proposes numerous policies and actions to conserve the existing housing stock. However, it is possible that some housing could be removed during buildout. The 2030 General Plan could have a **cumulatively considerable** contribution to this significant cumulative impact. All

feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

NOISE

Traffic noise levels will increase along major regional roadway corridors as a result of the additional traffic generated by buildout of the 2030 General Plan, coupled with regional growth. This represents a **significant** cumulative impact.

The primary factor for a cumulative noise impact analysis is the consideration of future traffic volumes. Implementation of the 2030 General Plan, along with regional growth and traffic conditions, would cause changes in traffic noise levels over existing traffic noise levels. The 2030 General Plan would make a **cumulatively considerable** contribution to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

PUBLIC SERVICES AND FACILITIES

Buildout of the 2030 General Plan would involve changes to land use type, density, and scale, which would increase demands on public services and facilities. The cumulative impacts on, public education services, parks and recreation, fire protection and emergency services, criminal justice services, and library services are described below.

Public Education Services

Growth anticipated with buildout of the 2030 General Plan would result in an increased student population, contributing to an increased demand for additional public schools.

Policies identified in the 2030 General Plan are intended to ensure that new neighborhoods include conveniently-located schools to serve new population and that there is funding available via impact fees on new development to expand or construct new school facilities. Additionally, the 2030 General Plan supports and encourages joint-use libraries for school and community use, and other appropriate joint-use facilities.

The County will ensure that new development projects provide impact fees, land dedication, school construction, or other measures acceptable to local school districts to ensure adequate educational facilities. New development is required by state law to pay school impact fees to school districts and provide sites for new schools. As new development occurs, new schools will be developed to accommodate the growth. Therefore, **no cumulative impact** to public educational services would occur.

The 2030 General Plan does not have any cumulatively considerable contribution to any significant cumulative impact. The impact is **less than significant**.

Fire Protection, Law Enforcement, and Emergency Services

It is expected that new fire protection and law enforcement facilities, and emergency services associated with development within the Valley Growth Boundary would be constructed and/or provided within development areas located within the Valley Growth Boundary identified on the County's Land Use Diagram. Land use change that occurs in Rural Communities served by foothill fire protection districts could require additional facilities. However, these facilities would be expected to be developed within Rural Community Boundary Areas, Fire protection services would be especially important in development areas with higher risk of wildfire, which includes the Rural Communities located in the foothills. Although major growth is not anticipated in the Rural Communities, some new development, particularly of service uses for rural residences, could occur. Any such development would need to conform to existing fire codes and regulations associated with defensible space, fire-resistant building materials, fire sprinkler systems, and fire flow requirements.

In the unincorporated County, fire protection services are provided by the California Department of Forestry and Fire Protection (CAL FIRE), the US Forest Service (USFS), and several fire protection agencies listed in Section 4.12, "Public Services and Facilities."

2030 General Plan provides an overall guide for development and conservation in the County over the long-term, including ensuring adequate access to the full range of public services, facilities, and infrastructure. To support the County's goal for fire protection, the 2030 General Plan includes policies intended to maintain adequate levels of service for fire protection for both existing and new residents.

Implementing actions contained in the 2030 General Plan will require the County to maintain a planning and entitlement review process that documents compliance with state and local standards for fire safety, and to update zoning, development, improvement standards, and building standards, as necessary, to maintain compliance with relevant fire codes, including those maintained by the California Department of Forestry and Fire Protection.

However, the County does not directly control whether and when facilities to serve new growth would be constructed; these decisions are made by the local fire protection service providers. Local demand, therefore, would be served through local expansion of services, and could perhaps involve construction of additional facilities, but this would not combine with effects in neighboring areas to create any cumulative impact. There is **no significant** cumulative impact, therefore, the 2030 General Plan would make **no cumulatively considerable** contribution.

Parks and Recreation Impacts

Several agencies provide park and recreation services in Yuba County in addition to County parks, including the Cities of Marysville and Wheatland, Olivehurst Public Utilities District (OPUD), River Highlands CSD, Browns Valley Irrigation District (BVID), and Yuba County Water Agency (YCWA).

Development and operation of new parks that may be needed to serve additional population accommodated under the General Plan could result in adverse impacts on the physical environment. Developed park facilities would be located within the Valley Growth Boundary and the Rural Community boundaries and natural and recreational open space may be provided in areas outside the Valley Growth Boundary and Rural Community Boundary Areas. Regional park and bike trail facilities could potentially be developed in more rural areas of the County. The General Plan includes policies and actions that will reduce impacts of park development both within and outside of the Valley Growth Boundary and Rural Community Boundary Areas.

The 2030 General Plan establishes the overall parkland standard as "a diversity of park types at a ratio of at least 5 acres for every 1,000 residents." Implementation of this standard will require land dedication and/or fees and planning for parkland of different types that is integrated into new growth areas, as well as redevelopment areas. The County, however, is not the primary provider of developed park facilities or recreational programming for all unincorporated areas. Providing a diversity of parkland at ratios that are adequate to avoid overuse of existing facilities will require the cooperation of, and action by other agencies beyond the County's direct control.

The General Plan provides the complete framework for providing parkland and recreational programming (see Action NR1.1), but the County cannot unilaterally implement this policy. Because the County cannot guarantee the full implementation of parkland and recreational policies and actions, and because it is possible that parkland and recreational facilities may not be provided at an adequate rate to avoid overuse of existing facilities, a **potentially significant** cumulative impact related to park facilities would occur. The 2030 General Plan would make a **cumulatively considerable** contribution to a significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

TRANSPORTATION AND TRAFFIC

The traffic analysis included in this EIR addresses cumulative impacts to the regional transportation system. A regional traffic model was used to analyze impacts of the proposed General Plan at buildout, along with projected regional growth. The regional traffic model already assumes a level of growth for other nearby jurisdictions based on plans and population/employment projections.

The transportation analysis supporting the 2030 General Plan and this EIR takes into account regional growth specifically on streets and highways connecting the County with adjacent jurisdictions. By comparing the volumes of traffic on those external gateways to projections from those adjacent jurisdictions' traffic models, an understanding of the magnitude of land use absorption can be achieved as described below:

- SR 65 at the Yuba/Placer County line – This segment is projected to carry about 76,000 ADT under the 2030 General Plan scenario. This amount of traffic is greater than the cumulative (2050) projection of 58,000 ADT for this segment in the City of Lincoln General Plan, which assumes the new general plan land uses. The increase over the City of Lincoln estimate may be due to a greater amount of land use absorption now contemplated in south Yuba County and the City of Wheatland.

- SR 20, 5th Street, and Third Bridge over Feather River at the Yuba/Sutter County line – These crossings are projected to carry approximately 200,000 ADT under the 2030 General Plan scenario. This amount of traffic is slightly greater than the cumulative (2030) projection of 190,000 ADT from the City of Yuba City Year 2030 Traffic Model, indicating that the Yuba County TDM considers the 2030 land uses from the Yuba City General Plan.

The scenarios studied in Section 4.13, "Transportation and Circulation," of this EIR are considered cumulative by nature because anticipated land use forecasts for other areas are already included in the traffic model. Please refer to Section 4.13 for more details on the 2030 General Plan's cumulative transportation impacts.

Regional population and employment growth is anticipated to result in traffic volumes along regional roadways, such as SR 70, that could exceed acceptable levels of service. This represents a **significant** cumulative impact.

While the 2030 General Plan includes various policies to reduce traffic demand and mitigation for roadway segments and intersections, traffic is anticipated to exceed level of service standards at certain roadway segments and intersections. The 2030 General Plan would make a **cumulatively considerable** contribution to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

UTILITIES AND SERVICE SYSTEMS

Water Supply

Development of land uses allowed under the 2030 General Plan would lead to new water demand. This demand, combined with demand created by development in the region, would potentially result in a **significant** cumulative impact related to water supply.

However, substantial surplus water supplies exist under current conditions in Yuba County. Because the existing surplus is greater than projected demand it is not anticipated that the increase in demand would require new entitlements. In addition, proposed policies within the 2030 General Plan and state law require that new water consumptive projects of substantial size demonstrate adequate supplies. The County has also incorporated water conservation policies in the 2030 General Plan, which supplement water conservation that is already required as a part of building code compliance. For these reasons, the 2030 General Plan would have a **less than cumulatively considerable** contribution to this significant cumulative impact.

From a Statewide perspective, global climate change could affect California's environmental resources through potential, though uncertain, changes related to future air temperatures and precipitation and their resulting impacts on water temperatures, reservoir operations, stream runoff, and sea levels (Kiparsky and Gleick 2003). These changes in hydrological systems could threaten California's economy, public health, and environment (California Energy Commission 2003). The types of potential climate effects that could occur on California's water resources include:

Several recent studies have shown that existing water supply systems are sensitive to climate change. Potential impacts of climate change on water supply and availability could directly and indirectly affect a wide range of institutional, economic, and societal factors. Much uncertainty remains, however, with respect to the overall impact of global climate change on future water supplies. For example, models that predict drier conditions suggest decreased reservoir inflows and storage and decreased river flows, relative to current conditions. Models that predict wetter conditions project increased reservoir inflows and storage, and increased river flows. Much uncertainty also exists with respect to how climate change will affect future demand of water supply.

Little work has been done on the effects of climate change on specific groundwater basins, groundwater quality or groundwater recharge characteristics. Changes in rainfall and changes in the timing of the groundwater recharge season would result in changes in recharge. Warmer temperatures could increase the period where water is on the ground by reducing soil freeze. Conversely, warmer temperatures could lead to higher evaporation or shorter rainfall seasons, which could mean that soil deficits would persist for longer time periods, shortening recharge seasons. Warmer, wetter winters would increase the amount of runoff available for groundwater recharge. This additional winter runoff, however, would be occurring at a time when some basins, particularly in Northern California, are being recharged at their maximum capacity. Reductions in spring runoff and higher evapotranspiration, on the other hand, could reduce the amount of water available for recharge. However, the extent to which climate will change and the impact of that change on groundwater are both unknown. A reduced snowpack, coupled with increased rainfall, could require a change in the operating procedures for California's existing dams and conveyance facilities. Whether or not there is a significant cumulative climate-change related groundwater impact is unknown at this time.

Wastewater Management Services

Growth in Yuba County, Sutter County, Butte County, and other nearby areas would contribute to additional demands for wastewater collection and treatment, leading to a need for additional wastewater facilities in the future. The construction and operation of these facilities and the cumulative potential for water quality violations related to wastewater treatment represent **significant** cumulative impacts.

By adhering to the policies proposed in the 2030 General Plan, as well as all applicable requirements pertaining to wastewater treatment and septic systems, the County could minimize impacts associated with construction of new wastewater treatment facilities or extension of existing facilities or infrastructure. Technical sections of this EIR evaluate the effects of construction activities relative to specific environmental issue areas, such as biological resources, air quality, etc., at a programmatic level of detail, as is appropriate for a general plan.

The 2030 General Plan includes policies and actions, and this EIR includes mitigation measures, where necessary, to reduce or avoid impacts, as noted throughout Section 4.0 of this EIR. Despite mitigating policies and actions and the application of necessary mitigation measures, construction and operation of new or expanded wastewater treatment facilities and infrastructure may result in significant environmental effects. The County has included throughout the 2030 General Plan all feasible measures available to mitigate such impacts. Nonetheless, it is possible that 2030 General Plan could involve **cumulatively considerable** contribution to these significant cumulative impacts. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

Solid Waste Management and Recycling

The Yuba-Sutter Regional Waste Management Authority was established in 1990 by a Joint Powers Agreement between Sutter and Yuba Counties and the Cities of Live Oak, Marysville, Wheatland and Yuba City for the purpose of providing reliable, economical, integrated and environmentally sound waste management services to the residents, businesses and organizations of the bi-county area (Yuba-Sutter Regional Waste Management Authority 2010).

The primary landfill that serves unincorporated portions of Yuba County is the Ostrom Road site, which also serves as Sutter County's primary landfill site. The Ostrom Road Landfill is among the landfill sites used by Butte, Nevada and Colusa Counties; however it is not the primary landfill for these counties (Butte County 2010, CalRecycle 2010). Existing regulations also require diversion of solid waste. Therefore, there is **no significant** cumulative impact with respect to solid waste disposal.

Buildout of the 2030 General Plan would increase local generation of solid waste. Existing capacity exists to serve this increase in demand. In addition, under 2030 General Plan policy, new projects may only be approved if sufficient capacity to dispose of solid waste exists at the time the new project is subject to review. For these reasons, buildout under the 2030 General Plan is not anticipated to require the construction of new landfills and would **not make a considerable contribution** to a significant cumulative impact.

ENERGY

Regional growth would involve new building construction, development projects and plans, transportation facilities, and other activities that would demand additional energy resources. This will require the construction of new energy infrastructure, the construction and operation of which could have **significant** cumulative impacts.

The 2030 General Plan includes a wide range of energy conservation strategies for land use, transportation, community design, public facilities and infrastructure. The 2030 General Plan includes policies and implementation measures that recognize the need to design buildings, coordinate development patterns, coordinate transportation planning, coordinate regional infrastructure investment, and comply with regional planning requirements during General Plan buildout to achieve energy conservation, as well as other objectives.

However, the demand for energy and consumption of energy resources would still increase. Future land use patterns, new construction and building renovations, and commuting patterns would increase demand for energy in the County. Cumulative development throughout the County and the region would result in a significant cumulative increase in the demand for energy and the need for construction of additional facilities to generate and/or distribute electricity. This is considered a significant cumulative impact. The County has included all feasible mitigation as policies and actions in the 2030 General Plan. Nonetheless, the 2030 General Plan would have a **cumulatively considerable contribution** to this significant cumulative impact. All feasible mitigation is included as policies and actions of the 2030 General Plan. This impact is **significant and unavoidable**.

6.2 GROWTH-INDUCING EFFECTS

The State CEQA Guidelines (Section 15126.2[d]) require that an EIR evaluate the growth-inducing effects of a proposed project (in this case, the update of the General Plan). Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Direct growth-inducing impacts are generally associated with the provision of urban services to an undeveloped area, although it is also possible to induce rural growth that does not depend on the availability of urban services. The provision of these services to a site, and the subsequent development, can serve to induce other landowners in the vicinity to convert their property to urban uses. Indirect, or secondary growth-inducing impacts consist of

growth induced in the region by the additional demands for housing, goods and services associated with the population and employment increase caused by, or attracted to, a new project.

Growth inducement, by itself, is not an environmental effect, but may indirectly lead to environmental effects. Such environmental effects may include increased traffic, degradation of air quality, conversion of agricultural land to urban uses directly from population and employment growth and indirectly from development associated with goods and services needed by such growth.

Based on Section 65300 of the Government Code, the 2030 General Plan is required to serve as a comprehensive, long-term plan for physical development and conservation in the unincorporated County.

The 2030 General Plan does not propose any specific development projects. In a sense, then, the 2030 General Plan therefore would not have direct growth-inducing impacts. Indirect growth-inducing impacts would occur, however, due in part to changes in the Land Use Diagram and the goals, policies, and actions of the 2030 General Plan.

Revisions to the General Plan are required in order to address long-range land use planning needs. The goals, policies, and actions of the 2030 General Plan provide a framework to accommodate future growth and conservation. Projected growth is described in Chapter 3, "Project Description," and the environmental consequences related to the potential growth are analyzed throughout Chapter 4.

The General Plan is designed to accommodate economic and population growth that would increase economic activity and population. Anticipated population growth is indirect in nature because the proposed General Plan does not directly propose development, but only provides the framework for development planning and implementation to proceed.

The actual level of buildout and the timing of construction and development activities would be subject to market conditions and other factors beyond the County's control or knowledge. However, with the substantial amount of new development accommodated under the General Plan, it is possible that, through expansion of job opportunities or other aspects of the General Plan, growth elsewhere could be facilitated. If jobs are created that cause people to move to the region and create a demand for housing construction beyond that provided locally, the General Plan could be considered growth inducing.

Whether or not growth obstacles are eliminated relates to the extent to which the 2030 General Plan would increase infrastructure capacity or change the regulatory structure such that additional development in the unincorporated County would be allowed. A physical obstacle to growth typically involves the lack of infrastructure and public service capacity. The extension of public service infrastructure (e.g., roadways, water and sewer lines) into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

To the extent that infrastructure is sized to accommodate already approved and expected growth based on the population projections of the 2030 General Plan, growth inducement would not occur beyond that accommodated by the expanded infrastructure and services. However, if infrastructure and facilities are oversized, or extended to areas outside of the Valley Growth Boundary, this could induce growth by providing capacity to areas not intended for development.

As detailed in the 2030 General Plan, this EIR, Municipal Service Reviews (MSRs) by the Yuba Local Agency Formation Commission (LAFCo), infrastructure and public services are planned and implemented according to the needs of planned and forecast development. The General Plan would not, then, have growth-inducing impacts related to the removal of obstacles to growth in the surrounding vicinity.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA requires that significant irreversible environmental changes caused by a plan be addressed in an EIR. Specifically, the EIR must consider whether "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" (State CEQA Guidelines Section 15126.2[c]). Nonrenewable resources, as used in this discussion, refer to the physical features of the natural environment: land, air, and waterways.

The land use designations proposed by the 2030 General Plan would result in commitment of allowable land uses to these areas for the foreseeable future. Proposed changes to land use designations would allow the development of differing uses that may not have been previously anticipated by the existing (1996) General Plan. As discussed in Section 4.10, "Land Use," of this EIR, the proposed amendments would both allow urban development in areas the 1996 General Plan designated for open space and also open space in areas where the 1996 General Plan and amendments allowed development.

The 2030 General Plan would use both renewable and nonrenewable natural resources for construction and operation of projects allowed under the revised Land Use Diagram. Projects accommodated under the 2030 General Plan would use nonrenewable fossil fuels in the form of oil and gasoline during construction and operation. Other nonrenewable and slowly-renewable resources consumed as a result of development would include, but not necessarily be limited to, lumber and other forest products, sand and gravel, asphalt, petrochemical construction materials, steel, copper, lead, and water. Operation of future urban development would also consume energy and water.

Irreversible changes would likely occur as a result of future excavation, grading, and construction activities associated with development of land uses envisioned in the 2030 General Plan. Although these changes can generally be addressed by mitigation measures, the potential for disturbance would represent an irreversible change. The 2030 General Plan would also result in irreversible changes by increasing land use densities and introducing development onto the sites that are designated for a specific land use, but that are presently undeveloped.

Land uses and development consistent with the 2030 General Plan would result in changes to traffic and circulation and therefore would increase emissions of air pollutants and generation of noise.

Land uses and development consistent with the 2030 General Plan would result in the conversion of agricultural lands to nonagricultural uses. Although the 2030 General Plan includes policies and programs aimed at protecting existing agricultural land uses and promoting continuation of agricultural operations, any conversion of agricultural lands would be a significant irreversible environmental change. These areas have important visual resources, which would be irreversible converted to urban use as a result of implementation of the 2030 General Plan.

The 2030 General Plan could result in irreversible damage from environmental accidents, such as an accidental spill or explosion of a hazardous material. During construction of projects accommodated under the 2030 General Plan, equipment on the site would use various types of fuel. Operation of projects potentially accommodated under the 2030 General Plan could include the use of hazardous materials, which could increase the risk of an accidental spill or release. However, these hazardous materials would be sold in relatively small quantities and in California, the storage, use and sale of hazardous substances are strictly regulated and enforced by various local and regional agencies. The enforcement of these existing regulations would be expected to minimize the potential for irreversible damage associated with accidental spills or explosions.

The 2030 General Plan would generate greenhouse gas emissions as described in Section 4.7, "Climate Change." Such emissions and the impacts of climate change related to greenhouse gas emissions would represent a significant irreversible change to the environment.

6.4 SIGNIFICANT AND UNAVOIDABLE EFFECTS

According to Sections 15126.2(a) and 15126.2(b) of the State CEQA Guidelines, an EIR shall identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented. For the 2030 General Plan, these would include the following:

Section 4.1, "Aesthetics"

Impact 4.1-1: Adverse Impacts on Scenic Vistas.

Impact 4.1-3: Degradation of Visual Character.

Impact 4.1-4: Increase in Nighttime Lighting and Daytime Glare.

Section 4.2, "Agriculture and Forestry Resources"

Impact 4.2-1: Loss of Important Farmland and Conversion of Agricultural Land to Non-Agricultural Uses.

Impact 4.2-2: Loss of Forest Land or Conversion of Forest Land to Non-Forest Use.

Section 4.3, "Air Quality"

Impact 4.3-1: Generation of Long-Term Operational, Regional Emissions of Criteria Air Pollutants and Precursors and Consistency with Air Quality Planning Efforts.

Impact 4.3-2: Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors.

Impact 4.3-4: Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants.

Impact 4.3-5: Exposure of Sensitive Receptors to Emissions of Odors.

Section 4.4, "Biological Resources"

Impact 4.4-1: Impacts to Special Status Wildlife and Fish Species.

Impact 4.4-3: Loss and Degradation of Sensitive Habitats.

Impact 4.4-4: Interference with Movement or Migratory Patterns of Fish or Wildlife Species.

Impact 4.4-5: Potential for Direct and Indirect Impacts on Federally Protected Wetlands and Other Waters of the United States.

Section 4.5, "Cultural Resources"

Impact 4.5-1: Damage to Identified Historical Resources and Unique Archaeological Resources.

Impact 4.5-2: Damage of Previously Unidentified Cultural Resources.

Impact 4.5-3: Disturbance and Damage to Human Remains.

Section 4.6, "Geology, Soils, Mineral Resources, and Paleontological Resources"

Impact 4.6-6: Loss of Availability of Known Mineral Resources.

Impact 4.6-7: Possible Damage to Unknown, Potentially Unique Paleontological Resources.

Section 4.7, "Climate Change"

Impact 4.7-1: Increase in Greenhouse Gas Emissions.

Impact 4.7-2: Impacts of Climate Change on Yuba County.

Section 4.10, "Land Use Planning, Population, and Housing"

Impact 4.10-4: Induce Population Growth.

Impact 4.10-5: Displacement of Existing Population and Housing.

Section 4.11, "Noise and Vibration"

Impact 4.11-2: Exposure to or Generation of Noise Levels in Excess of Local Standards.

Impact 4.11-3: Increases in Ambient Noise Levels.

Section 4.12, "Public Services and Facilities"

Impact 4.12-4: Need for New or Expanded Parks and/or Recreation Facilities and Potential for Accelerated Deterioration of Existing Parks.

Section 4.13, "Transportation and Traffic"

Impact 4.13-1: Increase in Traffic Levels.

Impact 4.13-3: Potential Traffic Impacts in Other Jurisdictions.

Impact 4.13-4: Traffic Impacts on Caltrans' Facilities.

Impact 4.13-5: Increased Vehicle Miles of Travel (VMT).

Impact 4.13-7: Introduce New Traffic Hazards.

Section 4.14, "Utilities and Service Systems"

Impact 4.14-2: Construction of New or Expanded Water or Wastewater Facilities.

Impact 4.14-3: New or Expanded Storm Water Drainage Facilities.

Section 4.15, "Energy"

Impact 4.15-2: Increased Energy Demand and Need for Additional Energy Infrastructure.

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No citations for this chapter.

Chapter 2, "Executive Summary"

No citations for this chapter.

Chapter 3, "Project Description"

No citations for this chapter.

Chapter 4, "Environmental Impact Analysis"

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9 COMMENTS AND RESPONSES TO ENVIRONMENTAL ISSUES

This section of the Final Environmental Impact Report (FEIR) contains comment letters received on the Draft EIR (DEIR). This section also includes the oral comments received during a public hearing before the Yuba County Board of Supervisors on February 9th, 2011. In conformance with State CEQA Guidelines Section 15088(a), written responses to comments on environmental issues received from reviewers of the DEIR were prepared, including both written and oral comments.

The focus of the responses to comments is on the disposition of significant environmental issues that are raised in the comments, as specified by Section 15088(c) of the State CEQA Guidelines.

9.1 LIST OF COMMENTS ON THE DEIR

Table 9-1 each comment letter date, the author of the comment letter, and an abbreviation for each comment letter.

Table 9-1
List of Commenters

Date	Agency/Person	Letter
December 15, 2010	Central Valley Regional Water Quality Control Board Dan Radulescu, EJD, P.E. CPSWQ	CVRWQCB
December 22, 2010	Central Valley Flood Protection Board James Herota, Staff Environmental Scientist	CVFPB
December 27, 2010	Native American Heritage Commission Katy Sanchez, Program Analyst	NAHC
January 20, 2011	California Department of Transportation Mike Bartlett, Chief, Office of Transportation Planning - North	Caltrans
January 20, 2011	California Department of Transportation, Division of Aeronautics – M.S. #40 Philip Crimmins, Aviation Environmental Specialist	DOT AERO
January 28, 2011	Dobbins Oregon House Action Committee (DOACT)	DOACT
January 31, 2011	Yuba Local Agency Formation Commission John Benoit, Executive Officer	LAFCo
February 4, 2011	Frances Hofman	Hofman
February 7, 2011	Browns Valley Irrigation District Walter Cotter, General Manager	BVID
February 7, 2011	Charles Sharp	Sharp 1
February 8, 2011	Greg and Shirley Crompton	Crompton
February 8, 2011	Woodbury Property Tiffany K. Wright of Remy, Thomas, Moose, and Manley	Woodbury

Table 9-1 List of Commenters		
Date	Agency/Person	Letter
February 9, 2011	North State Building Industry Association Dennis M. Rogers, Senior Vice President, Government and Public Affairs	BIA
February 9, 2011	Deborah Byrne	Byrne 1
February 9, 2011	Deborah Byrne	Byrne 2
February 9, 2011	Deborah Byrne	Byrne 3
February 9, 2011	City of Wheatland Tim Raney, Community Development Director	Wheatland
February 9, 2011	Henry Davis	Davis
February 9, 2011	Linda Fire Protection District Richard H. Webb, Chief	Linda Fire
February 9, 2011	Marysville Joint Unified School District Mark Allgire, Assistant Superintendent Business Services	MJUSD
February 9, 2011	Oregon House/Dobbins Community	Oregon House/ Dobbins Comm.
February 9, 2011	Charles Sharp	Sharp 2
February 9, 2011	Charles Sharp	Sharp 3
February 9, 2011	Wheatland Fire Authority Joe Waggershauser, Fire Chief	Wheatland Fire
February 9, 2011	Yuba County Water Agency Scott Matyac, Water Resources Manager	YCWA
February 9, 2011	County of Yuba Fish and Game Commission Deborah Byrne, Chair	Yuba FGC
February 11, 2011	Feather River Air Quality Management District Sondra Spaethe, Air Quality Planner	FRAQMD

9.2 COMMENTS AND RESPONSES ON THE DEIR

The written comments received on the DEIR and the responses to those comments are provided in this section.

CVRWQCB

Cucchi, Daniel

From: Dan Radulescu [DRadulescu@waterboards.ca.gov]
Sent: Wednesday, December 15, 2010 12:48 PM
To: Cucchi, Daniel
Subject: County of Yuba General Plan Update Programmatic EIR SCH#2010062054

Hello Mr Cucchi:

Please see our comments to the County of Yuba General Plan Update Programmatic EIR SCH#2010062054

1. Our comments refer mainly to the Biological Resources, Hydrology and Water Quality components. We believe that, in addition to avoidance exercised first, minimization second, if adequate compensatory mitigation measures are not implemented, the project may have the potential to result in significant impacts to aquatic and aquatic dependent resources. Recent studies from U.S. Geological Survey have demonstrated that immediate and significant impacts can result at very low level of changes of imperviousness in watersheds due to urbanization. http://pubs.usgs.gov/ds/423/ 1

2. We support serious consideration of the Environmentally Superior Alternative as the preferred alternative as the County contemplates a balanced growth scenario. 2

3. Please note that in Biological Resources component it is concluded that the implementation of General Plan activities may lead to significant unmitigated cumulative impacts to natural resources, such as wetlands, vernal pools, riparian vegetation, etc. Based on the beneficial uses protected through the Basin Plan adopted by the Central Valley Regional Water Board, the significant cumulative impacts may lead to degradation of the water quality of the region's water resources and further impairments to the species depending on those water resources. We believe that serious consideration should be given to approaches that will reduce the impacts to less than significant levels through the techniques outlined in CEQA Guidelines Section 15370. 3

4. In regard to the N.O.P. of the proposed EIR , we would like to recommend the County that, in conjunction with avoidance and minimization analysis, as outlined in CEQA Guidelines Section 15370, to incorporate Low Impact Development (LID), Smart Growth standards in the County's Code, if not already adopted, in order to mitigate some of the impacts related to urbanization and provide sustainable approaches for the (re)development of the County areas while preserving the natural resources. The LID Code should include incentives to allow flexible approaches for implementation. The proposed General Plan update is within the regulated area covered by the Phase II Small Municipal Separate Storm Sewer System (MS4) Permit, NPDES No. CAS000004, Water Quality Order No. 2003-0005-DWQ, (Order) which is regulated by the Regional Water Board. An integral and enforceable part of the Order includes the Storm Water Management Program (SWMP). One of the six programmatic control measures in the SWMP includes the Planning and New Development Program. The Order states that the Permittees must require long-term post-construction best management practices (BMPs) that protect water quality and control runoff flow ideally to the pre-development levels to be incorporated into development and significant redevelopment projects. LID strategies are specifically required, as well as the County addressing LID designs early in the entitlement phase of a project. 4

   LID is a sustainable practice that benefits water supply and contributes to water quality protection. The goal of LID is to mimic a sites predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall. LID provides opportunities to preserve natural resources, such as wetlands, riparian areas and corridors, etc., avoid and minimize impacts starting at the source and at initial phases of planning and design of a project. It also provides opportunities for mitigation close to the source avoiding expensive, end-of-pipe, treatment controls.

   Hydromodification strategies should include controls to manage the increases in the magnitude, volume and duration of runoff from development projects in order to protect receiving waters from increased potential for erosion and other adverse impacts, ideally to the pre-development levels.

   On 20 January, 2005, Resolution 2005-0006 was adopted by the State Water Resources Control Board. The

resolution adopted the concept of sustainability as a core value for all California Water Boards activities and programs, and directed California Water Boards staff to consider sustainability in all future policies, guidelines, and regulatory actions, including the review of applicable CEQA documents.

Please also note that the new Construction Storm Water General Permit, recently issued by the State Water Board, Order 2009-0009-DWQ, also require the implementation of post-construction controls. http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

4 cont'd

Further consideration should be given to the new CalGreen Code, CCR Title 24, Part 11, which require storm water controls for small size sites, and encourages the local agencies to adopt LID requirements in their building codes.

For further details please check
http://www.opr.ca.gov/ceqa/pdfs/Technical_Advisory_LID.pdf
http://www.epa.gov/smartgrowth/about_sg.htm
http://www.waterboards.ca.gov/water_issues/programs/low_impact_development/index.shtml
http://www.epa.gov/smartgrowth/water_scorecard.htm

Thank you for the opportunity to present comments,

Water Boards

Dan Radulescu, EJD, P.E., CPSWQ
Lead, MS4 Permitting & Water Quality Certification Unit
Central Valley Regional Water Quality Control Board | CalEPA
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1 This comment indicates that adoption of the draft 2030 General Plan would lead to an increase in impervious surfaces in unincorporated portions of the County through urban development. The DEIR acknowledges the potential for an increase in impervious surfaces to result in impacts on sensitive habitats (Chapter 4.4, Impacts 4.4-3 and 4.4-5). The mitigation that would reduce these impacts is described in responses 3 and 4 below.

2 This comment indicates that CVRWQCB supports consideration of the Environmentally Superior Alternative as the preferred alternative. This comment is noted.

3 This comment indicates that the EIR should include mitigation to reduce impacts to biological resources identified in Chapter 4.4. The comment refers to 14 Cal. Code of Regulations Section 15370 which defines mitigation. The DEIR provides the text of relevant Draft 2030 General Plan policies, including such policies as NR5.8 which requires avoidance of impacts to wetlands where possible, and where not possible, replacement at no net-loss basis as required under federal law. Other relevant policies include NR5.1 which requires evaluation of the potential for individual projects under buildout to result in impacts on biological resources. Because these policies and actions from the Draft 2030 General plan describe the avoidance, minimization and compensation for impacts that would be applied during review and implementation of future projects under the General Plan they are consistent with the requirements of Section 15370.

4 This comment indicates that development under the Draft 2030 General Plan is regulated by Order No. 2003-0005-DWQ. The comment further indicates that this order requires post-construction best management practices that protect water quality and control runoff flow. The relevant text of this order indicates that "The permittee must require long-term post-construction BMPs that protect water quality and control runoff flow, to be incorporated into development and significant redevelopment projects" (SWRCB 2003:6). Chapter 4.9, *Hydrology and Water Quality* describes numerous policies that are included in the Draft 2030 General Plan that would reduce the water quality impacts of development and ensure compliance with these permit conditions. For example, Policy HS3.4 explicitly states that new developments shall be designed to minimize and control surface runoff discharges in compliance with the permit standards and receiving water limitations administered by the Regional Water Quality Control Board. Policy CD15.6 indicates that new developments (public and private) should use Low Impact Development, Natural Drainage Systems, and other best management practices that reduce the rate of runoff, filter out pollutants, and facilitate groundwater infiltration. These policies thus require the BMPs that this comment suggests. RWQCB permit requirements will help to implement Order No 2003-0005 DWQ.

CVFPB

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

December 21, 2010

RECEIVED
DEC 22 2010
Community Development & Services Agency

Mr. Dan Cucchi
Yuba County Planning Department
915 Eighth Street, Suite 123
Marysville, California 95901

Dear Mr. Cucchi:

Subject: 2030 Yuba County General Plan Update
SCH Number: 2010062054
Document Type: Draft EIR

Staff for the Central Valley Flood Protection Board has reviewed the subject document and provides the following comments:

The proposed project is located within the jurisdiction of the Central Valley Flood Protection Board (formerly known as The Reclamation Board). The Board is required to enforce standards for the construction, maintenance, and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6); 1

- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);

- Vegetation plantings that will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection and flood fight procedures (Title 23, California Code of Regulations CCR Section 131).

The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board's website at http://www.cvfpb.ca.gov/. Contact your local, federal and state agencies, as other permits may apply.

1 cont'd

Should you have any further questions, please contact me by phone at (916) 574-0651, or via email at jherota@water.ca.gov .

Sincerely,

James Herota
Staff Environmental Scientist
Floodway Projects Improvement Branch

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814

Letter	Central Valley Flood Protection Board
CVFPB	James Herota, Staff Environmental Scientist
Response	December 22, 2010

1 This comment indicates that the project includes lands and features under the jurisdiction of the Central Valley Flood Protection Board (CVFPB). The comment further describes the specific kinds of activities that require a permit from the board. This comment has been noted. The Draft 2030 General Plan, by itself, does not include any physical construction that is regulated or permitted by the CVFPB.

NAHC

STATE OF CALIFORNIA Arnold Schwarzenegger, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

RECEIVED
DEC 27 2010
Community Development & Services Agency

December 22, 2010

Dan Cucchi, Project Planner
Yuba County
915 8th Street, Suite 123
Marysville, CA 95901

RE: SCH# 2010062054 Yuba County 2030 General Plan; Yuba County.

Dear Mr. Cucchi:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. . **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

1

Sincerely,
Katy Sanchez
Katy Sanchez
Program Analyst
(916) 653-4040

cc: State Clearinghouse

Native American Contact List
Yuba County
December 22, 2010

Maidu Nation
Clara LeCompte
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Strawberry Valley Rancheria
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United Auburn Indian Community of the Auburn Rancheria
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This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2010062054 Yuba County 2030 General Plan; Yuba County.

1 This comment letter recommends that a record search for cultural resources be performed at the North Central Information Center and that the Sacred Lands File with the Native American Heritage Commission (NAHC) should be checked for the proposed project. A record search was performed for the entire County, excluding areas of federal land, which are not subject to the control of Yuba County. The Draft 2030 General Plan, by itself, does not approve any ground disturbing land uses. Future review of project-level actions under the plan will include record searches and consultation with the NAHC as necessary, as described in Chapter 4.5 *Cultural Resources.* See also policies and the action included in the Natural Resources Element of the Draft General Plan under the heading, "Cultural Resources," including, but not limited to:

Policy NR6.1 *The County will require environmental assessment and mitigation to reduce or avoid impacts to significant cultural resources, as feasible, per state and federal legislation and regulations.*

Policy NR6.2 *If potential paleontological or prehistoric resources are detected during construction, work shall stop and consultation is required to avoid further impacts.*

Policy NR6.3 *New developments, roads, water and sewer lines, and stormwater infrastructure should be located to avoid impacts to significant cultural resources.*

Policy NR6.4 *The County will encourage adaptive reuse of historic structures in a way that maintains the character defining elements of the historic structure.*

Policy NR6.5 *Priority investment should go to preserving or rehabilitating historic structures that are grouped in close proximity, are particularly good examples of a specific architectural style, or are associated with important people or events in the County's history.*

Policy NR6.6 *The County will disseminate information to property owners regarding tax incentives and other federal and state programs that support the rehabilitation of historic structures.*

Action NR6.1 *Environmental Review and Mitigation.*

Building on the analysis in the General Plan Program EIR, new development projects that could have significant adverse impacts to prehistoric or historic resources will be required to assess impacts and provide mitigation. The following steps, or those deemed equally effective by the County, will be followed:

- *Request information from the Native American Heritage Commission regarding Native American groups that may have important sites in areas that could be affected by project development.*

- *Involve the local Native American community in determining the appropriate mitigation of impacts to significant prehistoric sites.*

- *Consult the County's historic and cultural resources database and updated information from the North Central Information Center regarding cultural resource sites, structures, or landscapes that could be affected by project activities.*

- *Based upon the sensitivity of the subject proposed project area (see Exhibit NR-6), additional technical work may be required. Where a cultural resources survey has not been performed:*

    - *a pedestrian survey may be required in areas of low sensitivity;*

    - *a pedestrian survey will be required in areas of moderate and high sensitivity; and*

    - *Based on findings of the pedestrian survey, additional technical studies may be required, such as geoarchaeological sensitivity analysis, Native American consultation, ethnographic studies, or other analysis scaled according to the nature of the individual project.*

- *For new developments that would alter historic structures (structures 50 years old or older), a qualified architectural historian shall conduct a record search and assess the potential for the project to result in significant impacts to historical resources that occur as part of the existing built environment.*

- *Determination of impacts, significance, and mitigation (i.e., site monitors, avoidance, and/or other measures) shall be made by a qualified professional archaeologist or architectural historian, as appropriate.*

- *If impacts cannot be avoided through project design, appropriate and feasible treatment measures are required. Such measures may consist of, but are not limited to actions such as data recovery excavations, photographic documentation, or preparation of design drawings documenting the resource subject to significant impacts.*

- *Provide the North Central Information Center with appropriate California Department of Parks and Recreation site record forms and cultural resources reports documenting resources that may be identified through technical work performed to review projects accommodated under the 2030 General Plan.*

- *If human remains are discovered during construction of projects occurring under General Plan buildout, the project proponent and landowner shall comply with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 7050.5.*

Related Goals: *Goal NR6*

Agency/Department: *Community Development and Services Agency*

Funding Source: *Project applicant funds*

Time Frame: *Ongoing, as construction occurs under the General Plan*

Action NR6.2 *Paleontological Resources*

If potential paleontological resources are detected during construction, work shall stop and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include construction worker education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures, as appropriate.

Related Goals: *Goal NR6*

Agency/Department: *Community Development and Services Agency*

Funding Source: *Project applicant funds*

Time Frame: *Ongoing, as construction occurs under the General Plan*

Caltrans

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN Jr., Governor

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Flex your power!
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January 20, 2011

032010YUB0013
Yuba County General Plan DEIR
SCH# 2010062054

Mr. Dan Cucchi
Yuba County
915 8th Street
Marysville, CA 95901

Dear Mr. Cucchi,

We appreciate the opportunity to review and comment on Yuba County's 2030 General Plan Draft Environmental Impact Report (DEIR). In addition to this comment letter, we provided comments at the Notice of Preparation (NOP) and Draft General Plan 2030 stage for the Circulation element. The majority of the comments we made on the Draft General Plan 2030 were not incorporated into this document. Caltrans has the following comments for the DEIR:

Specific Comments for the Circulation Element:

In our previous comment letter for the Draft General Plan (GP), the following comments are not addressed in the DEIR:

- Page 4.13-3 State Highways – this section states the State Routes (SR) 70, 65, 20, and 49 are regional routes that serve the local populations, as well as through trip. This section should include a statement of the purpose and intent of State Routes – to serve regional and interregional travel. 1

- Page 4.13.27, Table 4.13-3, 5th Street (Twin Cities Memorial Bridge) – identifies the expansion of the bridge from 2 to 4 lanes; this is not consistent with SACOG's 2035 Metropolitan Transportation Plan (MTP), which its planned to be expanded to 6-lanes. 2

- Pg. 4.13-48 Policy CD16.2 Traffic Impact Fees – states the County will revise its Countrywide Traffic Mitigation Fee Program based on a nexus study. The fee program update should include projects on the State Highway System (SHS), and future SHS needs to ensure an equitable contribution for impacts from development projects. 3

- Pg. 4.13-48 Policy CD16.10 – states the County will not use traffic Level of Services (LOS) policies to analyze and mitigate CEQA impacts of new development, but instead will use its LOS policies to assess fair-share funding of transportation facilities necessary to serve new projects. This statement should include fair-share funding for improvements to the SHS. 4

- The County should protect adequate right-of-way for new and expanded SHS transportation facilities. This should be reflected in a policy statement. 5

- As part of the circulation network, improvements to the SHS and the operation of the SHS are a shared responsibility between Yuba County and Caltrans. This should be reflected in a policy statement. 6

In addition to the comments above, we have the following comments for the DEIR:

- State Route 70 has recently undergone a conversion from 2-lane highway to freeway between the SR 65/70 interchange and the intersection of Feather River Blvd./SR 70 near the Bear River. Bicycle access is prohibited between these locations, as Feather River Blvd is an alternative route. 7

- The Third River Bridge is listed in the DEIR; however, it is not included in the SACOG's MTP as a project that will be constructed within the General Plan's 20-year planning horizon. Additionally, the traffic model developed for DEIR cannot assume the "Third Bridge" as a planned improvement. Furthermore, the Erle Road interchange is inadequate to handle the project volumes of traffic that would exit the freeway to access the Third Bridge. These issues leads to the conclusion that the Yuba County General Plan DEIR traffic analysis and traffic model must be revised to reflect what the traffic impacts of the proposed general plan would be without the new bridge. 8

Please provide our office with the final Circulation Element and Final Environmental Impact Report. If you have questions or need additional information, please contact Sukhi Johal, at (530) 740-4843 or sukhi_johal@dot.ca.gov. 9

Sincerely,

MIKE BARTLETT
Chief, Office of Transportation Planning – North

1 The commenter suggests that Section 4.13 of the DEIR, "Transportation and Traffic," should be revised to note that the purpose of state highway facilities is to serve regional and interregional travel.

This comment is noted and the requested change has been made. Please refer to Section 4.13 under the heading, "State Highways."

2 The commenter indicates that the SACOG 2035 Metropolitan Transportation Plan (MTP) indicates a plan to expand the 5th Street Bridge between the City of Marysville and the City of Yuba City to six lanes.

According to the Sacramento Area Council of Governments (SACOG), in materials presented during the October 2010 MTP workshops, the 5th Street Bridge is planned to be widened from two to four lanes, not six lanes as suggested by the commenter (SACOG 2010). It is further noted that the 5th Street Bridge Project Study Report/Project Report (PSR/PR) is an on-going multi-agency study that is evaluating various improvement options for the Twin City Memorial Bridge. Alternatives being considered include replacement in kind with a new two-lane structure, and replacement with a four-lane structure. These alternatives are being analyzed under a year 2035 design year. Thus, planning and environmental clearance for the bridge replacement is contemplating no more than four lanes.

3 This comment suggests that the County's traffic mitigation fee program update should include projects on state highways. Related topics are addressed in the Circulation section of the Community Development Element under the heading "Regional Transportation Planning." Of particular relevance are the policies under Goal CD18, including, "Action CD18.1 Regional Traffic Fee Program." This action indicates that the County will coordinate with cities and surrounding counties to develop and implement a regional fee program to address non-County transportation facilities (including state facilities). The regional mitigation fee program is to be designed to address cumulative regional transportation needs on a fair-share basis for new specific plans and new developments. Action CD18.1 has been revised to add specific mention of state highway facilities.

In addition, the State has access to State Transportation Improvement Program funds (including the Interregional Improvement Program) and local agency shares of State Transportation Improvement Program (Regional Improvement Program) funding administered by SACOG.

4 This comment suggests a revision to Policy CD16.10, which broadly discusses fair-share funding for transportation facilities necessary to serve new projects, to specifically call out state facilities.

This policy is not intended to distinguish between different types of transportation facilities. The point of the policy is that level of service (LOS) will not be used for California Environmental Quality Act (CEQA) analysis and mitigation, in general, but that fair-share funding would still be required of projects. This policy is not intended to get into detail about which levels of facilities would be addressed by fair-share funding. It

would create asymmetry to point out one specific piece of the transportation system that is funded by a combination of local and regional contributions while not calling out other components by name. There is a section of the Community Development Element, however, where this policy content would be appropriate. Policy CD18.7, which is presented a few pages later in the Community Development Element, does include specific reference to fair-share funding for Caltrans facilities.

5 This comment suggests that the County should add a policy about protecting adequate right-of-way for new and expanded state highway facilities.

The County has revised Policy CD16.7 to address this comment, adding the following text, "New developments in areas adjacent to state highways may be required to dedicate right-of-way to accommodate expansion of these facilities."

6 This comment requests that the County revise the General Plan to note that improvements to the state highway system are a shared responsibility between Yuba County and Caltrans.

This topic is addressed in the paragraphs under "Regional Transportation Planning" in the Community Development Element:

> "*County's transportation facilities are planned in coordination with state, regional, and local transportation investment programs. With development accommodated under the General Plan, state highways and interchanges in Yuba County will need to be improved and expanded. These improvements may include widening, realigning and reconfiguring interchanges and associated ramps. It may also involve realigning and improving the County roads in the vicinity of the state highway system...Regional transportation planning and infrastructure funding are very important to the County's circulation goals and the County will coordinate with other local agencies, regional agencies, and state and federal agencies in regional transportation planning efforts.*"

In addition, this topic is also addressed in Policy CD18.1, Policy 18.4, Policy CD18.7, and Policy CD18.8.

7 This comment notes that State Route 70 (SR 70) has recently undergone a conversion from two-lane highway to freeway in Yuba County and that bicycle access is prohibited between these locations, with Feather River Boulevard serving as an alternate route.

The recent improvements to SR 70 between the SR 65/70 interchange and Feather River Boulevard are described in several areas of the DEIR (including page 4.13-3 and Table 4.13-4).

8 This comment discusses the third Feather River bridge. The comment notes that the third Feather River Bridge is discussed in the EIR but not in the SACOG MTP as a project that will be constructed by 2030.

The SACOG MTP traffic analysis was based on substantially lower levels of development in Yuba County when compared to the 2030 General Plan buildout totals. Lower levels of development in the MTP analysis would likely have shown fewer benefits associated with a third Feather River bridge than was shown in the DEIR. It is worth noting that the County's Vehicular Circulation Diagram (Exhibit Community

Development-13) also shows SR 20 widening from two to four lanes from Loma Rica Road to Ramirez Street. This state highway improvement is warranted based on General Plan buildout, but is excluded from the SACOG MTP for reasons similar to those listed above. The DEIR also includes analysis of various growth scenarios with lower development estimates that would not require a third Feather River bridge.

The commenter correctly states that the existing SR 70/Erle Road interchange does not have sufficient capacity to accommodate added traffic from a third Feather River bridge. To address this situation, Table 4.13-4 identifies this interchange as a recommended improvement. The County and Caltrans have started evaluating improvement options at the interchange as part of the Project Study Report for the Goldfields Parkway.

9 This comment requests a copy of the final Community Development Element (which includes circulation) and the FEIR.

County staff will provide Caltrans with the requested notification and documentation.

DOT AERO

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN JR., Governor

DEPARTMENT OF TRANSPORTATION
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Flex your power!
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January 19, 2011

RECEIVED
JAN 20 2011
Yuba County Dept. of Planning

Mr. Dan Cucchi
Yuba County
915 8th Street, Suite 123
Marysville, CA 95901

Dear Mr. Cucchi:

Re: Draft Environmental Impact Report for the Yuba County 2030 General Plan;
SCH# 2010062054

The California Department of Transportation, Division of Aeronautics (Division), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The Division has technical expertise in the areas of airport operations safety and airport land use compatibility. We are a funding agency for airport projects and we have permit authority for public-use and special-use airports and heliports. The following comments are offered for your consideration. 1

The proposal is for an update to Yuba County's 1996 General Plan. The updated document will be known as the Yuba County 2030 General Plan.

In accordance with California Public Utilities Code (PUC) Section 21676 *et seq*., prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission (ALUC), the local agency shall first refer the proposed action to the ALUC. 2

General plans and elements must clearly demonstrate intent to adhere to ALUC policies to ensure compliance with airport land use compatibility criteria. Direct conflicts between mapped land use designations in a general plan and the ALUC criteria must be eliminated. A general plan needs to include (at the very least) policies committing the county to adopt compatibility criteria essential to ensuring that such conflicts will be avoided. The criteria do not necessarily need to be spelled out in the general plan. There are a number of ways for a city or county to address the airport consistency issue, including: 3

- Incorporating airport compatibility policies into the update.
- Adopting an airport-combining zoning ordinance.
- Adopting an "Airport Element" into the general plan.
- Adopting the airport compatibility plan as a "stand alone" document or as a specific plan.

The general plan must acknowledge that until ALUC compatibility criteria are incorporated into the general plan, proposals within the airport influence area must be submitted to the ALUC for review. These provisions must be included in the general plan at a minimum for it to be considered consistent with the airport compatibility land use plan. 3 cont'd

The proposal should also be coordinated with staff at Beale Air Force Base, Yuba County Airport, and Brownsville Aeropines Airport to ensure its compatibility with future as well as existing airport operations. 4

These comments reflect the areas of concern to the Division with respect to airport-related noise, safety, and regional land use planning issues. We advise you to contact our District 3 office in Marysville concerning surface transportation issues. 5

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please call me at (916) 654-6223, or by email at philip_crimmins@dot.ca.gov.

Sincerely,

PHILIP CRIMMINS
Aviation Environmental Specialist

c: State Clearinghouse, SACOG (Yuba County ALUC), Yuba County Airport

1	This comment indicates that the DOT is a funding agency for airport projects and has jurisdiction over public-use and special-use airports and heliports. This comment is noted.
2	This comment indicates that prior to revision of a general plan that encompasses lands within the planning boundary of an airport land use commission (ALUC) the relevant city or county must refer the draft general plan to the relevant ALUC for review. Yuba County has provided the draft 2030 General Plan to the ALUC for review.
3	This comment indicates that general plans must incorporate policies that commit the county to adopting criteria for determining the consistency of mapped land uses with airports. The exact criteria need not be incorporated into the general plan, but the general plan must acknowledge that until such criteria are adopted, proposals for development within the airport area of influence must be referred to the ALUC for review. This comment is noted. The General Plan includes policies and actions requiring collaboration with the ALUC and Beale Air Force relative to land use compatibility. Please refer to the Public Health & Safety Element, starting with Goal HS4.
4	This comment adds detail to comment DOT AERO 3 above, indicating that proposals should be referred to Beale Air Force Base, Yuba County Airport and Brownsville Aeropines Airport to ensure compatibility with future as well as existing airport operations.
5	This comment further recommends that Yuba County contact Caltrans District 3 in Marysville, California to consult regarding surface transportation issues. This comment is noted. Caltrans District 3 was notified and provided written comments on the DEIR.

DOACT

LIST OF CONCERNS on General Plan: DOACT 1/26/11

A. GENERAL CONCERNS

Implementation- p. 1: "Some General Plan Amendments will be accomplished through adoption of Specific Plans or Community Plans (also known as Rural Community Plans)."
Comment: We request confirmation of planning staff verbal statements that no GP Amendment will be required to adopt a Rural Community Plan, so long as it does not conflict with the General Plan.

Implementation –p. 2: "The approval of 4 out of the 5 members of the Board of Supervisors with the following findings is required for any General Plan Amendment…"

- The 4 findings (summarized): that the proposed amendment is in the public interest; compatible with the General Plan; potential effects not detrimental to public health, safety, or welfare; in accordance with the California Government Code and California Environmental Quality Act.

Comment: This raises the bar for amendments to a super majority vote.
The staff has explained that the general plan has a great deal of flexibility, and will be able to accommodate most projects. Therefore, their reasoning is that if there is any proposal that needs a general plan amendment, that the bar should be higher. The 4 out of 5 concept is a staff initiated proposal.

A general plan cannot possible anticipate every planning scenario that might arise over a 20 year timeframe; therefore some flexibility of Amendments must be allowed for. However, raising the vote to 4 out of 5 is an undesirable overreach.

"Flexibility" and "Enabling Wording" throughout the Plan:
The flexibility that is referred to throughout the Plan is very troublesome, as it creates a great deal of uncertainty. The general plan should be as definitive as possible, so that it functions as a plan, setting guidelines in order that projects can have more certainty, not less. "Flexibility" gives default decision-making to staff, and takes control from BoS.

"Enabling Wording" throughout the General Plan supports a great degree of flexibility, but in some cases also inserts unnecessary ambiguity. Concerns include uncertainty occurring with some property owners regarding what uses will be applicable to, or allowed, on their properties in the future. An example can be seen related to Goal CD7 on Community Development Page 31, "Mixed Use Corridors." Some corridors are identified by name with an additional reference to "other appropriate corridors" (Policy CD7-1). Under this goal there is no definition of what constitutes a "mixed use corridor." Further, mixed use attached to a given corridor may (objectively) only apply to a portion of the roadway identified with the corridor. As currently worded, planning staff is "enabled" to subjectively define a roadway as a "mixed use corridor" with a resulting potential to place existing property owners under unexpected conditions. To best serve the people, a comprehensive analysis of the Draft General Plan should be conducted for the purpose of resolving all unnecessary ambiguity.

B. SPECIFIC CONCERNS

Vision Section

Home Businesses **Vision-4: Economic Independence:** "Promote appropriate home business opportunities which utilize advances in electronic technology and have minimal impacts on residential areas."
Comment: Home businesses should not be limited to those "which utilize advances in electronic technology". Further, those businesses that do not employ any activity other than that which is normally associated with the use of residential property should be allowed under exactly the same circumstances as it would if not conducted as a business. The only exceptions might be where taxing authority and/or consumer protections are involved.

Implied Down-zoning **Vision- 5:** "Reexamine existing plans in the foothills that provide for urban or suburban levels of density that may no longer be preferred by the County and should be re-evaluated in light of infrastructure feasibility, interests of the community, etc." [and]
Vision-6 "Reexamine feasibility of continued subdivision into five acre parcels within the foothill community boundaries based on water availability, adequate soil for waste disposal, and other environmental or physical constraints."
Comment: The language on these 2 pages sets the stage for an across-the-board down-zoning of all currently zoned A/RR5 parcels, based on "other environmental or physical constraints" and could effectively freeze any future lot splits within the rural communities. 1 cont'd

Freezing future subdivision would not allow future build-out projections to be realized. This also presents a contradiction, projecting a build-out that cannot happen if this Vision statement is followed to its logical conclusion

Community Development Section

Location of Rural Centers **Policy CD9.11** "Rural Centers should be located along existing or planned future transit routes."
Comment: This places an unnecessary restriction on rural center locations to be along transit routes. From a planning point of view, it may be desirable to place a rural center at an intersection along a main road. However, from a community development viewpoint, there may be other sites that might be better suited. It would be undesirable to preclude this possibility if this map leads to zoning these areas—and these areas only—as rural centers. The general plan should not restrict this option.

Placetypes, Aesthetics **CD p. 15**.
Restrictive and expensive policies on the aesthetics of private property, for example, as in the Placetypes section, limited parking areas, expensive and questionably useful bike trails, how to build buildings, infill, etc.

Comment: Local citizens are less concerned with the aesthetics of this issue as they are with the functionality and convenience of the services provided. The costs related to planning and implementing this concept far exceed the value of any benefit to be realized by our local citizens.

Travel Demand Management/Vehicle Miles Traveled **Goal CD17**
Under "Travel Demand Management," **CD p. 72** last paragraph, there is an apparent objective to cause citizens to behave in a manner that they do not desire. It is implied in the paragraph that Vehicle Miles Traveled (VMT) should be discouraged by intentionally interjecting inconvenience through limitations on parking lots and roadway expansions. **Goal CD17** through **CD21** and their supporting policies (CD pp 73-80) emphasize discouraging VMT through policies that introduce inconvenience while seeking to encourage modes of travel that may be viewed by citizens as undesired, inconvenient and/or impractical. Our people believe that if there is a valid need to mitigate some undesirable effects of travel by private vehicles, Government should adopt policies that encourage the use of low or non polluting vehicles. Further, discouraging travel by vehicle may be inviting another problem in that it may be easier for criminals to victimize people who are walking or riding bicycles than it is for those protected by their vehicle (in today's society, a very real concern).

Public Health & Safety Section

1 cont'd

Fire Safety **HS – pp 10-15**
Policies related to evacuation from areas threatened by catastrophic wildfire do not specify consideration of worst case predicted wildfire behavior. A minimum requirement in high fire danger areas should include ingress and egress to/from inhabited areas such that safe evacuation can be achieved simultaneously with access by fire suppression resources during the occurrence of such a fire in accordance with Public Resources Code 4290. To achieve this end a road leading away from what would be the head of the "worst case predicted wildfire" must be required. A second ingress/egress route must be required that provides egress in a direction approximating 180 degrees from that specified above. Further, the characteristics of the required ingress/egress roads, such as number of lanes, surface stability and the ability to accommodate traffic, in consideration of the population in the affected area, should be addressed. Such requirements will not be applicable for new development or parcel splits involving less than 4 units. Where reference to public trails and unimproved roads is cited for use in evacuations, unless this occurs as a last ditch effort, there should be provision for avoiding such use by vehicles likely to get stuck and trap others. **Public Health and Safety policies HS2.1, 2.2, 2.9 and 2.10** (pp 13-14) inadequately address these concerns. In addition, Policies **HS9.3 & HS9.4** and **Action HS9.1** (p. 43) also fail to address the "worst case predicted wildfire" issue, seemingly weighted toward emergency ingress and egress related to flooding. Also the text on Public Health and Safety page 10 should include Oregon House and the map on page 11 needs correction to properly indicate all areas of very high fire danger.

Septic Systems Policy **HS3.12**: "The County will prohibit construction of septic systems in areas with high groundwater recharge potential and will collaborate with trustee agencies and property owners to remove existing septic systems in such areas and either relocate or redesign systems to avoid impacts to groundwater."

Comment: In effect, this enables County staff to require a homeowner to cease using an existing septic system and upgrade or replace it. In essence this could subject homeowners to an ex post facto enforcement. Due to ambiguity in the policy's wording, and possible extremes in interpretation, enforcement can result in serious financial hardship on affected residents up to the possibility of making some of them homeless. To avoid such an inappropriate consequence, wording associated with this policy should state in effect: "In cases where an existing septic system has not failed, is serving a residence and has previously been approved with a permit issued, payment of costs incurred in complying with this policy will be sought and acquired by the County. County will protect homeowners from all hardship that compliance with this policy can cause."

The Natural Resources Groundwater Recharge Areas map (NR-48), currently shows large areas of the foothills as having a moderate infiltration rate. This policy could require the redesign and relocation of any number of existing septic systems even though they may be functioning adequately and within their expected lifespan. Policy HS3.12 should not be applicable unless a septic system is demonstrably not performing or if it is determined that the system is adversely affecting groundwater supplies.

The Yuba County GIS parcel database needs to include information on the recharge potential of each parcel. 1 cont'd

Landowners should be able to determine, with certainty, if their property is in an area with high groundwater recharge potential and what impact this policy would have on existing septic systems.

Natural Resources Section

Biological Resources, including Deer (NR pp. 23-30)

Biological Survey Requirements **Action NR5.1** "The County will maintain information on biological resources, including data gathered for this General Plan and the NCCP/HCP, and will use this information to determine whether projects could have potentially significant impacts on biological resources, and whether project level biological assessments would be required prior to project approval."

Comment:

The requirement for a biological survey must be made on an objective determination of why such a survey is needed and sufficient documentation must be provided by the lead agency to justify the necessity of such a survey.

The Yuba County GIS parcel database needs to include information on the biological resources for each parcel, so that a property owner can determine if their property is in such an area.

Wetlands & Riparian Buffers **Action NR5.3** "Through review of proposed private and public projects near wetlands and riparian areas, the County will require buffering to protect these important habitats. Setbacks are expected to range from 33 to 150 feet in width. Where stream courses are contained within levees, as in the case of the Bear, Feather, and Yuba Rivers, required setbacks shall be measured from the outside toe of the levee. Where levees are not present, the buffer shall be measured from the edge of the active floodway."

Comment:

The general plan needs to provide descriptions of riparian areas and maps of sufficient detail that any property owner may determine if any water body or stream on their property shall require setbacks and exactly what the setback requirements or other restricted activities will be.

Policy NR5.12 "New developments that could affect wildlife movement corridors shall conduct a biological assessment and avoid placing any temporary or permanent barriers within such corridors, if they are determined to exist on site."

Comment: This places a high financial burden on property owners, so it should be specified how the need for a survey is determined.

Policy NR5.14 "Within the designated winter and critical winter range of the Mooretown and Downieville deer herds, the County will strongly discourage any development that could substantially adversely affect these species. Where Rural Community Boundary Areas occur within the winter and critical range for these species, new developments shall dedicate permanent open space and provide minimum lot sizes designed to avoid substantial adverse impacts to these species. The County will communicate with the California Department of Fish & Game regarding open space dedication and lot sizes needed to avoid impacts to deer herds."

1 cont'd

Comment:

The Migratory Deer Range Map is out of date; it was last edited in 1979, over 30 years ago. Development patterns that have ensued over the last three decades may have altered the number and paths of migratory deer. New field surveys, done by the Department of Fish and Game, are needed to determine to what extent the migratory patterns of the Mooretown and Downieville deer herds might have been altered from the last map edition in order to determine the current applicability of Policy NR5.14. Additionally the impact of global warming on the possible change to the deer habitat and migratory paths is not addressed.

Other Issues in Natural Resources Section:

Archeological survey requirement: **Policy NR6.1** "New developments involving the movement, scraping, or leveling of soil in areas of moderate or high potential for prehistoric resources shall conduct archeological background research, site analysis, and surveying to inform site design and avoid impacts to prehistoric sites (see Exhibit NR6)."

Comment: This is an overreach because the map is flawed: the white areas, indicating areas of low sensitivity, are white only because there is no data available. There may indeed be more areas that would be classified as high or moderate (red or yellow), and

therefore subject to this policy, if the data were available. Thus, applying this policy would present an arbitrary inequality on property owners.

Current state law already protects archeological resources, so we request that the General Plan confine itself to saying "State Law will be followed in all its provisions for protection of archeological resources related to new development."

Policy NR6.3 also covers this possibility. The state standard and Policy NR6.3 are entirely adequate to protect any such prehistoric resources.

Green House Gas policies **Action NR7.13** "The County will also consider the feasibility of using fees or actions required to meet County greenhouse gas efficiency policies on a fair-share basis to fund energy efficiency improvements and renewable energy systems in existing developed buildings and the public realm."

Comment: The term "existing developed buildings" could mean retrofitting homes with efficiency improvements. Are private homes and buildings going to be subject to an energy audit to determine a "GHG" efficiency factor?

Request for New York Flat Dam/Reservoir **NR Page 9 Exhibit NR2 map.** The current General Plan shows a future New York Flat Reservoir. This is omitted from this General Plan Update.

Comment:

A valid contractual agreement exists for the creation of this reservoir. The effectiveness of reservoirs in contributing to flood control, as water sources used for suppression of wildland fires and as water storage for domestic and agricultural uses are sufficient reasons to retain creation of this reservoir as a planned future project.

1 cont'c

Oak Woodland and Tree Preservation **Goal NR10 (**and Policies**)** Yuba County should not adopt disincentives to achieving fire safety around homes.

Comment:

Goal NR10 and its supporting policies and action (Natural Resources page 41) may conflict with fire safety and other safety requirements. Fire safety requires that brush, or understory, be removed out to a minimum of 100 feet from residences and other structures. **Policy NR10.1** implies that brush ("existing native vegetation") be retained to the extent feasible (with emphasis on trees) when placing buildings on parcels. In the areas from 30 to 100 feet out, State law requires trees be thinned such their foliage canopies do not touch for fire safety reasons. For 30 feet and below State law refers to "Specimen" trees, only, as being allowed. Where fire safety requirements are applied to conditions on slopes, necessary clearances can be much greater than 100 feet. To procure homeowner's insurance, clearances required by an insurance company can be as high as one quarter mile, a clearance option allowed by State law. In addition to fire safety concerns, insect infestations, such as bark beetle in pine trees, will require removal of infected trees to help protect uninfected trees. Also, for aesthetic reasons on their properties, or to eliminate trees likely to fall under high wind conditions, homeowners may choose to thin trees and remove brush beyond that required for fire safety.

Action NR10.1 states that County will determine the significance of impacts related to tree removal. This implies that County can require homeowners to obtain a permit to cut

down trees even when this is done to comply with State clearance requirements. County permits seldom come without costs and inconveniences. Homeowners, and future homeowners, must be allowed to clear vegetation to comply with fire safety requirements, and also, when other safety issues and desired aesthetics are involved. A requirement to get a permit and pay a fee to achieve fire safety or to save another tree from infestation is likely to do more harm than good. It can contribute to breeding disrespect for the law, and/or inhibit incentive to make properties fire safe or more aesthetically pleasing. Such clearing should not be regulated in the manner set forth or "enabled" under Goal NR10!

Surface/Ground Water **Policy NR12.1** "The County will manage land use change in a way that prevents overdraft of groundwater supplies, protects overlying groundwater rights, and ensures that the combined use of surface and groundwater resources provides for current and future water demand." 1 cont'd

Comment:

This policy may prevent the drilling of wells and has broad implications in regards to drilling a well for domestic water supplies. In particular, the soil hydrology of the fractured rock geology of the foothills is poorly understood and little data exists on the overall availability of ground water supplies. Policy NR12.1 opens up the possibility of prohibiting the drilling of any domestic use wells, since, because there is a such a scarcity of data, it could be determined that any well may negatively impact groundwater resources and thus needs to be restricted.

* *

DEIR issues:

Inconsistencies of the Plan and the EIR: e.g. EIR says the County cannot meet the State's standards; inaccurate language in the EIR states that the Foothills are not in danger from wildfires 2

There is a need for an extended public comment period on the 600-plus page EIR. 3

Other:

We citizens have been "put on notice" (see Purpose-1) that this Plan is going to change our way of life. This is troubling. 4

1 The comment identifies several concerns with the policy language of the Draft General Plan. The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

2 This comment suggests that there are inconsistencies between the Draft General Plan and the EIR without elaborating. It is possible that the commenter is suggesting that the Draft General Plan may establish policy intent related to an environmental topic for the purpose of later policy analysis at the project level, but the General Plan EIR concludes that for implementation of the General Plan, the County is unable to demonstrate with substantial evidence that this policy intent is met. However, without any explanation from the commenter, it is not possible to respond further. The comment states that the DEIR inaccurately states that the foothill area is not in danger of wildfire. Impact 4.8-6 in Section 4.8, "Hazards and Hazardous Materials," of the DEIR states that the majority of lands in the foothills and mountainous portions of the County are within high risk fire zones, as mapped by CAL FIRE and that fire hazard is greatest in the foothill and mountain areas of the County.

3 The comment states that an extended public comment period is needed for the DEIR. The public comment period for the DEIR is based on, and follows all requirements under CEQA Guidelines Section 15105. A Notice of Preparation ("NOP") of the Draft EIR was filed with the Office of Planning and Research and each responsible and trustee agency and was circulated for public comments from June 17th, 2010 through July 16th, 2010. The County prepared, noticed, published, and circulated, a DEIR for review. A Notice of Completion ("NOC") and copies of the Draft EIR were distributed to the Office of Planning and Research on December 10th, 2010 to invite comments. The County provided a longer period of time than required in order to allow greater public review and input. An official 60-day public comment period for the Draft EIR was established by the Office of Planning and Research. The public comment period began on December 10, 2010 and ended on February 9, 2011. A Notice of Availability (NOA) of the Draft EIR was mailed to all interested groups, organizations, and individuals who had previously requested notice in writing on December 10, 2010. The NOA stated that the County has completed the Draft EIR and that copies were available at www.yubavision2030.org, the Yuba County Community Services & Development Services Agency, Planning Department, 915 8th Street, Suite 123, Marysville, or at the Yuba County Public Library, 303 2nd Street, Marysville. A public notice was placed in the Appeal-Democrat on December 10, 2010, which stated that the Draft EIR was available for public review and comment. A public notice was posted in the office of the Yuba County Clerk on December 10, 2010.

4 The comment alleges that the General Plan suggests that the Plan will change the way of life for citizens. The comment is unrelated to the contents or adequacy of the DEIR.

LAFCo

YUBA LOCAL AGENCY FORMATION COMMISSION

John Benoit, Executive Officer

526 C Street
Marysville, CA 95901

Phone: (530) 749-5467
FAX: (530) 740-4836
URL: www.yubalafco.org

January 27, 2011

Yuba County Community Development and Services Agency
Dan Cucci, Planning Department
915 8th Street, Suite 123
Marysville, CA 95901

Re: Yuba County General Plan DEIR

Dear Mr. Cucci:

Thank you for providing LAFCO of Yuba County with the opportunity to comment on the General Plan DEIR.

Section 15096 of the CEQA guidelines outlines the process for a responsible agency. This section bestows special duties upon LAFCO when acting as a responsible agency. LAFCO is required to comment during this time or this project will be presumed to comply with CEQA. Further, LAFCO is required to treat the EIR as adequate when there is a subsequent action before LAFCO provided certain factors or circumstances have not changed with respect to the project or new information has not become available.

Even though LAFCO is not directly a responsible agency for the General Plan, LAFCO would like to use the EIR for the establishment or updates of various Spheres of Influence with Yuba County and perhaps for various changes of organization in the near future. Using the General Plan EIR for this purpose would substantially reduce the cost to LAFCO and therefore to the County and Cities for CEQA Compliance. 1

LAFCO previously commented on the Draft Yuba County General Plan and would like to add the following specific comments on the DEIR:

1. Section 1.7 page 1-9 Please modify the wording of the following sentence "Yuba LAFCO, which would approve changes in spheres of influence, sphere planning areas, and jurisdictional boundaries in Yuba County" to "Yuba LAFCO, which would approve the establishment or updates of spheres of influence, changes of organization for special districts and cities throughout Yuba County"

2. Section 3.6.3 page 3-15. Please add the following word with respect to Spheres of Influence in the last sentence.....and the establishment **and update** of Spheres of Influence. 2

Please provide LAFCO with a copy of the Final EIR when it becomes available. 3

Sincerely,

Paige Hensley for John Benoit

John Benoit
Executive Officer

1 The comment discusses responsible agency responsibilities and Local Agency Formation Commission (LAFCo) responsibilities. LAFCo indicates a desire to use the County's General Plan EIR for CEQA compliance in approving sphere of influence changes and other changes of organization. The above comments are noted by the County. Please refer to Section 1.7 of the EIR, which includes a number of actions for which the General Plan EIR may be used, including LAFCo actions.

The comment requests modification of wording in Section 1.7 on page 1-9 of the DEIR. The requested change has been made.

2 The comment requests additional language to be added to Section 3.6.3 on page 3-15 of the DEIR. The requested language has been added.

3 The comment requests a copy of the FEIR be sent to LAFCo. A copy will be sent to LAFCo when available.

Hofman

OFFICE OF THOMAS W. ERES
ATTORNEY AT LAW
4030 Winding Creek Road
Sacramento, CA 95864
Telephone 916.482.4021
Fax No. 916.488.5950

FAX COVER SHEET

FAX NUMBER TRANSMITTED TO: (530) 749-5434

To: Kevin Mallen, Director
Of: Community Development and Services Agency
From: OFFICE OF THOMAS W. ERES
Client/Matter:
Date: February 4, 2011

(3 pages including cover sheet)

Comments:

Hi Kevin,

Attached please find a letter to you from Ms. Hofman regarding the General Plan Update and the Draft Environmental Review.

Thanks,
Tom

RECEIVED
FEB 04 2011
Community Development & Services Agency

The information contained in this facsimile message is information protected by attorney-client and/or the attorney/work product privilege. It is intended only for the use of the individual named above and the privileges are not waived by virtue of this having been sent by facsimile. If the person actually receiving this facsimile or any other reader of the facsimile is not the named recipient or the employee or agent responsible to deliver it to the named recipient, any use, dissemination, distribution, or copying of the communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original message to us at the above address via U.S. Postal Service.

HOFMAN RANCH
3002 Forty Mile Road
Marysville, CA 95901
(530) 218-6271

February 4, 2011

Kevin Mallen, Director
Community Development and Services Agency
915 8th Street, Suite 123
Marysville, CA 95901

Dear Mr. Mallen:

I continue to be concerned with the County's General Plan work and the Environmental Impact Reports as relate to Hofman Ranch. Although we have discussed these matters many times, I want to once again reiterate the problems and my concerns.

As you are aware, my Ranch and agriculture operations are being severely impeded by current encroachment compounded by planned new development surrounding the Ranch. Forty Mile Road is the east boundary, and development is clearly depicted in the General Plan including industrial commercial, sports and entertainment, amphitheatre, casino and other development. The residential developments of the Plumas Lake Specific Plan area and North Arboga Study area border the west boundary, and the people who occupy these houses do not like agricultural operations next to them and frequently complain of our work. These complaints are increasing and are disruptive to our operations. 1

The current County planning concept is to significantly widen Plumas Arboga Road as a major connector of the new Highway 70 interchange and Highway 65, somewhere near South Beale Road. Such improvement will obviously be significantly and substantially growth inducing along the southern boundary of the Ranch.

The northern border of the Ranch is essentially the confluence of Highway 70 and 65. Consequently, I am surrounded by growth which will continue to drive severe limits and constraints on my agriculture operations.

For example, the neighbor complaints restrict my rice farming because they oppose best farming practices and cost efficient operations such as aerial operations and noise makers to scare away birds. The land is not suitable for field crops or orchards. Livestock grazing is only available for summer pasture for cows, and goats or sheep are not viable uses. Winter pasture is hard to come by. 2

Historical policies relating to "right to farm" are rapidly becoming irrelevant to the Ranch, and notations on deeds are of no real significance. 2 cont'd

With respect to flooding issues, even if you limit development in areas where there are purported flowage easements of the Sacramento San Joaquin Drainage District, those easements only potentially impact less than one half of the 1350 acres of the Ranch. The remaining land should be included in the General Plan for some sort of development. 3

The recent FEMA maps purport to expand the area of potential flooding with no factual or rational basis, other than artificial lines on a map. We all know, for example, if the FEMA map is accurate for my property, if there is a high water event, it is quite probable all of Plumas Lake Specific Plan area and its homes will be under water.

I want my Ranch identified in the General Plan for development; however, until such development, I plan to continue my ranching as long as I can, given the surrounding encroachment activities. 4

Thank you for your, hopefully, favorable consideration of my request. If you want to discuss this matter further, just give me a call at the above telephone number, or you can reach me through (916) 660-9374 or (916) 482-4021.

Frances Hofman

cc: Yuba County Board of Supervisors

Letter Hofman Response	Frances Hofman February 4, 2011
1	The comment states that the commenter's existing ranch operations are disrupted by new development in the area. The comment further states that roadway improvements near commenter's property will induce growth. Conversion of agricultural land to non-agricultural use is analyzed in Section 4.2, "Agriculture and Forestry Resources," of the DEIR. Impact 4.10-4 in Section 4.10, "Land Use Planning, Population, and Housing," of the DEIR analyzes potential growth inducing impacts of the 2030 General Plan.
2	The comment expresses concern about new development interferences with commenter's existing agricultural operations. Section 4.2, "Agriculture and Forestry resources," of the DEIR analyzes impacts to agriculture lands and includes discussion of 2030 General Plan policies intended to reduce conflicts between agricultural operations and adjacent uses.
3	The comment expresses concern about flooding in the area of the commenter's property. Section 4.9, "Hydrology and Water Quality," of the DEIR discusses existing conditions and analyzes potential impacts related to flooding. The comment does not suggest that the analysis in the DEIR is inadequate or flawed in any way. This comment also requests that a certain portion of property be designated for development. This is a question of policy that is unrelated to the adequacy of the EIR in addressing environmental impacts of implementation of the General Plan.
4	The comment states that commenter intends to continue agricultural operations, but would like property identified for development. The comment is related to Yuba County policy and does not relate to the adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

064-01

BVID

Browns Valley Irrigation District

Post Office Box 6, Browns Valley, CA 95918

Business Office:
530/743-5703
FAX:
530/743-0445
Water Operations Office:
530/742-6044

RECEIVED BY EACH BOARD MEMBER

February 7, 2011

RECEIVED
FEB 7 2011
CLERK OF THE BOARD OF SUPERVISORS

Honorable Board of Supervisors
County of Yuba
915 8th Street, Suite 109
Marysville, CA 95901

Re: Comments of the Browns Valley Irrigation District on the Draft Environmental Impact Report for the Draft 2030 Yuba County General Plan

To the Honorable Board of Supervisors:

Please accept this letter as the comments of the Browns Valley Irrigation District ("BVID" or the "District") to the Draft Environmental Impact Report for the Draft 2030 Yuba County General Plan (the "DEIR"). BVID's comments are being timely submitted to the Board of Supervisors in accordance with the "Notice of Availability of a Draft Environmental Impact Report for the Yuba County General Plan 2030."

BVID's comments are directed to specific portions of the DEIR that discuss or that might affect the District's operations and water rights. As an initial comment, BVID requests that all references to its water supply reservoir throughout the DEIR be corrected from the colloquial "Collins Lake" to the proper legal name of "Merle Collins Reservoir" or if shortened, "Collins Reservoir." Because the DEIR is a public document that, when final, will govern a formally adopted policy of the County, proper names of places and features should be used. 1

In addition, BVID has the following specific comments about certain portions of the DEIR:

1. Section 4.6, Geology, Soils, Mineral Resources, and Paleontological Resources, Impact 4.6-8, Potential Damage from a Seiche, pages 4.6-48 and 4.6-49:

BVID owns the shoreline around Collins Reservoir up to elevations at least 50 feet above the spillway of Virginia Ranch Dam. To date, residential and resort building around Collins Reservoir has been on parcels substantially upslope of the boundary between private property and BVID's property. Given the substantial freeboard above Collins Reservoir's 2

maximum water elevations both under normal operations and under any increase expected from a seiche likely to form in a water body of its size, the risk of injury or damage to persons or property from a large seiche on Collins Reservoir is remote. 2 cont'd

2. Section 4.9, Hydrology and Water Quality, Subsection 4.9.2 – Environmental Setting, subdivision entitled "Reservoirs," page 4.9-25:

The first paragraph in this portion of the DEIR over-generalizes about the primary purpose of the dams listed. Other than Lake Francis and New Bullards Bar Reservoir (which also has significant water supply, flood protection and environmental protection purposes), none of the other reservoirs listed were built primarily for hydroelectric generation purposes. BVID's Merle Collins Reservoir was constructed in the early 1960s as a water supply reservoir and retains that primary purpose today. The hydroelectric generator located at the base of Virginia Ranch Dam was not installed until 20 years after the dam was built. The following paragraphs of the Reservoirs subdivision detail that the primary purpose of most of the listed reservoirs is not hydroelectric generation. Therefore, the last sentence of the first paragraph should be revised as follows: "These reservoirs fulfill multiple purposes, including flood control, water supply, hydroelectric power generation, debris control, and recreation." 3

The final paragraph describing BVID's Merle Collins Reservoir is awkward and therefore should be revised as follows:

"Merle Collins Reservoir, also known as Collins Lake, was completed in 1963 by BVID. Collins Reservoir was created by the Virginia Ranch Dam's impounding of French Dry Creek and has a capacity of 57,000 acre-feet. Water stored in Collins Reservoir is used primarily to supply BVID's customers with untreated water for irrigation purposes (YCWA 2008a)."

3. Section 4.12, Public Services and Facilities, paragraph entitled "Parks and Recreation Providers," pages 4.12-8 and 4.12-9:

The general statement on page 4.12-8 that BVID provides park and recreation services is incorrect, as is the statement on page 4.12-9 that "BVID owns the Collins Lake Recreation Area, but on-going maintenances [sic] is provided by a private vendor." The recreational facilities at Collins Reservoir are leased on a long-term basis to a concessionaire, Pineland Development Co., Inc. Pineland provides all recreational services directly to the public in addition to owning, maintaining and improving the facilities on the western side of the reservoir. All recreational services and facilities provided at Collins Reservoir are funded by user fees set and collected by Pineland. From those fees, Pineland pays any rents due to BVID. 4

4. Section 4.14, Utilities and Service Systems, Subsection 4.14.2, Environmental Setting – Water Supply, Distribution and Demand, pages 4.14-4 and 4.14-5:

In general, this portion of the DEIR is inaccurate both as to the description of water supplies and demands and the data provided to support the narrative text. While Yuba County Water Agency ("YCWA") manages river flows and reservoir releases to ensure the water supplies of all member units, BVID and two other member agencies have their own water rights that are senior to those of YCWA. As a result, YCWA is required to coordinate with BVID and the other senior water right holders to ensure that their supplies are delivered as requested.

BVID possesses a pre-1914 appropriative water right, which is the most senior right on the North Fork Yuba River. In State Water Resources Control Board Revised Decision 1644, the State Water Board determined BVID's consumptive pre-1914 right as 24,462 acre-feet annually based on specified maximum diversions each month. BVID's pre-1914 water right also has a non-consumptive component that dates to an 1896 agreement with PG&E. It consists of a year-round right to divert 47.2 cfs for hydroelectric power generation purposes and is now used by YCWA in the Yuba River Project. BVID also holds a contractual entitlement to 9,500 acre-feet water for consumptive use annually from YCWA. BVID's consumptive water supplies are diverted at BVID's Yuba River pump station, lifted into the Pumpline Canal and delivered to customers in the lowland portion of the District. 5

In addition to its Yuba River supplies, BVID holds three appropriative water right licenses issued by the State Water Resources Control Board to store, divert and re-divert the waters of French Dry Creek. Those licenses permit BVID to operate Collins Reservoir and to distribute water to its customers for consumptive uses in the upland portion of the District. The total maximum water supplies that BVID is able to provide each year to customers from both direct diversions from French Dry Creek and from storage in Collins Reservoir are 46,500 acre-feet. In dry years Collins Reservoir, which is fed only by rainfall, may not fill and inflow to Dry Creek may be limited. As a result, in drier years BVID may be required to cut back the water supplies that it can deliver to its customers. While BVID's Yuba River water supplies are extremely reliable, supplies from French Dry Creek are more variable.

Table 4.14-1 on page 4.14-5, providing data concerning County water supply and demand, also is inaccurate. Specifically, the data provided for BVID does not reflect its water rights and actual consumptive water supplies and demands. Like other agencies listed in the table that supply irrigation water to customers on a seasonal basis, characterizing demand using an average daily rate is meaningless because that measurement is useful only for treated water served for municipal and industrial uses on a year-round, 24/7 basis. Rather BVID's demands, as with similar agencies, should be stated only as an annual average. 6

In accordance with the above discussion, the data in Table 4.14-1 should reflect the following data. The total <u>maximum</u> annual water supplies that BVID has available for consumptive use is 70,962 acre-feet. For BVID, current annual <u>average</u> demand is <u>57,128</u> acre-feet (16,062 acre-feet Yuba River and 41,066 acre-feet Dry Creek). Using the correct

numbers, BVID's current "water surplus" using maximum supplies and current average year demand are approximately 13,834 acre-feet. If average supply data was used, the "surplus" would be even smaller. It should be noted that BVID's engineers analyzed demand through 2026 within the District in a report accepted by BVID's Board of Directors in March 2008. The engineers determined that there would be no surplus supplies available in BVID's Collins Reservoir service area based on projected growth in demand at 2026. The study also determined that BVID would have only a small surplus in most water year types in its Yuba River service area. 6 cont'd

5. Section 4.15, Energy, Subsection 4.15.2, Environmental Setting, paragraph entitled "Electricity Generation", page 4.15-8:

The statement that BVID's hydroelectric power plant is "capable of generating one MW of electricity per year at Virginia Ranch Dam at Collins [Reservoir]," is incorrect. The one MW designation is the nameplate rating of the generator unit and represents the amount of power the unit is estimated to be able to generate at a constant head of water on an annualized basis. The actual amount of power that BVID is able to generate in any given year depends on the amount of water stored in Collins Reservoir that BVID is able to run through the Virginia Ranch Dam Powerhouse. 7

Browns Valley Irrigation District thanks the Board of Supervisors for the opportunity to comment on the DEIR for the General Plan Update. BVID also appreciates the Board's full consideration of its comments to the Draft Environmental Impact Report for the Draft 2030 Yuba County General Plan. If any member of the Board or County staff or the County's consultants has a question about this letter, please contact me at the address or telephone number above.

Sincerely,

BROWNS VALLEY IRRIGATION DISTRICT

By: _____
Walter Cotter, General Manager

WC:

cc: BVID Board of Directors

Letter	Browns Valley Irrigation District
BVID	Walter Cotter, General Manager
Response	February 7, 2011

1 The comment requests correction throughout the EIR referencing Merle Collins Reservoir. The requested changes have been made.

2 The comment provides detailed information about Collins Reservoir. The comment confirms information already in the DEIR.

3 The comment suggests revised language to clarify descriptions of Collins Reservoir. The requested changes have been made.

4 The comment provides clarification and correction regarding recreation at Collins Reservoir. Changes have been made to reflect this information.

5 This comment indicates that the characterization of water rights held by BVID in Table 4.14-1 of the DEIR is inaccurate. The text of Table 4.14-1 provided in the DEIR has been deleted and replaced with a general discussion of water use in Yuba County based primarily upon the YCWA IRWMP. In addition the requirement that YCWA coordinate with the senior water right holders described in this comment has been noted in the text of Section 4.14. This comment is included in this FEIR in its entirety to supplement the discussion in Section 4.14 of the EIR.

6 This comment objects to the content of Table 4.14-1 provided in the DEIR. As described above and in response to comments submitted from YCWA this text has been deleted. The revised discussion characterizes existing patterns of water use and projected increases in water demand. This comment is included in this FEIR in its entirety to supplement the discussion in Section 4.14 of the EIR.

7 The comment provides correction regarding BVID's hydroelectric plant. Changes have been made to reflect this information.

Sharp 1

February 7, 2011

Mr. Dan Cucchi
Yuba County Planning Dept.
915 Eight Street, Suite 123
Marysville, CA 95901

Dear Mr. Cucchi:

Subject: 2030 Yuba County General Plan Update,
SCH Number: 2010062054
Document: Draft EIR

Review of the draft EIR has noted the following discrepancy between the draft General Plan and the draft EIR. This inconsistency conflicts with State General Plan Guidelines, and leads to public confusion as to which GHG reduction goal is applicable for this General Plan. Your careful attention to explaining these perplexing and conflicting statements will be greatly appreciated.

It is noted that in the past, you have been helpful in explaining a certain incorrect characterization that 6.4 MT per capita reduction as not being roughly half of the the current statewide averages.

Public Health and Safety-34
Action HS5.1 Greenhouse Gas Reduction Plan:

The County's GHG Reduction Plan will be designed to be consistent with AB 32, as appropriate and applicable within the unincorporated County. The County will ensure that the GHG emissions reductions targets represent the unincorporated County's "fair share" of statewide GHG reduction, consistent with legislation and regulations with AB 32 (i.e., reduce statewide GHG emissions to 1990 levels by 2020). This does not mean the County will attempt to literally reach its own 1990 emissions level by 2020, as this would be a misreading of legislation. As noted, the County's overall objective is to plan for new growth in a way that is GHG-efficient as would be needed statewide to achieve AB 32 mandates. 1

Page 5-21 of the draft EIR (5.8.7 Greenhouse Gas Emissions/Climate Change)

Under the 2030 General Plan, the County would not meet the GHG-per-SP benchmarks derived for the year 2020, which are established to be between 4.36 and 4.6 MT of CO_2e per SP. The 2030 General Plan includes detailed guidance for a Greenhouse Gas Reduction Plan (Action HS5.1) and a program to assist farmers with voluntary GHG emissions reductions strategies (Action HS5.2). However, the County cannot guarantee at this time that the implementation of these actions would reduce below the established significance thresholds. New development accommodated under the 2030 General Plan would not accomplish Yuba County's "fair share" of GHG emissions reductions needed statewide to achieve California's 2020 GHG target established under AB 32. This impact of the 2030 General Plan is significant and unavoidable.

These statements are contradictory and inconsistent. On the one hand, the General Plan says the County will meet its "fair share" of statewide GHG reduction and on the other hand the draft EIR says "the 2030 General Plan would not accomplish Yuba County's "fair share" of GHG emissions.

How is this inconsistency going to be reconciled?

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Community Development & Services Agency

If Yuba County cannot meet its own 1990 emissions by 2030, then some other part of the state must exceed their "fair share" of emissions so as to offset the County's excess emissions. 1 cont'd

How is the County going to control where and how that happens?

From the State of California General Plan General Plan Guidelines 2003

All elements of a general plan, whether mandatory or optional, must be consistent with one another. The court decision in Concerned Citizens of Calaveras County v. Board of Supervisors (1985) 166 Cal.App.3d 90 2

Without consistency in all five of these areas, the general plan cannot effectively serve as a clear guide to future development. Decision-makers will face conflicting directives; citizens will be confused about the policies and standards the community has selected; findings of consistency of subordinate land use decisions such as rezoning and subdivisions will be difficult to make; and land owners, business, and industry will be unable to rely on the general plan's stated priorities and standards for their own individual decision-making. Beyond this, inconsistencies in the general plan can expose the jurisdiction to expensive and lengthy litigation.

Regards,

Charles Sharp

Charles Sharp
P.O. Box 107
Dobbins, CA 95935

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Community Development & Services Agency

1 The comment suggests that there is an inconsistency between Action HS5.1 and discussion on page 5-21 of the DEIR. Action HS5.1 states that a GHG reduction plan will be designed with the goal of achieving AB 32 mandates. The General Plan includes a wide range of policies and actions (summarized in Table 4.7-4 of the DEIR) that will reduce GHG emissions and promote consistency with the mandates of AB 32. Many of the County's policies will have significant and positive impacts on VMT reduction, which translates to large reductions in GHG emissions, while some will make a smaller contribution. However, because of the large amount of development and potential for simultaneous construction of multiple sites, taken together with modeled emissions, implementation of the 2030 General Plan could result in, or substantially contribute to GHG emissions. Although the policies and actions would reduce GHG emissions, the County cannot at this time based on Countywide policy in the General Plan demonstrate that the 2030 General Plan would have GHG emissions per service population at a level needed statewide to achieve the AB 32 target. Therefore, the County drafted Action HS5.1, which provides extensive and specific guidance on the performance standard for this follow-on action. Please refer to Section 4.7 of the EIR for more detailed information.

2 This comment asks about the County's intent for achieving "fair-share" GHG reductions. Please refer to the response to Comment 1, Section 4.7 of the EIR (including Table 4.7-4), and the Draft 2030 General Plan, which explain in detail the County's approach to minimizing GHG emissions. The comment expresses concern about inconsistencies within the General Plan. Please refer to the response to Comment 1.

Crompton

Greg & Shirley Crompton
PO Box 315
Dobbins, CA 93935
February 8, 2011

Yuba County Board of Supervisors
915 8th Street Suite 109
Marysville, CA 95901

Honorable Supervisors:

In reviewing the Draft Yuba County 2030 General Plan Environmental Impact Report we believe there is significant inadequacy (or ambiguity) with respect to fire safety specifically related to safe evacuation occurring simultaneously with access by fire suppression resources. This concern applies to Policies HS9.1 and 9.2, and Action HS9.1 under Goal HS9, and Policies HS 2.1, 2.2, 2.9, and 2.10, and Action HS 2.1 under Goal HS2. Within each of these items reference to emergency access and, where addressed, evacuation, there is no requirement to provide access and egress that will allow safe evacuation simultaneously with suppression resource access during worst case predicted wildland fire behavior. There are residential areas in our, and other foothill, communities where there is currently no adequate egress from such a fire. These are fires occurring under conditions like those existing during the Williams and Pendola fires (hot dry north wind events). 1

A related concern involves Policy HS2.9 which provides for (where feasible) evacuation on unimproved roads and trails. Without application of restrictions on the use of such routes serious safety problems could occur. For example, a heavy duty pickup truck pulling a horse trailer could easily slide off a one lane dirt road cut into a steep hillside, blocking traffic. With no room behind the stuck vehicle to turn around, people could be trapped. Although in a dire emergency any possible way out may, of necessity, be used, it should not be planned to allow vehicle egress that may cause more harm than good. 2

In light of the inadequacies, or ambiguities, in the Draft Yuba County 2030 General Plan cited above we believe that the conclusions of "less than significant impacts" under both Goals HS2 and HS9 are inappropriate. Where reference to "multiple access points" and "emergency egress" or "evacuation" occurs in the Draft General Plan without consideration of worst case predicted wildfire behavior, impacts are not "less than significant". The same can be said related to invoking "unimproved roads and trails" without measures to control access by vehicles that could trap others due to an incapability to safely traverse such roads or trails. 3

Respectfully:

Greg Crompton

Shirley Crompton

Greg & Shirley Crompton

Cc Kevin Mallen
Dan Cucchi

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Yuba County Dept. of Planning

1 The comment expresses concern about the adequacy of evacuation routes during a wildfire and policies that would affect emergency access and evacuation. Several Health & Safety Element policies and actions have been revised in relation to wildfire risk, particularly in foothill communities. Specifically, Actions HS2.1 and HS2.2 have been revised in relation to adequate evacuation routes and emergency vehicle access.

The County has made revisions to the Public Health & Safety Element to clarify policies and actions related to reducing the potential for risk related to wildfire. The County's policies in the draft and revised General Plan are designed to protect people and property from wildland and urban fire risk and create more fire-resilient communities. Existing state regulations related to wildfire risk will be required as a part of new developments that could be accommodated under the General Plan higher fire risk areas. Projects will be conditioned, as appropriate, to ensure defensible space, fire-wise landscaping, fuel breaks, emergency access, fire flow, hydrants, sprinkler systems, fire stations and other improvements and conditions. New developments are required to pay on a fair-share basis for fire stations, equipment, and other fire suppression improvements necessary to provide adequate fire protection services. All community water systems serving new development projects are required to meet or exceed County minimum standards for provision of water for fire flows.

Emergency access and evacuation routes are comprehensively addressed both in County policy and actions described in the Public Health & Safety Element, including access needs as informed by modeling of wildfire behavior. Following General Plan adoption, the County will maintain a planning and entitlement review process that documents compliance with state and local standards for fire safety.

The County will update zoning, development, improvement standards, and building standards, as necessary, to maintain compliance with relevant fire codes, including those maintained by Cal Fire. County codes would be anticipated to address such topics as landscaping standards and fire-resistant plant materials, fire resistant building materials for exterior walls and other exterior features of structures, defensible space standards for different topographic conditions, sprinklers, emergency access, water supply and pressure for firefighting, building and road construction in areas prone to fire risk and greater slopes, and other relevant topics.

In addition, as included in the revised General Plan, the County will prepare, adopt, and implement a comprehensive wildfire safety plan for foothills portions of the County with high and very high wildfire risk. This plan will be designed to reduce fuel loads, ensure emergency access and evacuation routes, and provide incentives for property owners to improve properties in order to reduce wildfire risk and improve fire resiliency for existing developed areas. As a part of this planning effort, the County will collaborate with other public agencies and nonprofits to implement fire breaks and fuel reduction projects in areas of high and very high fire risk, including removal of invasive species that increase understory fuel loads. Areas of particular focus could include County roads, ridges surrounding rural communities, and defensible space around existing structures. The County will seek funding from sources, such as the Bureau of Land Management, for fire

fuel reduction projects. The County will collaborate with land owners in fire prone areas without adequate secondary access to improve access, add water tanks, or otherwise improve fire safety conditions. The County will seek funding to provide incentives for property owners to retrofit existing structures in high and very high fire risk areas to reduce combustibility. Planning for emergency access and evacuation routes will take into account records of historic fire activities affecting foothills portions of the County. Emergency access and evacuation will also take into account fire behavior modeling, including consideration of wildfire driven by winds that could limit the use of existing evacuation routes. The County will analyze and consider planning and fair-share funding of improvements needed to provide for emergency access and evacuation routes generally leading away from the head of a wildfire that has the characteristics of the worst-case predicted wildfire and secondary access allowing egress oriented in a direction of approximately 180 degrees from the previously described route.

2 The comment expresses concern regarding the language in Policy HS2.9 and the potential for vehicles to use informal access points as a formal evacuation route. Policy HS2.9 has been revised to clarify that these rights-of-way are not considered primary evacuation or emergency access routes and vehicles that cannot successfully navigate these routes shall not make use of them.

3 The comment summarizes points made previously in the comment letter and opines that impact conclusions in the DEIR regarding fire hazards are inappropriate. Changes to Health & Safety Element policies and actions have been made to be more specific and ensure adequate emergency evacuation and emergency vehicle access.

Woodbury

Remy Thomas Moose & Manley LLP

455 Capitol Mall, Suite 210
Sacramento, CA 95814

Tiffany K. Wright
twright@rtmmlaw.com

February 7, 2011

Yuba County Planning Department
Dan Cucchi, Project Planner
915 8th Street, Suite 123
Marysville, CA 95901

Re: Comments on the Yuba County2030 General Plan Environmental Impact Report

Dear Mr. Cucchi:

This letter is provided on behalf of the Woodbury property owners group. As you know, the County has accepted an application for the Woodbury Specific Plan, and a Request for Proposals for EIR preparation was circulated last January. The 1,345-acre Woodbury Specific Plan area is located just south of Erle Road, in the Highway 65 Corridor between Linda and Wheatland. The proposed Specific Plan includes a mix of residential, commercial, park, public (schools), and open space uses. In previous letters and communications with the Planning Commission and the Board of Supervisors, the property owners have commented that designating the Woodbury area as "Valley Neighborhood" will help the County to fulfill many of the proposed 2030 General Plan's goals.

The Board of Supervisors previously expressed its agreement that Woodbury should be included in the General Plan with a land use designation allowing residential and commercial development. (See Minutes of October 13, 2009 action, attached.) At the October 13, 2009 Board hearing, the Board specifically directed staff to include Woodbury and Magnolia Ranch in the General Plan update. And yet, the proposed 2030 General Plan still designates the Woodbury property as "Natural Resources." 1

It is our understanding that the Environmental Impact Report (EIR) for the 2030 General Plan did assume some level of development for Woodbury in the analysis. In other words, even though Woodbury is shown as "Natural Resources," the levels of development assumed for the Linda area (6,100 to 8,100 single-family units and 2,520 to 3,400 multi-family units) would accommodate development at Woodbury. Please confirm whether our understanding is correct.

We hope that this is the case because, as we explain below, designating Woodbury as "Valley Neighborhood" and removing the problematic Planning Reserve designation will help to mitigate many of the proposed 2030 General Plan's significant and unavoidable impacts. And properly designating Woodbury as "Valley Neighborhood" will not trigger further analysis in the EIR. 1 cont'd

1. The EIR should consider mitigation for the proposed 2030 General Plan's significant and unavoidable impacts.

One of CEQA's fundamental goals is to "maintain a quality environment for the people of California." The primary means of achieving this goal is CEQA's substantive mandate that public agencies not approve projects with significant environmental effects if "there are feasible alternatives or mitigation measures" that can substantially lessen or avoid those effects. (*Mountain Lion Foundation v. Fish & Game Comm.* (1997) 16 Cal.4th105, 134.)

This EIR should serve as a frank examination of whether the proposed General Plan may result in significant impacts and how to further mitigate those impacts. Unfortunately, the 2030 General Plan EIR fails in this respect. In every instance in which a significant and unavoidable impact is identified, the EIR refuses to consider additional mitigation measures that could further reduce the impact. Instead, the standard response is that "[n]o additional feasible mitigation beyond General Plan policies and actions is available to reduce this impact to a less-than-significant level while also addressing the basic purpose of the General Plan." 2

And in many instances, there *is* a mitigation measure or alternative that would help to reduce the impact: planning for more compact, sustainable growth, rather than continuing to plan for more dispersed development that will accommodate much more growth than is reasonably expected for Yuba County.

The Draft EIR demonstrates the benefits of planning for development that is more compact. For example:

- "Alternative 3 would have a reduced impact on aesthetic resources compared to the 2030 General Plan, because it would have a smaller development footprint and would focus new development in areas adjacent to existing development." (Draft EIR, p. 5-14.)

- "Alternatives 2, 3, and 4 would all preserve substantially more farmland than the 2030 General Plan." (Draft EIR, p. 5-17.)

- "Alternatives 2, 3, and 4 are anticipated to generate roughly 4 MT CO_2e per service population (population + employment). This is less than the rate of GHG emissions required at the statewide level to achieve State mandates for GHG emissions. Therefore, the GHG emissions impact of Alternatives 2, 3, and 4 would be less than cumulatively considerable, while the impact of the 2030 General Plan would be cumulatively considerable." (Draft EIR, p. 5-22.)

- "Alternatives 2, 3, and 4 are all similar to one another in the relative level of impact to biological resources. These alternatives would result in the conversion of wildlife habitat, as would the 2030 General Plan. However, many of the areas that would be developed are within and adjacent to existing urban development. Under Alternatives 2, 3, and 4, there would be a reduced loss of oak woodland habitat and reduced level of development in areas with riparian, riverine, and wetlands habitats. Because the footprint of new development would be reduced under these alternatives compared to the 2030 General Plan, the impacts described above would be similar, but on a smaller scale and in areas that are less likely to support special status wildlife and plant species and sensitive habitats. Habitat modification would still occur as part of Alternatives 2, 3, and 4, but the scale of impacts would be reduced. The impacts to biological resources would remain significant and unavoidable under Alternatives 2, 3, and 4, but the level of impact to biological resources would be reduced."

2 cont'd

And as the analysis of vehicle miles travelled and greenhouse gas emissions demonstrates, it's not just that Alternatives 2, 3, and 4 have a smaller footprint or a lower growth rate that leads to a reduction in impacts. The analysis shows that vehicle miles travelled and greenhouse gas emissions are reduced on a per capita basis when development is planned in a more sustainable manner.

2. Planning for development at Woodbury will help reduce the proposed 2030 General Plan's significant and unavoidable impacts.

3

As explained in the EIR, Alternatives 2, 3, and 4, are all based on reasonable, if not aggressive growth rates. This demonstrates that the County can still meet its goals and objectives, and accommodate expected growth, in a more compact form. Woodbury should be part of that scheme for growth, as planning for development at Woodbury – rather than more dispersed areas of the County that are more distant from existing (and

proposed) development and infrastructure – will help the County to meet its sustainability goals. The feasibility of such a plan is evident from the application currently on file.[1]

Other aspects of the proposed 2030 General Plan demonstrate that designating Woodbury as Valley Neighborhood will help the County to achieve its goals and reduce the proposed plan's significant and unavoidable impacts. For example, the Placetypes Diagram in the draft 2030 General Plan locates a Commercial Center and Neighborhood Center on the north and northwestern boundaries of the Woodbury property. (Exhibit Community Development-5.) The draft General Plan explains that "[i]n the vicinity of the areas where a Commercial Center is identified, important design features include bicycle lanes or pathways, sidewalks and transit access, in addition to vehicular access." (Community Development-16.) But all of these features are useless if adequate residential and mixed uses do not surround the Commercial Center. 3 cont'd

Similarly, the draft General Plan depicts a Neighborhood Center on the northern boundary of Woodbury. This is a logical location for a Neighborhood Center. The draft General Plan explains that "[t]he intent is to develop and redevelop neighborhoods in a way that allows most residents to be within walking or bicycling distance of daily destinations (school, shops, parks, etc.). To meet this goal, the County intends for higher-activity land uses, such as schools, parks, retail and commercial services, offices, civic uses, and apartments, to be clustered together in an area serving the surrounding existing or planned neighborhood." (Community Development-15.)

But it make little sense to designate an area as a Neighborhood Center, and then plan for development on only one side of the center. In order to support the land uses planned for a Neighborhood Center, and to put them within walking distance of residences, the Neighborhood Center must be surrounded by residential and mixed land uses. Furthermore, the proposed policies describing the Neighborhood Center demand more housing units in close proximity than can be provided by the proposed land use designations: 3,000 to 5,000 existing or planned residents in the surrounding neighborhoods. (Draft 2030 General Plan, policy CD6.2.) Thus, when the EIR lists dozens of policies that will help to reduce significant and unavoidable impacts like increased vehicle miles travelled and greenhouse gas emissions, the analysis is not 4

[1] / The Woodbury property owners have requested that the application be put on hold pending the 2030 General Plan update process. This request should not be viewed as a withdrawal of the application or as an indication that the project is no longer feasible or planned. Because the County should logically consider the Specific Plan after the adoption of the General Plan, the owners have simply requested that further processing of the application be suspended until after adoption of the General Plan.

supported by substantial evidence because the policies will not be fulfilled without proper land use designations. 4

A specific example of a lack of evidence supporting the EIR's conclusions is in the traffic analysis. The Draft EIR lists several General Plan policies that are intended to reduce travel demand. Many of these policies could very well achieve this goal by helping to improve the jobs/housing balance and by locating mixed uses within close proximity. For example, Policy CD2.2 states that "[t]he County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment." Policy CD4.2 provides that "Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods."

But three of the policies listed above, in conjunction with the Planning Reserve designation, will do nothing to reduce vehicle miles traveled. In fact, they will have the opposite effect. Policies CD1.3, CD1.4, and CD13.5 are obstacles to the very type of development that will help the County meet the goals of sustainable and vibrant valley communities. Policy CD1.3 provides that:

> General Plan land use designations will not be assigned within the Planning Reserve area unless the County determines that these lands are needed to fulfill either the County's regional housing needs allocation or accommodate job-generating developments needed to achieve the County's jobs-housing goals. 5

Policy CD1.4 provides that:

> Projects will not be approved within the Planning Reserve area until the County assigns the appropriate General Plan land use designations and approves zoning and development standards consistent with the Community Development Element.

Policy CD13.5 provides that:

> For areas designated Planning Reserve, allowable land use will be regulated according to the underlying land use designation unless 4 of 5 members of the Board of Supervisors approve the following findings:
>
> - The subject project or plan proposed within the Planning Reserve Area promotes the goals and is consistent with the policies of the

Community Development Element, Natural Resources Element, Housing Element, and Public Health & Safety Element of the General Plan; and

- The subject project or plan proposed within the Planning Reserve Area will directly provide substantial basic (exporting) employment development potential; or

- The subject project or plan proposed within the Planning Reserve Area will construct water, wastewater, and drainage infrastructure that will serve future employment development, with the understanding that project applicants are repaid on a fair-share basis for the cost of providing off-site infrastructure to employment centers.

These three policies, when applied to Woodbury, essentially postpone the type of development that will help the County to meet its goals: development that is close to existing infrastructure, development that locates housing and jobs in close proximity, development that provides a variety of housing types, and development that provides a mix of uses. Instead, areas that will result in less sustainable development will develop first. The tens of thousands of additional homes that could be developed under the proposed 2030 General Plan before Woodbury develops as a result of these three policies would be scattered in areas much less suitable for development. This will simply increase the vehicle miles travelled both over all and on a per capita basis. These policies, in turn, will increase air quality impacts and greenhouse gas emissions. 5 cont'd

There are only two areas in the County covered by the Planning Reserve designation: the areas of the proposed Woodbury and Magnolia specific plans. Adding these policies that make development in these areas more difficult than other areas in the County places unnecessary obstacles to sustainable development. These policies should be deleted. Doing so will help to mitigate the draft 2030 General Plan's significant and unavoidable impacts.

The benefits of a more compact development scheme, such as one that incorporates Woodbury, can be seen by comparing the vehicle miles travelled under the various scenarios. Tables 4.13-4 and 4.13-5 show that, even when you account for the differences in the total amount of growth, the two Growth Scenarios have lower vehicle miles traveled per person/employee.

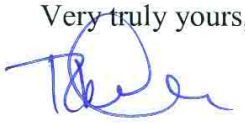
The EIR ultimately concludes that the increase in vehicle miles travelled is significant and unavoidable and that all available feasible mitigation has already been included in the plan. (Draft EIR, p. 4.13-81.) The Draft EIR takes the same approach with its analysis of climate change and greenhouse gas emissions. (Draft EIR, pp. 4.7-22 to 4.7-33.) This is simply untrue. A feasible mitigation measure or alternative would be to reduce the amount of development proposed in the more remote regions of the County, and instead focus on growth near existing uses and infrastructure, growth that provides mixed uses, and growth that locates housing near jobs. In other words, a plan that includes Woodbury, or at the very least doesn't make Woodbury the lowest priority for development, would help to mitigate the significant and unavoidable traffic, air quality, and greenhouse gas impacts of the proposed General Plan.

5 cont'd

The Board of Supervisors got it right when they directed that Woodbury be included in the General Plan update. And the EIR demonstrates that doing so will help to reduce the significant and unavoidable impacts of the proposed 2030 General Plan update. Including Woodbury in the 2030 General Plan, and deleting or revising Policies CD1.3, CD1.4, and CD13.5 will not trigger recirculation. We therefore request that the Board's direction be implemented and that Woodbury be included in the 2030 General Plan as "Valley Neighborhood," and that the policies regarding the Planning Reserve designation discussed above be deleted.

6

Very truly yours,



Tiffany K. Wright

cc: Randy Collins

Attachment

YUBA COUNTY, CALIFORNIA

BOARD OF SUPERVISORS

OCTOBER 13, 2009

The Honorable Board of Supervisors of the County of Yuba met in regular session on the above date, commencing at 9:40 a.m., within the Government Center, Marysville, California, with a quorum being present as follows: Supervisors Andy Vasquez, John Nicoletti, Mary Jane Griego, Roger Abe, and Hal Stocker. Also present were County Administrator Robert Bendorf, County Counsel Angil Morris-Jones, and Deputy Clerk of the Board of Supervisors Rachel Ferris. Chairman Nicoletti presided.

CONSENT AGENDA

Upon motion of Supervisor Stocker, seconded by Supervisor Griego, and unanimously carried, the Board took the following actions:

A. Administrative Services: Authorized Budget Transfer in the amount of $851 from Account No. 101-0900-417-1811 (Buildings and Grounds Government Center) to Account No. 101-0900-417-6200 (Fixed Assets) for the purchase of a chemical storage cabinet that meets Cal-OSHA requirements. — AUTH. BUDGET TRANSFER

B. Board of Supervisors: Cancelled the regular Board meeting scheduled November 3, 2009. — CANCELLED MEETING 11/3/09

C. Clerk of the Board of Supervisors

1) Reappointed Walter Shackelford to the Smartsville Cemetery District for a term to end October 13, 2013. — REAPPOINT REP.

2) Appointed Kevin Hinckley to the Substance Abuse Advisory Board for a term to end September 23, 2011. — APPOINT REP.

3) Appointed Felix Mata to the Area 4 Agency on Aging Advisory Council for a term to end June 30, 2011. — APPOINT REP.

PUBLIC COMMUNICATIONS

No one came forward.

ORDINANCE AND PUBLIC HEARINGS

The Clerk read the disclaimer.

1) Ordinance/Repealing and Re-enacting Chapter 9.35 of Title IX of the Yuba County Ordinance Code relating to Travel on the Levees: County Administrator Robert Bendorf recapped the ordinance and responded to Board inquiries.

Chairman Nicoletti opened the public hearing.

County Counsel Angil Morris-Jones responded to specific questions raised by Ms. Frances Hofman regarding proposed signage relating to trespassing.

Following additional Board discussion, upon motion of Supervisor Stocker, seconded by Supervisor Vasquez, and unanimously carried, the public hearing was closed, the reading was waived, and the Board adopted Ordinance No. 1484, which is on file in Ordinance Book No. 40, which is entitled: "AN ORDINANCE REPEALING AND REENACTING AS AMENDED CHAPTER 9.35 OF TITLE IX OF THE YUBA COUNTY ORDINANCE CODE RELATING TO THE REGULATION OF TRAVEL ON LEVEES UNDER THE JURISDICTION OF YUBA COUNTY." ADOPT ORDINANCE NO. 1484

2) Ordinance/Amending Chapter 9.15 of Title IX of the Yuba County Ordinance Code Regarding Vehicle Traffic Speed Limits on County Service Area No. 14 Roads: Public Works Director Mike Lee advised engineering and traffic, and speed surveys were completed earlier this year and concluded it was appropriate to post speed limits on roads in County Service Area No. 14. 7 cont'd

Chairman Nicoletti opened the public hearing. No one came forward.

Upon motion of Supervisor Griego, seconded by Supervisor Vasquez, and unanimously carried, the Board closed the public hearing, waived reading, and introduced an ordinance amending Chapter 9.15 of Title IX of the Yuba County Ordinance Code regarding vehicle traffic speed limits on County Service Area No. 14 roads. WAIVE READING

3) Ordinance/Repealing and Reenacting Chapter 13.20.400 of Title XIII of the Yuba County Ordinance Code Relating to Environmental Health Fees: Environmental Health Director Tej Maan provided a brief background on Certified Unified Program Agency (CUPA) fees and responded to Board inquiries.

Chairman Nicoletti opened the public hearing. No one came forward.

Upon motion of Supervisor Griego, seconded by Supervisor Vasquez, and unanimously carried, the Board closed the public hearing, waived reading, and introduced an ordinance amending Title XIII of Chapter 13 of the Yuba County Ordinance Code by repealing and re-enacting Section 13.20.400 relating to Environmental Health Fees. WAIVE READING

4) Ordinance/Amending Title VII of Chapter 7 of the Yuba County Ordinance Code by Adding Section 7.13 Prohibiting Trash Scavenging from Refuse and Recycling Receptacles: Following a recap from Sheriff Steve Durfor and Board inquiries, Chairman Nicoletti opened the public hearing. No one came forward.

Upon motion of Supervisors Stocker, seconded by Supervisor Griego, and unanimously carried, the Board closed the public hearing, waived reading, and introduced an ordinance amending Title VII of Chapter 7 of the Yuba County Ordinance Code prohibiting trash scavenging from refuse and recycling receptacles. WAIVE READING

5) Public Hearing/Findings of Fact, Conclusions of Law and Orders/Assessment of Administrative and Abatement costs/$61,361.50/Recording of Lien/5576 Cottonwood Avenue, West Linda (Anchak, Albert): Code Enforcement Officer Michael Eheler recapped violations and costs of abatement of nuisance. Chairman Nicoletti opened the public hearing. No one came forward.

Upon motion of Supervisor Griego, seconded by Supervisor Stocker, and unanimously carried, the Board adopted Findings of Fact, Conclusions of Laws and Orders, and assessment of Administrative and Abatement Costs and Penalties in the amount of $61,361.50 and the recording of a lien located at 5576 Cottonwood Avenue, West Linda, (Anchak, Albert). WAIVE READING

7 cont'd

COUNTY DEPARTMENTS

California State Association of Counties (CSAC) Appoint Representative and Alternate: Following a brief recap from Chairman Nicoletti, upon motion of Supervisor Abe, seconded by Supervisor Griego, and unanimously carried, the Board appointed Supervisor Abe as the Representative and Supervisor Griego as the Alternate for one-year terms to commence with the first day of the CSAC annual conference. APPOINTED REP. AND ALT.

CORRESPONDENCE

Upon motion of Supervisor Stocker, seconded by Supervisor Griego, and unanimously carried, the Board accepted the following correspondence:

A. Letter from Mooretown Rancheria regarding environmental impacts in the 2009 General Plan Update. REFER TO STAFF

Referred to Community Development and Services

B. Notice from California Emergency Management Agency advising various primary and contiguous counties have been declared disaster areas due to agricultural losses caused by drought which includes Yuba County.

C. Letter from California Health and Human Services Agency regarding funding for fraud investigation and program integrity efforts related to the In-Home Supportive Services program pursuant to the California State Budget Act of 2009. REFER TO STAFF

Referred to Health and Human Services, County Administrators Office

D. Schedule of Proposed Actions from the United States Forest Service regarding Plumas National Forest for October 1, 2009 to December 31, 2009.

E. Notice from California Fish and Game Commission regarding proposed emergency regulatory action relating to incidental take of Pacific fisher. REFER TO STAFF

Referred to Fish and Game Commission

7 cont'd

BOARD AND STAFF MEMBERS' REPORTS

Reports were received on the following:

Supervisor Stocker:

- Pacific Gas and Electric conducting a survey for retro fitting power poles in the Colgate area to accommodate birds wingspan
- Childhood obesity ad hoc meeting
- Browns Valley Elementary School scored 924 Academic Performance Index (API)

Supervisor Abe: Attended Sierra-Sacramento Valley Medical Service meeting, October 9, 2009

Supervisor Vasquez: Attended Area 4 Agency on Aging committee meeting, October 9, 2009

Supervisor Griego:

- Teichert safety luncheon
- Childhood obesity ad hoc meeting

- Receiving stimulus fund updates from Economic Development Director John Fleming, and North County Consortium Executive Director Fran Kennedy
- Requested by Cal LAFCO to be the moderator for two round table discussions
- Attended a gathering for Chairo Garibay, October 11, 2009
- Invited by Local Government Commission to attend a mock Board meeting in Modesto

Supervisor Nicoletti:

- Out of state October 15-16, 2009 on other business
- 4th Annual Homeless Consortium, October 14, 2009
- Public session for the Federal Energy Regulatory Commission (FERQ) relicensing for Yuba County Water Agency, October 14, 2009
- Commended the Appeal Democrat staff writer Ben van der Meer for article encouraging attendance to the Board meeting
- Commended Veterans Services Officer Marvin King for his efforts to restore benefits and back pay to two local vets

County Counsel Angil Morris-Jones: Announced the law library will soon be available to the public on line, a dedicated computer in the Court House will be available during regular business hours, and free to the public.

Assistant County Administrator Randy Margo: Received consensus to reestablish liaison committee with Olivehurst Public Utilities District (OPUD)

7 cont'd

CLOSED SESSION

At the request of Counsel Angil Morris-Jones and upon motion of Supervisor Stocker, seconded by Supervisor Abe, and unanimously carried the Board removed one case of potential litigation and Personnel/Public Guardian Appointment from closed session discussion.

REMOVE ITEMS

The Board retired into closed session at 10:57 a.m. to discuss the following:

A. Threatened litigation pursuant to Government Code §54956.9(b)(3)(E) - One Claim

B. Conference with Real Property Negotiator pursuant to Government Code §54956.8 - Property: APN 008-010-030-000 Negotiating Parties: Cruz and County of Yuba/Doug McCoy Negotiation: Terms of Payment

C. Conference with Real Property Negotiator pursuant to Government Code §54956.8 - Property: APN 019-230-052-000 Negotiating Parties: Inderbitzen and County of Yuba/Robert Bendorf Negotiation: Terms of Payment

The Board returned from closed session at 11:49 a.m. with all Board and staff members present as indicated above. Counsel advised staff was given direction from the Board.

RECESS

The Board recessed at 11:50 a.m. and reconvened at 1:00 p.m. with all Board and staff members present as indicated above.

COMMUNITY DEVELOPMENT AND SERVICES

Preferred Land Use Alternative/General Plan Update: Community Development and Services Director Kevin Mallen provided a Power Point presentation recapping the General Plan Update vision, goals and strategies, and responded to Board inquiries.

Mr. Greg Forest provided a Power Point presentation highlighting benefits of the Magnolia Ranch project and responded to Board inquiries, including:

- Focus on employment opportunities for the Highway 65 Corridor
- Solution to resolving constraints such as lack of access
- Infrastructure
- Jobs to housing balance
- Phase I and II build out

7 cont'd

Mr. Ike Balmaseda and Mr. Randy Collins provided a Power Point presentation highlighting benefits of the Woodbury project and responded to Board inquiries, including:

- Mixed-use community with identifiable neighborhoods
- Jobs to housing balance
- Infrastructure improvements for water and sewer
- Town Center, Business Park and Power Center
- Site opportunities and constraints

The following individuals spoke:

- Mr. Al Johnson, Magnolia Ranch
- Ms. Frances Hofman, Olivehurst
- Mr. Frank Webb, South Beale Road
- Mr. Tom Eres, representing Hofman Ranch
- Mr. Don Rae, Plumas Lake

- Mr. Ben Bartholomew
- Mr. Dennis Cook, on behalf of Barbara White property owner adjacent to the Woodbury project
- Ms. Sandra Gilbert, Pleasant Grove Road
- Mr. Richard Paskowitz, Hoken Lane

Supervisor Abe left the meeting at 2:37 p.m. and returned at 2:39 p.m.

Following additional Board discussion, upon motion of Supervisor Nicoletti, seconded by Supervisor Vasquez and following a roll call vote with Supervisor Abe voting in opposition, the Board directed staff to prepare resolutions for Woodbury and Magnolia Ranch projects; Woodbury to include proposed Chippewa Territory; Magnolia Ranch to include the industrial zoning designation as part of the reserve, both residential and commercial; and include them both in the general plan update. DIRECTION PROVIDED

ADJOURNMENT

There being no further business to come before the Yuba County Board of Supervisors, Chairman Nicoletti adjourned the meeting at 3:08 p.m.

7 cont'd

Chairman

ATTEST: DONNA STOTTLEMEYER
CLERK OF THE BOARD OF SUPERVISORS

Rachel Ferris, Deputy Clerk Approved: Oct 27, 2009

By: Rachel Ferris, Deputy Clerk

1 This comment identifies a previously submitted development application for a project known as the "Woodbury Specific Plan." This comment states that the Board of Supervisors directed staff to include the Woodbury and Magnolia Ranch projects in the General Plan Update. These comments are unrelated to the adequacy of the EIR for addressing environmental impacts. The comment also inquires as to whether the General Plan analysis assumed development of the Woodbury Specific Plan. The Woodbury property is within the Valley Growth Boundary and is designated as Natural Resources with a Planning Reserve overlay in the proposed General Plan. The General Plan EIR analysis did include development assumptions for the Woodbury property based on previous development applications submitted for the Woodbury Specific Plan. As stated in the Community Development Element of the General Plan, "The County has assumed potential development in the Planning Reserve area..." (See 2030 General Plan Community Development Element, page Community Development-19). Although Planning Reserve Areas are not planned for development under the 2030 General Plan, these areas would be the subject of planning and to serve future needs for housing and jobs growth. Action CD1.1 also indicates, "The County will also periodically review the Planning Reserve Area and consider removing lands from the Planning Reserve Area, assigning General Plan land use designations, and approving zoning and development standards, if needed, to accommodate population and employment growth consistent with the General Plan" (See the Community Development Element, page Community Development-23). This comment also suggests that removing the Planning Reserve designation from this specific area of land would mitigate impacts of the 2030 General Plan. As noted by the commenter, this statement is further discussed later in the letter. Please refer to responses to Comment 3.

2 This comment reiterates analysis presented in the Alternatives chapter of the EIR, suggests that growing more compactly is feasible mitigation, and recommends that additional mitigation should be suggested for impacts that are determined to be significant and unavoidable.

County staff has sought direction from the Board of Supervisors at many stages of the General Plan update process. As noted in the General Plan Update Process chapter of the 2030 General Plan, a fundamental part of the process of preparing or updating a general plan is the selection of a possible course of action for future growth, development, conservation, and reinvestment. According to California general plan guidelines, alternative concepts for the future of the community should be developed and examined before writing the general plan. This process enables the community to weigh the pros and cons of a variety of possible directions for the future. Ten alternatives analyzed as a part of the 2030 General Plan Update process represented a reasonable range of alternatives to the proposed project, including an alternative for more compact development within the Valley Growth Boundary. The County considered several diverse land use and circulation alternatives, which represented distinct approaches to achieving long-range planning and environmental goals. The overall extent of development – whether relatively compact or expansive – was an important area of contrast among the alternatives. A Preferred Alternative was evaluated by the Board of Supervisors in August and approved in October of 2009. The Preferred Alternative included narrative guidance in a document entitled Yuba County General Plan Update Vision, Goals & Strategies and a diagram called Sustainable Yuba County: Economy, People & Natural

Resources. The Board of Supervisors' direction embodied in the selection of the Preferred Alternative (see Exhibit Process-2) provided County staff with the direction necessary to prepare the 2030 General Plan. It would not be appropriate for the County to consider mitigation that would fundamentally change the overall development pattern compared to this direction offered by the Board of Supervisors. However, an analysis of alternative development patterns and comparative impacts would be appropriate in the context of alternatives analysis. Chapter 5, Alternatives to the Proposed Project, describes growth scenarios and land use plans that were considered as alternatives, including more compact and lower growth assumptions. The alternatives presented in that chapter were not brought forth as the preferred alternative for a number a reasons – the alternatives may not have met all of the goals and objectives of the General Plan or may have had different population and employment projections.

3 The comment suggests that development of the Woodbury property would help reduce the General Plan's significant and unavoidable impacts by providing compact development in the County. As mentioned above, the Woodbury property is designated as Natural Resources with a Planning Reserve overlay. As a part of the DEIR, the County evaluated land use change throughout the County, including areas with the Planning Reserve designation within the Valley Growth Boundary. Land use change assumptions used in the DEIR for the areas of interest to the commenter (the Woodbury Specific Plan Area) are based on the most recent available application submitted by the Woodbury project proponents. The comment requests a change in the County's land use designation for the Woodbury property. This comment is forwarded to the Board of Supervisors for their consideration. See also response to Comment 2.

4 The comment notes that the General Plan Land Use Diagram proposes a Neighborhood Center north of the Woodbury property. The comment is related to Yuba County policy and proposed land uses and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required. As noted previously, the County presents comprehensive analysis of the impacts of development of all areas within the Valley Growth Boundary, including areas with a Planning Reserve designation. Finally, this comment alleges that the County has not provided substantial evidence of the effectiveness of the wide array of policies and programs included in the 2030 General Plan and designed to reduce vehicle miles traveled (VMT) and therefore reduce greenhouse gas (GHG) emissions.

The Community Development Element was drafted by County staff in consultation with various experts in transportation planning, land use planning, urban design, and related topics. The County provided references to research and documentation related to policies and programs for reducing VMT. For example, on page Community Development-74: Todd Litman, Victoria Transport Policy Institute. "Are Vehicle Travel Reduction Targets Justified? Evaluating Mobility Management Policy Objectives Such As Targets to Reduce VMT and Increase Use of Alternative Modes." December 2009. As another example, from page Community Development-77, another such reference is provided: Reid Ewing and Robert Cervero, "Travel and the Built Environment" Transportation Research Record, 1780, Paper No. 01-3515. This second referenced paper is actually a synthesis of studies on multi-modal travel demand in areas with different development patterns and transportation systems.

The County provides analysis of total VMT produced by the 2030 General Plan at full buildout. See Section 4.13 for a complete description of methodology and assumptions.

As noted in Section 4.13 of the EIR, full buildout of the General Plan would have VMT that is 10% reduced compared to buildout of the 1996 General Plan even as it accommodates a greater amount of population due to the better balance and location of land uses. Since transportation is the largest source of GHG emissions, methods to reduce VMT are also important to reducing GHG emissions.

As noted in the EIR, the analysis likely overestimates the 2030 General Plan's actual VMT. This is because the VMT calculations were derived from a traditional travel demand model, which does not consider a number of factors incorporated into this General Plan that reduce VMT including: shifts in travel to transit, bike, and walk modes, improved local street connectivity, and mixed-use projects. The 2030 General Plan includes other policies that will act to reduce VMT, but are difficult to quantify within a travel demand model, such as travel demand management, increased density, shared parking, and workforce housing. As such, the VMT analysis in this section is considered conservative because it does not account for these more localized VMT reduction benefits.

As noted in Section 4.13 of the EIR, extensive research has shown that the above planning techniques can reduce vehicle trips, increase non-automobile mode share, reduce trip lengths, and reduce VMT. Increases in density and development intensity are correlated with reduced vehicle travel (on a per unit or square foot basis). Mixing complementary uses in a neighborhood setting increases internal trip "capture." Many different urban design approaches are used to increase transportation connectivity and provide high-quality bicycle, pedestrian, and transit facilities, increasing the attractiveness of non-automobile modes of travel. Access to regional destinations involves the strategic placement of land uses near regional attractions. A wide array of 2030 General Plan policies and actions incorporate these concepts. The programmatic analysis of the benefits of such policy approaches for reducing travel demand is appropriate for a General Plan. Project level analysis for future developments accommodated under the General Plan would incorporate quantified estimates of the VMT benefits of increasing connectivity, increased housing and employment density near transit, enhanced bike and pedestrian facilities, and other measures.

5 This comment alleges that the EIR's conclusions are not supported by substantial evidence without referencing any specific conclusions. See the response to Comment 4 above, which reiterates the evidence presented in the General Plan and EIR regarding VMT benefits of the County's policy array.

The comment alleges that Policy CD2.2 and CD4.2 would increase VMT. These policies are reproduced below:

Policy CD2.2 *The County will support specific plans, redevelopment plans, corridor plans, and community plans that promote infill development and reinvestment.*

Policy CD4.2 *Employment and Commercial Centers shall be designed to provide convenient and safe pedestrian and bicycle access from surrounding developed and planned neighborhoods.*

Infill development in Yuba County will place homes and destination land uses in closer proximity in areas served by transit. This reduces VMT by providing practical options for reaching destinations other than by car. Ensuring convenient and safe access to and from

employment and commercial centers is a straightforward approach to providing residents with practical non-vehicular modes of reaching work, shopping, or other destinations.

The comment alleges that use of the Planning Reserve for a specific portion of the County would reverse the effectiveness of the above policies. The above policies will be applied, as appropriate, on a countywide basis. Although it is impossible to predict the quantified benefits of these General Plan policies, it is clear from the material presented in, and referenced by the General Plan and EIR that application of the County's comprehensive policy approach will serve to minimize VMT and provide other attractive options for mobility in Yuba County.

The comment notes that there are conditions that must be met, as described in the General Plan, before land designated as Planning Reserve can be assigned specific land use designations. One of those conditions is that a project must demonstrate that the project or plan is planned and designed to improve the match between local jobs and the local labor force, consistent with the goal of accommodating 0.8 total local jobs for every member of the labor force (Policy CD13.4). The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

Finally, the comment alleges that all feasible mitigation for greenhouse gas emissions and VMT impacts has not been considered. The comment suggests that feasible mitigation or an alternative design could include reducing the level of development in more remote parts of the County. Please see the discussion under Impact 4.13-1 in the EIR, which lists a very large number of policies and actions that were specifically designed to reduce VMT and GHG emissions, as well as provide various other economic, social, and environmental benefits to the County and its residents. Refer also to Table 4.7-4 in the EIR, which summarizes a large number of policies and actions specifically designed to reduce VMT and GHG emissions. Implementation of the policies and actions summarized in Table 4.7-4 that are designed to reduce GHG emissions, would promote consistency with the mandates of AB 32. Many of the County's policies will have significant and positive impacts on VMT reduction, which translates to large reductions in GHG emissions, while some will make a smaller contribution. As noted, the framework of the 2030 General Plan is designed to achieve GHG reduction, among other social, economic, and environmental objectives of the County. The 2030 General Plan also introduces the idea of a "Valley Growth Boundary," which is intended to communicate the long-term limits of urban growth within valley portions of the unincorporated County and would serve to focus growth in urbanizing areas. All feasible mitigation is included as policy or as an action in the 2030 General Plan.

The County recognizes in the 2030 General Plan that transportation is the largest source of GHGs in Yuba County and California, and that land use and transportation planning to reduce vehicular travel is needed to achieve GHG reduction goals, especially since, given the predominance of transportation as a source of GHG emissions, improvements in building energy efficiency and other GHG emissions sectors can be overwhelmed by increases in VMT. The County can exercise substantial influence on VMT through its land use entitlement authority on development patterns, community design, transportation facilities planning, and other factors that closely relate to VMT. Land use/transportation strategies to reduce VMT and GHGs are a primary focus of the 2030 General Plan. However, because of the large amount of development and potential for simultaneous

construction of multiple sites, taken together with modeled emissions, implementation of the 2030 General Plan could result in, or substantially contribute to GHG emissions.

The County considered several diverse land use and circulation alternatives, which represented distinct approaches to achieving long-range planning and environmental goals. The County considered 10 different alternatives in drafting the General Plan, including alternatives that envisioned development of the land area referenced by the commenter. The overall extent of development – whether relatively compact or expansive – was an important area of contrast among the alternatives. A Preferred Alternative was evaluated by the Board of Supervisors in August and approved in October of 2009. The Preferred Alternative included narrative guidance in a document entitled Yuba County General Plan Update Vision, Goals & Strategies and a diagram called Sustainable Yuba County: Economy, People & Natural Resources. The Board of Supervisors' direction embodied in the selection of the Preferred Alternative (see Exhibit Process-2) provided County staff with the direction necessary to prepare the 2030 General Plan. In addition, the County considered a reasonable range of alternatives in the EIR with different development patterns and overall level of development.

6 The comment requests that the Woodbury property be designated as Valley Neighborhood. The comment is related to Yuba County policy and proposed land uses and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

7 The comment provides minutes from the October 13, 2009 Board of Supervisors meeting. The comment is related to Yuba County policy and proposed land uses and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

January 31, 2011

RECEIVED
FEB - 9 2011
Yuba County Dept. of Planning

Roger Abe
Chair, Yuba County Board of Supervisors
915 8th Street, Suite 109
Marysville, CA 95901

RE: Yuba County Draft 2030 General Plan

Dear Supervisor Abe:

The North State Building Industry Association (BIA) represents homebuilders and subcontractors in the Sacramento region north to the Oregon border. As I am sure you know, the construction industry remains mired in a prolonged depression as the region's high foreclosure rate and credit crisis prevents the construction of new homes and commercial buildings. The economic impact of the homebuilding industry, once a cornerstone of the regional economy, has declined 80% from its peak in 2005. Presently, the unemployment rate is approximately 40% in the construction industry, as hundreds of local carpenters, plumbers and tradesmen are out of work. The impact on Yuba County, the home of many people formerly employed in the construction industry, has been dramatic. As you are painfully aware, the unemployment rate in Yuba County has reached an excruciating level, with one in five residents out of work. 1

It is against this ugly economic backdrop that you and your fellow supervisors must set a course for local policy over the next twenty years. On behalf of our members, we urge you to make economic recovery a top priority in the 2030 General Plan. To do this, you must avoid placing costly new requirements on the local construction industry. The County desperately needs construction activity to get Yuba County working again. This letter seeks to point out some proposed policies that would undermine economic recovery, hurt local homebuilders and prolong Yuba County's economic stagnation.

- **Policy CD 10.6 - Housing Restrictions (Size, Price and Location Controls)**

  The County should encourage residential development that is priced, sized, and located to serve the needs of local employers and workers and discourage overproduction of housing that is sized, priced, and located for residents working outside Yuba County. 2

Homebuilding is already among the most highly regulated industries in California. Our members have a multitude of local, state and federal standards, requirements and regulations to contend with, from the nation's most stringent environmental protection standards, to consumer protection regulations and increasingly onerous labor requirements.

1536 Eureka Road
Roseville, CA 95661-3055
phone 916.677.5717
fax 916.677.5734

As these regulations pile up, the ability of the free market to operate becomes ever more constrained.

Policy CD 10.6 concerns us because home size and price have traditionally been areas where our members have been allowed to exercise freedom in response to consumer preferences and market demand. Does the County really want to be in the business of dictating the size and price of new housing in the County, on top of all the other controls (e.g., density) that are already in place? Our members put a great deal of time and energy in market research before investing in a new housing project. The size, style and price they select for new homes must match consumer demand in order for their projects to be successful. A County regulator stepping in to set maximum price and size controls would be an unwelcome hindrance in an already highly regulated environment. Those who work in the homebuilding industry on a daily basis know that home size and price are already determined by density, and location is set by the County's local land use plans. Policy CD 10.6 would simply add another layer of regulation to further hinder the local real estate market and constrain consumer choice. 2 cont'd

We are also concerned that Policy CD 10.6 will drive the economy of Yuba County backward. Unfortunately, there are presently not enough good-paying, long-term jobs in Yuba County. As the County encourages more and better job generation by attracting new industry, this will change. As the County's jobs-housing balance improves, those working in new Yuba County jobs may have precisely the same preferences, in terms of the size, price and location of housing, as people currently working outside of the County. For example, residents of new home communities in Plumas Lake and East Linda that currently work in Placer, Sutter and Sacramento Counties may find work in emerging industries in Yuba County under the 2030 General Plan. Because this sort of housing meets a segment of the economy that Yuba County is otherwise encouraging, Policy CD 10.6 runs counter to the overall economic interests expressed in the General Plan and, like Policy CD 10.7, would contribute to a moratorium on new housing under the General Plan.

- **Policy CD 10.7 - Housing Moratorium**

  Large residential development projects shall be phased or timed to occur concurrently with development projects that will provide employment in the County.

Our members understand the County's frustration with the slow rate of non-residential construction in the unincorporated area. The relative lack of shopping and professional services (especially medical offices) makes Yuba County less competitive than neighboring Sutter and Placer Counties. 3

The County therefore should do all it can to encourage non-residential construction by providing business incentives and facilitating the extension of infrastructure and services (particularly new roadways) to entice new businesses to locate in Yuba County. However, **merely stopping residential construction will not improve Yuba County's economy.**

Large residential development projects shoulder the cost of extending infrastructure, building new roads, and expanding urban services on the valley floor, which makes non-residential development feasible. Imposing strict phasing or timing restrictions on such projects will make non-residential construction infeasible, by preventing the ability of new employers to take advantage of infrastructure and services that have been extended by large residential development projects. By constraining new growth, particularly in the Planning Reserve Area, Policy 10.7 will have opposite its intended effect: stifling the creation of new long-term employment opportunities.

3 cont'd

Policy 10.7 also completely misses the fact that large development projects themselves provide employment in the form of hundreds of local construction jobs, many of which last for decades as these large projects gradually build out. To ensure that large development projects induce enough non-residential development, the County should plan for new employment uses (and zoning) in appropriate locations and in sufficient amounts to enable non-residential development to occur. We urge the County not to impose phasing or timing restrictions as these will likely only translate into moratoria on residential construction.

- **Policy CD 13.1 - Mandatory Development Phasing**

  Growth shall be phased from development areas and existing infrastructure outward in a logical, efficient manner, and in a way that avoids premature conversion of agricultural lands, changes in rural character, and unnecessary loss of other land-based natural resources.

The Draft General Plan already establishes a Valley Growth Boundary, the intent of which is to focus growth in a logical and efficient pattern near existing communities on the valley floor. The Local Agency Formation Commission also places requirements on the extension of urban services and the conversion of agricultural land. With growth planned and focused in this fashion, why is it necessary to further constrain development within the Valley Growth Boundary by requiring phasing? How will this phasing be implemented? The County should rely on its master-planning to ensure a proper mix of residential densities and non-residential development. Additional phasing requirements are unnecessary and will merely extend depressed economic conditions.

4

- **Policy CD 19.3 - Development Moratorium**

  New developments and specific plans shall be phased or timed to occur concurrently with development that will provide employment in the County.

Our members recognize the current jobs-housing imbalance in Yuba County. Goal 10 (and related policies) of the Draft General Plan seeks to correct this imbalance by encouraging jobs-generating development. Homebuilders often advance funding for the extension of government infrastructure and services into new areas, which directly benefits properties zoned for commercial and industrial development. Because it uses the mandatory word "shall," Policy CD 19.3 could prevent this from occurring by requiring concurrent

5

development of residential and non-residential development. As non-residential construction ordinarily follows residential development, this would likely have the effect of a development moratorium. 5 cont'd

- **Policy HS 3.15 - Mandatory Rainwater Collection**

  New projects and plans in the Valley Growth Boundary shall employ runoff collection strategies located close to the point where water initially meets the ground to minimize urban runoff.

If taken literally Policy HS 3.15 would require the installation of a rain-water catchment system or cistern in every new home or business in the County. This would be a costly new requirement far beyond even the ambitious mandates of California's new green building code. With all of the other policies directed at improving water quality and controlling stormwater, there is no need for such a drastic water conservation measure.

Yuba County is blessed with plentiful rainfall. At present, the County receives over 22 inches of rainfall each year, which is more than double the amount of rainfall in the southern part of the state. In spite of this local advantage, Policy HS 3.15 takes a policy that has yet to be implemented in the more water-starved areas of the state, and makes it a mandatory policy of water-rich Yuba County. Rainwater capture makes sense in dry places (e.g., Arizona, Nevada) where domestic water rates are more expensive. Homeowners in such places need to be water-conscious, and have begun to replace lawns with drought-tolerant landscaping. Rainwater collection makes sense in these areas where the amount of rainfall is minimal and the domestic irrigation demand has been reduced. 6

Yuba County has invested millions of dollars in rainwater collection and flood control facilities in the form of dams and reservoirs; surely the residents of Yuba County deserve the opportunity to benefit from these structures by enjoying ample domestic water supplies. Collecting rainwater in exiting reservoirs represents a more economical means to conserve water, and would require no new capital outlays. By contrast, it would cost between $1,500 and $3,000 to install a rainwater collection system in a new home or business with the capacity to store more than a nominal amount of rainwater. This equates to a cost of $37.5 to $75 million for the 25,000 units forecast in the Draft General Plan, and probably an additional $15 to $25 million for commercial construction. At most these systems would displace about 10-15% of the water presently demanded for domestic irrigation. It makes more sense to invest in recycled water (purple pipe) infrastructure and encourage drought-tolerant landscaping. We urge the County not to impose a costly new water conservation requirement on a struggling construction industry.

- **Policy HS 5.2 - GHG Emissions Threshold**

  In evaluating operational emissions of development projects and plans, the County will use a threshold of an annual net increase of 6.4 metric tons of CO_2 equivalent per-capita and 4.4 metric tons of CO_2 equivalent per service population. This threshold does not 7

apply to agricultural operations or processing, industrial projects, or other types of stationary sources.

Setting a GHG emissions threshold would trigger preparation of an EIR for any project that could not show GHG emissions (i.e., from car and light truck trips) below the threshold.

Policy HS 5.2 sets a GHG emissions threshold that will be impossible for virtually any new project in the County to achieve for the foreseeable future. Presently, the statewide per-capita GHG emissions rate is almost 13 MT of CO_2 equivalent, which is largely the result of vehicle miles travelled (VMT). Only by dramatically reducing the extent of driving (i.e., by carpooling, or moving closer to work) can a family reduce its VMT and the associated GHG emissions. It is for this reason that major reductions in VMT are difficult to achieve outside of densely developed, downtown urban areas of the region. 7 cont'd

Yuba County has a low-density development pattern and fledgling transit system which makes it infeasible to rely on the kind of "transit-oriented-development" necessary to meet the aggressive standard enumerated in Policy HS 5.2. In effect, this will require the Board of Supervisors to certify an Environmental Impact Report, and make findings of overriding considerations, to approve any new project under the 2030 General Plan that would add car trips to the County's roads. This would obviously not encourage construction jobs or promote development. The North State BIA urges the Board of Supervisors to adopt a more realistic (and feasible) threshold for GHG emissions.

- **Policy HS 5.4 - GHG Emissions Cap**

  The County will apply an efficiency-based standard (per-capita, per-employee) for urban land uses, such as homes, retail, office, and other uses where the location and density is very important to the level of greenhouse gas generation.

Where Policy HS 5.2 sets a new threshold for future environmental review, Policy HS 5.4 prescribes a maximum amount of GHG emissions for any and all new "homes, retail, office, and other uses" developed in the County in the next twenty years. Depending on the level of permitted GHG emissions, this could effectively stop virtually all new development in the unincorporated area of the County. However, the County cannot set a GHG emissions cap for the simple reason that it is not possible to determine the GHG emissions of individual projects: 8

> "To meet the goals of AB 32, California would need to generate fewer GHGs than current levels. It is recognized, however, that for most development projects, ***there is no simple metric available*** to determine whether the individual project would substantially increase or decrease overall emission levels of GHGs." (DEIR p. 4.7-16)

The North State BIA is therefore very concerned about the County's intent to set a GHG emissions cap, when there is no way to determine whether a given project would meet or exceed it. While various qualitative measures are supposed to increase GHG efficiency, the

ability to accurately "model" GHG emissions does not exist. (*See* DEIR p. 4.7-20: "The County cannot estimate the GHG reduction benefits of its various land use, transportation, and design policies.") Until a reliable GHG efficiency model is available, the County should not impose a GHG emissions cap. 8 cont'd

We would be very interested in participating in the development of these and other policies following approval of the 2030 General Plan.

Sincerely,

Dennis M. Rogers
Senior Vice President
Government and Public Affairs

cc: Hal Stocker, Vice-Chair, Yuba County Board of Supervisors
Andy Vasquez, Jr., District 1 Supervisor
John Nicoletti, District 2 Supervisor
Mary Jane Griego, District 3 Supervisor
Kevin Mallen, Director, Yuba County Community Development & Services Agency
Dan Cucchi, Yuba County Planning Department

1 The comment urges the Board of Supervisors to make economic recovery a top priority in the 2030 General Plan. The comment is related to Yuba County policy and does not include any issues related to the contents or adequacy of the EIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

2 The comment expresses concern about policies CD10.6 and CD10.7 adversely affecting the business of housing construction in Yuba County by encouraging a connection between the type of housing constructed and the type of housing needed by local employers and workers. This comment does not relate to the adequacy of the EIR for addressing adverse physical environmental impacts and is included here for consideration by the Board of Supervisors. See the revised Draft 2030 General Plan. Both of the referenced policies have been revised.

3 The comment claims that requiring a link between new housing and new jobs would create a moratorium on housing construction. This comment does not relate to the adequacy of the EIR for addressing adverse physical environmental impacts and is included here for consideration by the Board of Supervisors. Policy CD10.7 has been revised.

4 The comment claims that Policy CD13.1, which discusses phasing of new development from areas with existing infrastructure first and then areas further out later, would constrain development in Yuba County. This comment does not relate to the adequacy of the EIR for addressing adverse physical environmental impacts and is included here for consideration by the Board of Supervisors. Policy CD13.1 has been revised.

5 The comment claims that Policy CD19.3, which links housing development with jobs development, would create a moratorium on housing construction. This comment does not relate to the adequacy of the EIR for addressing adverse physical environmental impacts and is included here for consideration by the Board of Supervisors. Policy CD19.3 as referenced in the comment has been removed from the General Plan, as this same topic is addressed in other policies.

6 The comment states that Policy HS3.15 requiring certain stormwater management practices in new developments would be a costly requirement. This comment does not relate to the adequacy of the EIR for addressing adverse physical environmental impacts and is included here for consideration by the Board of Supervisors. However, Policy HS3.15 has been revised to encourage, but not require, rainwater collection systems where feasible.

7 The comment expresses concern that Policy HS5.2 in the Draft 2030 General Plan would virtually stop all new development in the unincorporated area. This comment does not relate to the adequacy of the EIR for addressing adverse physical environmental impacts and is included here for consideration by the Board of Supervisors. The threshold identified in Policy HS5.2 has been deleted. The approach by which the County will arrive at a GHG reduction target is described in the Public Health & Safety Element, and in particular, within Action HS5.1.

8 The comment characterizes Policy HS5.4 as an "emissions cap" and alleges that this policy could effectively stop all proposed development in unincorporated Yuba County. This comment does not relate to the adequacy of the EIR for addressing adverse physical environmental impacts and is included here for consideration by the Board of Supervisors. The revised version of the policy is included below.

Policy HS5.4 *The County will use an efficiency-based threshold (net emissions per-capita + employee) to evaluate proposed urban land uses, such as homes, retail, office, and other uses where the location, density, and mix of uses in the project area is important to the level of greenhouse gas generation.*

The policy is not a cap. As noted in the Implementation Chapter of the 2030 General Plan, this Plan will be implemented through a combination of private and public actions during the General Plan time horizon. The County will use the policies included throughout this General Plan as a decision making guide for a wide range of discretionary actions. General plans are meant to allow flexibility in implementation. Policies provide a decision making guide, but discretion is inherent in implementing the General Plan. Some variation from the policy language may be allowed, so long as such variations further General Plan goals.

The comment further points out that the DEIR (page 4.7-16) states that for most development projects, there is no simple metric available to determine whether an individual project would increase or decrease overall GHG emissions levels. The commenter is concerned about the potential for the General Plan to create a development cap if it is difficult to quantify GHG emissions reductions.

The County has provided the policy and environmental framework for managing GHG emissions locally. There are a variety of policies related to land use, transportation, and design that, when used together, can substantially reduce vehicular travel demand. Any policies that reduce vehicle travel are also protective of air quality and reduce GHG emissions. Policies included in other Elements of the 2030 General Plan have GHG-reducing effects. Policies in the Community Development Element are designed, in part, to reduce GHG emissions. The County employs several feasible approaches to managing travel demand in the policy array. While it is difficult to predict the quantitative benefits of GHG reducing policies at the General Plan level, it is feasible to do so at the project level. The County has provided GHG emissions modeling at the General Plan level and did not intend for the EIR to suggest that there was any issue with the ability of the County to model GHG emissions. It is true, however, that it is not possible to accurately estimate at the General Plan level all of the benefits of the policies included in the 2030 General Plan in reducing GHG emissions and providing related co-benefits (household and business transportation and energy costs, etc.).

Byrne 1

Deborah Byrne
P.O. Box 589
Marysville, CA 95901

February 9, 2011

Mr. Dan Cucchi
Yuba County Planning Department
915 8th St., Suite 123
Marysville, CA 95901

Re: Yuba County 2030 General Plan Update
Draft EIR (DIER) (SCH No. 2010062054)
Woodbury/Magnolia projects

Dear Mr. Cucchi,

Thank you for the opportunity to provide comments on the Draft Environmental Impact Report for the above-referenced project.

According to the Woodbury General Plan comment letter and plot plan posted on 12/15/2010, by proponent Randy Collins, the project will consume 1144 acres of Unique Farmland into houses, schools, commercial use, parks and roads. Woodbury proposes a build out of 5026 dwelling units. Using 2.87 persons per dwelling unit (U.S. Census Bureau persons household 2000, California) this calculates to 5026 x 2.87 = 14,424 people. 1

The conversion of Unique Farmland inconsistent with the County's desire to protect higher value agriculture land from encroachment and preservation for future generations of farmers.

Neither the General Plan nor the EIR make any mention of the Woodbury project even as the Woodbury comment letter posted on 10/22/2010 by the proponents attorneys, Remy, Thomas, Moose and Manley, eloquently pleads that the General Plan be revised to change the land use destination from Natural Resources to Valley Neighborhood. This has not happened.

Since Woodbury is not considered in the EIR, there has been no accounting for the GHG emissions due to the VMT that might be generated by these 14,424 people. Nor is there any statement of what impact the transportation or other elements of the General Plan. 2

Since Woodbury is not considered in the EIR, no accounting for the Housing Element is made.

Draft EIR (DIER) (SCH No. 2010062054) **(cont.)**
Woodbury project

Should the Woodbury project be added to the draft general plan at some subsequent date, the resulting impacts (and the consequences of those impacts) could be:

Violation of the 2030 General Plan policy to protect agriculture
(need Statement of Overriding Concerns and justification)
Violation of the Housing Element
(need Statement of Overriding Concerns and justification)
Possible violation of the Transportation Element
(need Statement of Overriding Concerns and justification)
Understatement in the EIR of the 2030 General Plan GHG effects
(need restatement of GHG calculations)
Possible exacerbation of the jobs/housing imbalance
(need some sort of assurances that the commercial portion of the project would be developed in a timely manner or Statement of Overriding Concerns)

Any or all of the above could cause changes to the EIR sufficient to require recirculation of the document.

2 cont'd

Furthermore, there may be an economic impact as well of which the Board of Supervisors should be made aware:

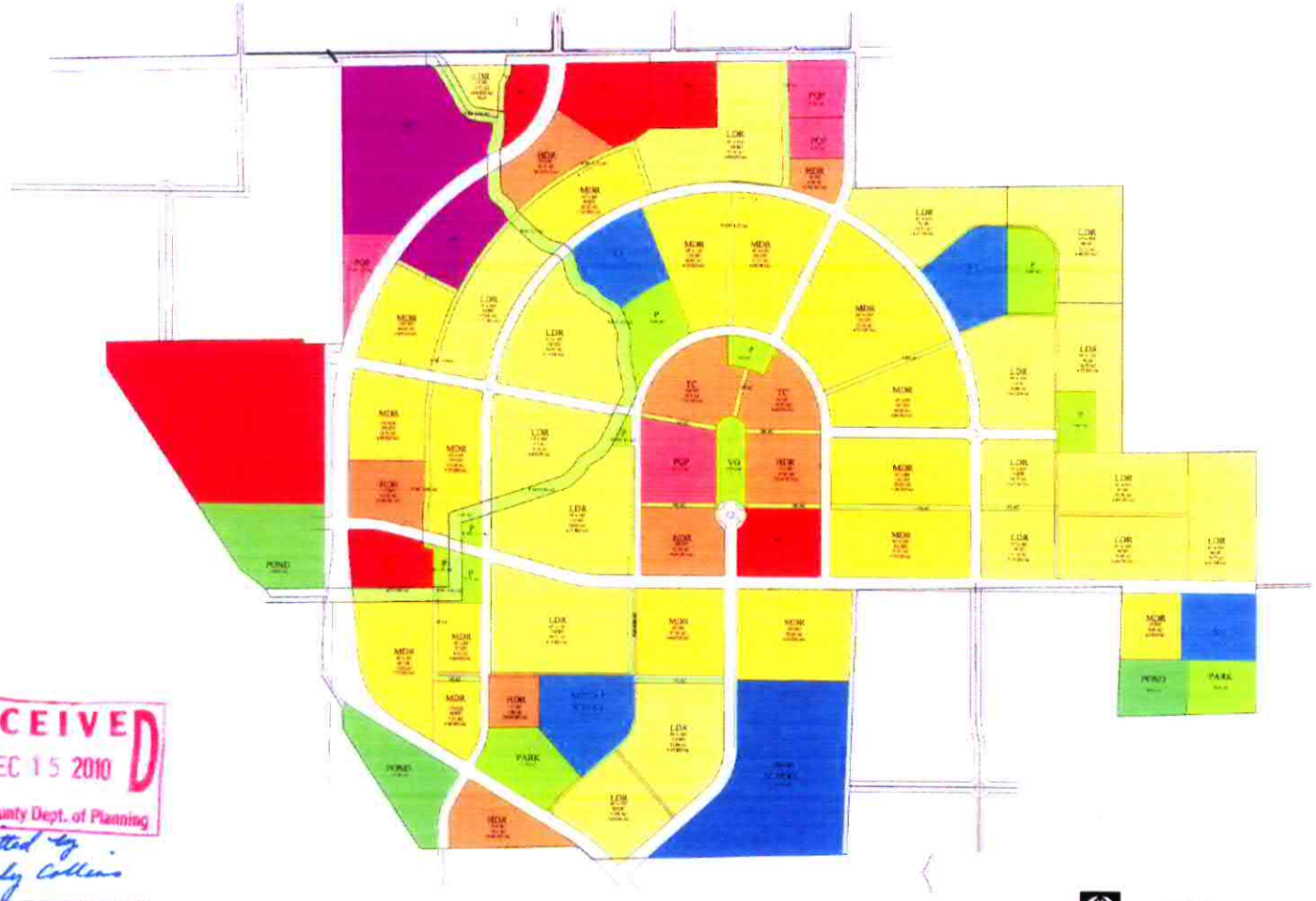
Any large-scale residential entitlements could cause the undeveloped portions of the Plumas Lake Specific Plan, with its additional costs for levee improvements and other assessments estimated to be $20,000 to $40,000 more per lot, to remain undeveloped. This will lead to the inability of Yuba County to pay its portion of the levee bonds on which payment is to begin in the next few years. This inability could lead to Yuba County defaulting on these bonds, causing the credit rating of the County to fall and make it more expensive and/or difficult to ever do another bond issue.

3

While I have detailed specifics of the proposed Woodbury project above, the same level of detail was unavailable for the proposed Magnolia Ranch project. It is my understanding that the proposed Magnolia Ranch project is on a much larger scale, causing it to have a much greater impact. All of the above comments should be applied to the proposed Magnolia Ranch project or any other large-scale residential entitlements as well.

Respectfully submitted,

s/ Deborah Byrne



RECEIVED
DEC 15 2010
Yuba County Dept. of Planning
Submitted by
Randy Collins

WOODBURY
YUBA COUNTY, CA

MASTER LAND USE PLAN

DANIELIAN ASSOCIATES
ARCHITECTURE + PLANNING

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21078.01
November, 2010

1 The comment states that conversion of farmland is inconsistent with the County's desire to preserve and protect agriculture lands. Please refer to Section 4.2, which presents comprehensive analysis of agriculture-related impacts attributable to implementation of the 2030 General Plan. This comment relates to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

2 The comment states that neither the General Plan nor the DEIR mention the Woodbury project. It should be noted that the Woodbury project application is currently on hold at the proponent's request. However, the 2030 General Plan analyzes land use change for all areas within the Valley Growth Boundary, including lands within the area known as the "Woodbury Specific Plan Area." The comment alleges that VMT and GHG effects from development of the Woodbury area are not included in the EIR. The County used the most recent available application materials from the Woodbury applicant in creating land use change assumptions for this portion of the County. The comment goes on to identify specific environmental impact areas that would be associated with development within the Woodbury area. As noted, land use change here has been included for the entire Valley Growth Boundary, including the area currently known as the "Woodbury Specific Plan Area."

3 The comment raises concerns regarding fiscal impacts of large-scale residential development. This comment relates to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required. The comment also states that the Magnolia Ranch project is not mentioned by name in the General Plan or EIR. The 2030 General Plan analyzes land use change for all areas within the Valley Growth Boundary, including lands within the area known as the "Magnolia Ranch Specific Plan Area." The County used the most recent available application materials from the Magnolia Ranch Specific Plan applicant in creating land use change assumptions for this portion of the County.

Byrne 2

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RECEIVED
FEB - 9 2011
Yuba County Dept. of Planning

February 9, 2011

Mr. Dan Cucchi
Yuba County Planning Department
915 8th St., Suite 123
Marysville, CA 95901

Re: Yuba County 2030 General Plan Update
Draft EIR (DIER) (SCH No. 2010062054)
General Comments

Dear Mr. Cucchi,

Thank you for the opportunity to provide comments on the Draft Environmental Impact Report for the above-referenced project. The following comments are of a general nature and are broken down by subject.

EIR Analysis of General Plan Update

1

The General Plan update (2030 General Plan) was prepared by a consulting firm (EDAW/AECOM). The environmental analysis of this plan was prepared by the same firm. This lack of an independent review could result in a less than comprehensive analysis of the environmental impacts. The process would appear to be flawed from the inception, and could leave the new plan and environmental review vulnerable to legal challenges.

Project Alternatives

There is no state requirement to do a new (or updated) General Plan within a specific timeframe like there is with respect to certain required elements such as the Housing Element. What is required by the state is a periodic analysis of the current (96) General Plan to make sure that it is still applicable. Where is the analysis of the 96 General Plan that shows that it is outdated and needs to be "updated?"

2

If this is an "update," where is the "redline" showing changes from the 96 General Plan? Without this "redline," it is impossible to discern how this plan differs from the current 96 General Plan. This does not appear to be an "update," but an entirely new concept and plan, and no comparison appears to be possible.

In addition, the published maps are so small as to be unreadable. Any analysis based on the published maps is also impossible. Maps broken down into smaller areas would allow for increased detail to be shown and may make analysis possible.

In listing the alternatives considered by this EIR in Table 5-1 with respect to population and jobs added, it is clear that the General Plan Update is within parameters set forth in the 96 General Plan (which is also designated the "no project alternative"). The "no project alternative" and the proposed General Plan update are so similar in those aspects as to be the same. This would appear to indicate that a wholesale "update" of the 96 General Plan was not necessary and is a waste of resources.

By the EIR's own analysis, the "environmentally superior" alternative is Alternative 3, the SACOG-developed growth scenario. Even this alternative appears to be overly optimistic. This alternative was developed in 2004. This scenario is the one that projects the least growth of the alternatives considered, yet still appears to project more growth than can be anticipated, given the new information such as the severe economic downturn which started several years after this scenario was developed (and resulted in a virtual halt to development and growth) and the 2010 census. This would seem to indicate that even the "environmentally superior" scenario projects more growth than what can now be anticipated. Based on this, the EIR fails to consider the most reasonable alternative, which would project even less growth than Alternative 3, and yet Alternative 3 is not the chosen Alternative. 3

There does not appear to be a comprehensive analysis of the alternatives that would justify the selection of the currently proposed alternative, nor indeed, any of the alternatives listed in the EIR.

Relationship to Area and Regional Plans

While the EIR mentions that the Yuba County General Plan "will be affected by these plans, and will have effects on these other plans," no analysis of the effects appears to have been made. The EIR lists these possible effects with respect to the Federal Government, the State Government, LAFCO, and SACOG, to name a few.

Specifically, while the Yuba County LAFCO has recently completed both a Sphere of Influence study and a comprehensive Municipal Services Review, this General Plan Update does not appear to have been reconciled with these important plans. In addition, the staff admits that there has not yet been an attempt to reconcile this plan to state and/or federal issues. With respect to SACOG, staff recently sent a letter to SACOG disagreeing with its assessment of the growth to be attributed to the County. This issue is already addressed above with respect to the "environmentally superior" alternative. 4

Loss/conversion of Agricultural Land

Table 2-1 under section 4.2 indicates that "buildout of the 2030 General Plan could result in the conversion of as many as 5,682 acres of Important Farmland and 44,901 acres of grazing land to nonagricultural uses." This impact is listed as "significant and unavoidable." This would appear to be in conflict with the County's stated goal of preserving agricultural resources. This would seem to indicate that the "goal" of preserving agricultural resources is not being met. 5

Proposed/Potential Changes to the draft General Plan update

The staff report dated February 9, 2011 indicates that there are already two changes recommended by staff. These changes are detailed in the report. The report also contains a long list of "other topics where staff recommends modifications:"

- Deer herds and corridors
- NCCP/HCP support
- Incorporation and SOIs
- Stronger coordination with LAFCO
- Water policies for new urban growth
- Preservation of wetlands, riparian areas
- Septic systems in high groundwater recharge areas
- Floodplains
- Fire Safety & Evacuation routes
- Definitions – boutique farming, cottage industry, etc.
- Language modifications regarding transit
- Waste collection in urban areas
- Road standards – slopes
- School facilities planning
- Delete exhibit Public Health & Safety – 10

6

These staff report includes no other information as to what these proposed changes might be. Without detailed information on these other proposed changes, it is impossible to adequately comment on the adequacy/accuracy of the EIR. Until these changes are made public, and the public has an opportunity to study and comment on these changes, any attempt to close the public comment period for the EIR may make the process vulnerable to legal challenge.

Respectfully submitted,

s/ Deborah Byrne

1 The comment observes that the general plan and EIR were prepared by the same firm and expresses concern that this could result in a less than comprehensive analysis of impacts and could open the general plan and EIR to legal challenges. Under California law, each local government agency is responsible for adopting, implementing, reviewing, and periodically amending its own general plan. Under CEQA, the County of Yuba is the lead agency for preparation of the EIR because it is the "public agency which has the principal responsibility for carrying out or approving a project" (13 PRC 21066). The County of Yuba has contracted with AECOM for the preparation of the general plan and the EIR documents in collaboration with County staff. Both the general plan and the EIR are subject to public review and require approval by the Board of Supervisors. As such, there is independent review of both documents by members of the public, other agencies, and the Board of Supervisors.

The 2030 General Plan and Environmental Impact Report (EIR) were drafted in tandem as a part of a single cohesive and mutually supportive process. The existing conditions analysis and alternatives analysis that supported selection of a "Preferred Alternative" for the General Plan also provided a platform for discussing how the design and narrative content of the plan could be structured to minimize or avoid significant impacts. As a part of the policy development of the 2030 General Plan, the County explicitly considered narrative policy, actions, and diagrammatic policies that could reduce environmental impacts associated with General Plan buildout. The County has, to the extent feasible, created a self-mitigating plan – one where the very design of the plan itself serves to reduce potential environmental impacts. Since the County endeavored to create a largely self-mitigating plan, projects that incorporate 2030 General Plan policies and actions, as appropriate, at the project level can minimize a wide range of potential impacts simply through consistency with the 2030 General Plan.

2 The comment questions the need to update the 1996 General Plan. This comment does not relate to the adequacy of the DEIR for addressing environmental impacts of the 2030 General Plan and is included here for Board of Supervisors consideration.

3 The comment states that the EIR lacks comprehensive analysis justifying the selection of the proposed alternative.

The County's General Plan alternatives are designed with consideration of estimates of future population and economic growth. However, the General Plan and General Plan EIR alternatives were not prepared to have land use designations that would necessarily match the amount of development that is predicted for Yuba County through 2030. The County does not wish to artificially bid up the cost of land by restricting planned growth to the amount needed to accommodate forecast growth. The County wishes to provide enough flexibility in its land use policies to accommodate development consistent with the General Plan goals, policies, and actions. General Plan EIR alternatives are based on the County's Project Objectives, which include:

- *Proactively direct long-term development in the unincorporated County according to the General Plan Update Vision, Goals, and Strategies.*

- *Revitalize existing communities, neighborhoods and primary transportation corridors.*
- *Offer a variety of housing types to meet "lifecycle" needs (young adulthood through retirement), freedom of choice, and affordability to local workers.*
- *Protect agricultural lands, rural landscapes, air and water quality, and natural resource areas that prove to be positive characteristics of Yuba County.*
- *Strive for a balance between jobs and housing—both numerically and demographically—by promoting jobs for our residents.*
- *Promote and encourage new commercial and industrial development to balance the recent residential development, generate revenues, and create local jobs and services for residents.*
- *Through efficient infrastructure planning and prudent financing mechanisms, keep impact fees as low and competitive as possible in order to attract employment opportunities to the County.*
- *Promote existing growth areas as the engines of the economy by focusing on existing cities, downtown areas, and primary corridors.*
- *Continue to promote our recreational and tourism opportunities.*
- *Encourage retail, services, and jobs conveniently located for residents in order to reduce travel demand, reduce vehicle miles traveled and associated air pollution, lower household transportation costs, and reduce transportation infrastructure costs.*
- *Encourage the ability for future incorporation and/or annexation of unincorporated areas by establishing realistic and manageable growth boundaries.*
- *Focus on build out of the partially built existing specific plans and promote modification to those plans consistent with the vision and goals of the General Plan when opportunities arise.*
- *Preserve foothill community boundaries that will continue to enhance and allow for open space, grazing lands, deer herds and oak woodlands which define the rural character of the foothills and the County as a whole.*
- *Guide long-term development and conservation within the County's rural communities, in order to make them more environmentally and economically sustainable places.*
- *Protect prime agricultural lands, rural landscapes, and other natural resources.*

The County considered a range of land use and circulation alternatives for the 2030 General Plan. This process touched on many environmental issues, although social and economic issues were also involved. Like the General Plan alternatives, the EIR alternatives involve different amounts of land subject to development. Both sets of alternatives include different levels of growth (in terms of population and employment added). Neither the 2030 General Plan, nor the alternatives are attempting to predict future growth. The County is intentionally providing some surplus in the 2030 General

Plan in order to avoid artificially bidding up land costs to accommodate growth needs during this time horizon. The alternatives are meant to accommodate growth needs in the unincorporated County without trying to predict exactly where and how much growth may be realized. To develop the parameters for EIR alternatives, the County created different sets of land use change assumptions that can accommodate future development needs.

The County assumes Alternative 2 would grow at approximately 1.74% annually between present and 2030. In order to settle on an assumed growth rate for this alternative, the County examined its own growth rate. Between 1990 and 2009, the County grew at an average rate of 1.53%. The County also examined growth rates of nearby and comparable counties. Among these counties, Placer had the highest growth rate between 1990 and 2009 (1.74%). The County also examined jobs/housing ratios for a wide range of counties – some with greater proportions of rural development, some with urbanizing unincorporated areas, and some with existing established urbanized unincorporated areas. The average jobs/housing ratio in comparison counties is 0.95. The average plus one standard deviation is 1.15. Reflective of the County's General Plan goals, this alternative uses the highest of these options for a jobs/housing ratio – 1.15.

Alternative 3 was developed to analyze the differential environmental impacts that would result if the County were to develop consistent with the level and mix of development identified for unincorporated areas under the SACOG Blueprint Preferred Scenario. To develop this alternative, the County consulted data summaries from SACOG on housing units, relative levels of infill versus greenfield development, jobs, mix of housing types, mix of job types, and other key statistics. The County also considered conceptual diagrammatic representations of the Blueprint Preferred Scenario. Adjustments were made to the Preferred Scenario diagram to create better consistency between this alternative and the project objectives, and to create a more meaningful comparison between the project (2030 General Plan) and this alternative. Also, since the Blueprint Preferred Scenario land use change estimates are for 2050, further adjustments were needed to make this alternative more comparable with the Blueprint Preferred Scenario at 2030.

Alternative 4 was developed to analyze the differential environmental impacts that would result if the County were to experience high and sustained rates of growth through 2030. This alternative assumes that between present and 2030, the unincorporated County would add between 36,000 and 45,000 people and between 21,000 and 25,000 jobs.

The commenter indicates that EIR Alternative 3 is the environmentally superior alternative. This conclusion is presented in Section 5.10 of the EIR. The comment goes on to summarize other information from Section 5.0 of the EIR. The comment claims that the County failed to consider the most reasonable alternative, which the commenter claims would project even less growth than Alternative 3. The commenter indicates that Alternative 3 is not the proposed project. The 2030 General Plan provides greater development capacity than Alternative 3. The 2030 General Plan better fits the County's EIR Project Objectives, as noted in Section 5.0 of the EIR and as identified in the County's Statements of Overriding Considerations.

The No Project Alternative would not proactively direct long-term development in the unincorporated County according to the General Plan Update Vision, Goals, and Strategies. The No Project Alternative would not place the same emphasis as does the 2030 General Plan on revitalization of existing communities, neighborhoods, and primary

transportation corridors. The No Project Alternative would not place the same emphasis as does the 2030 General Plan on encouraging new commercial and industrial development to balance recent residential development or efficiency in infrastructure planning and financing.

Alternative 2 would not guide long-term development in the unincorporated County to the extent that the 2030 General Plan would. Alternative 2 would conflict with the diagram that accompanied the County's approved General Plan Update Vision, Goals, and Strategies document, which represented the "Preferred Alternative" for the purposes of development of the 2030 General Plan and indicates the Board of Supervisors' policy preferences for development of the 2030 General Plan.

Alternative 3 anticipates population and job growth substantially lower than envisioned under the 2030 General Plan. By including provisions for a greater number of jobs and new residents, the 2030 General Plan is able to best meet the project objectives of economic independence, improving jobs/housing balance, and creating sustainable and vibrant communities. Alternative 3 would not guide long-term development in the unincorporated County to the extent that the 2030 General Plan would. Alternative 3 would conflict with the diagram that accompanied the County's approved General Plan Update Vision, Goals, and Strategies document, which represented the "Preferred Alternative" for the purposes of development of the 2030 General Plan and indicates the Board of Supervisors' policy preferences for development of the 2030 General Plan.

Alternative 4 would not guide long-term development in the unincorporated County to the extent that the 2030 General Plan would. Alternative 4 would not place the same emphasis as does the 2030 General Plan on encouraging new commercial and industrial development to balance recent residential development.

The comment suggests that the No Project Alternative is similar in total population and jobs as the 1996 Plan. The County is required to analyze the No Project Alternative as a part of this EIR.

4 The comment states that the EIR fails to analyze potential conflicts with other land use plans, including federal, state, LAFCo, and SACOG plans. As noted elsewhere, the County specifically included for analysis a SACOG Blueprint Preferred Scenario in Section 5.0 of the EIR, in order to help the Board of Supervisors evaluate the differential effects related to an alternative more similar to the Blueprint. Please see also Impact 4.10-2, beginning on page 4.10-14 of the FEIR, which analyzes potential conflicts with numerous land use plans. The FEIR concludes that impacts from plan conflicts would be less than significant. The comment claims that the County's General Plan is not "reconciled" with the Yuba LAFCo Sphere of Influence study and comprehensive Municipal Services Review. These documents were important to developing background information and policy analysis related to public infrastructure and services in Yuba County, as noted in the February 2009 "Infrastructure, Public Facilities, and Public Services General Plan Update Background Report." See the County's General Plan Update Background Reports, posted online at: www.yubavision2030.org. The LAFCo documents were also used to develop policy in the 2030 General Plan. The County's 2030 General Plan policy requires consistency with other planning efforts and programs enforced by other agencies. For example, from the Community Development Element:

Policy CD14.2 *The County will coordinate with the cities of Wheatland and Marysville for proposed planning actions or development*

	approvals involving land within their respective spheres of influence.
Policy CD14.3	*The County will support an orderly framework for communication with Wheatland, Marysville, Beale Air Force Base, LAFCo, service providers, SACOG, Sutter County, and other regional service providers and agencies.*
Policy CD14.4	*The County will coordinate with special districts, cities, LAFCo, SACOG, Caltrans, joint powers authorities, and other relevant agencies to provide efficient local and regional infrastructure, public facilities, and public services.*
Policy CD14.5	*The County will participate in tax-sharing agreements with relevant agencies, consistent with General Plan goals and policies.*
Policy CD14.6	*The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.*
Policy CD14.7	*The County will support joint-use facilities, shared maintenance, and projects with other local service agencies and districts that are coordinated to provide enhanced public levels of service and/or long-term cost savings.*
Policy CD14.9	*The County will support agreements with Marysville and Wheatland that promote mutual goals for fiscal sustainability, growth management, review of spheres of influence, transportation planning, agricultural preservation, emergency access and response, flood protection, renewable energy development, regional infrastructure provision, and other important planning and environmental issues, consistent with the General Plan.*
Policy CD14.10	*The County will support agreements with Marysville and Wheatland on appropriate building standards, public utility connections, sewer and water service, and other matters that promote cost-effective development of unincorporated areas within the Valley Growth Boundary and viability for future incorporations.*
Policy CD14.11	*The County will consult with Yuba College to pursue mutual goals for housing, economic development, curriculum development and training courses, mixed-use redevelopment, transportation access, and other planning and environmental issues.*
Policy CD14.12	*The County will coordinate with Yuba County Water Agency on conjunctive water use, renewable energy generation and use, and other agreements that would provide advantages to local industries and benefits to existing residents and businesses.*

Policy CD14.14 *The County will coordinate with reclamation districts, special districts, and Caltrans for maintenance and improvement of storm drainage facilities, where appropriate.*

Policy CD14.15 *The County will consult with Beale AFB to pursue mutual goals for housing, economic development, transportation access, wastewater treatment and other infrastructure needs, and other planning and environmental issues.*

As shown in the above referenced policies and other material in the General Plan, General Plan EIR, and General Plan Update Background Reports, the County has considered data, plans, and policies of other agencies, including those referenced by the commenter in preparing the General Plan and EIR.

5 The comment states that the projected conversion of agriculture lands to non-agriculture uses would conflict with County goals.

See Section 4.2 of the EIR, which comprehensively analyzes agricultural impacts of implementing the 2030 General Plan. The 2030 General Plan includes policies that are intended to conserve agricultural land and reduce the number of acres converted to other uses by maintaining zoning appropriate for long-term agriculture, continuing the disclosure of agricultural operations and potential inconveniences to nearby residences, directing growth away from important agricultural lands, directing development patterns that consume less agricultural land than past development in the County, and requiring agricultural buffers. However, the purpose of the 2030 General Plan is to develop a framework for future long-term development, and it is inevitable that some conversion of agricultural land to non-agricultural use would occur in accommodating long-term growth needs.

Policies and actions under the General Plan seek to reduce impacts to agricultural resources and conserve areas for ongoing agricultural production. The 2030 General Plan introduces the concept of a "Valley Growth Boundary." The intent of the Valley Growth Boundary is, among other objectives, to reduce the overall footprint of future urban development and reduce potential conflicts at the urban-rural edge as part of the County's overall strategy for agricultural and open space preservation. Through a comprehensive planning approach, the Valley Growth Boundary sets the long-term spatial limits of urban development in the valley portion of the County to accommodate most development needs between present and buildout of the 2030 General Plan. The Valley Growth Boundary was created to support development patterns with cost-effective infrastructure and public facilities; protect important natural resources, rural landscapes, air and water quality, farmland, and other important open spaces; promote revitalization and infill development in existing communities; encourage development patterns that support walking, biking, and public transit; and, reduce "leapfrog" and incomplete, piecemeal developments. Rural Community Boundary areas serve a similar purpose outside the Valley.

In addition, policies and actions, such as disclosure requirements and anti-nuisance ordinances would reduce impacts related to the indirect conversion of agricultural land, including Important Farmland. The Valley Growth Boundary and Rural Community Boundary areas were created, in part, from an analysis of different resource areas in the unincorporated County, such as mining, forestland, agricultural lands, riparian habitat, and other types of open spaces.

The County has defined several open space designations in the Natural Resources Element, including agricultural lands (cropland, grazing, and processing areas), wetlands and riparian areas, grasslands, woodlands, and forests. As noted in the 2030 General Plan, "open spaces are important for resource production and extraction, buffering between incompatible uses, biological habitat, recreation, cultural resources, aesthetics, and other functions. The open space designations and the accompanying Open Space Diagram are used to communicate the County's intent for these resource areas. The open space designations identify uses that are supportive to the subject open space function, as well as uses that could potentially conflict with the protected open space function.

6 The comment states that changes to the general plan require full disclosure and additional public review of the EIR. The comment lists topics where revisions to the Draft 2030 General Plan were identified. The commenter claims that they cannot comment on the EIR without reviewing the changes to the Draft General Plan. The County has revised the General Plan and EIR and posted these documents for public review. The comment claims that by closing the public comment period for the EIR, the County's approval process may be vulnerable to legal challenge. The County's EIR process, including review periods, is consistent with Public Resources Code Section 21091 and Section 15105 of the CEQA Guidelines.

Byrne 3

Deborah Byrne
P.O. Box 589
Marysville, CA 95901

February 9, 2011

Mr. Dan Cucchi
Yuba County Planning Department
915 8th St., Suite 123
Marysville, CA 95901

Re: Yuba County 2030 General Plan Update
Draft EIR (DIER) (SCH No. 2010062054)
Deer Range Map

Dear Mr. Cucchi,

I appreciate the opportunity to provide comments on the Draft Environmental Impact Report for the above-referenced project.

On page 4.4-48, the draft EIR recognizes the potential impact of development on deer habitat and deer migratory paths. It says:

Multiple deer herds are also known to move throughout public and private land in the County. The 2030 General Plan could affect up to 56,690 acres of potentially suitable deer habitat, including grasslands and woodlands. Rural community development would occur in much of this habitat which is located in the foothills of the County between Smartsville and Loma Rica.

On page 4.7-11 of the draft EIR it says:

Climate change has the potential to affect environmental conditions in California through a variety of mechanisms. Resource areas other than air quality and atmospheric temperature could be indirectly affected by the accumulation of GHG emissions.

1

It goes on to say that:

As the existing climate throughout California changes over time, the ranges of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the state if suitable conditions are no longer available.

Even though the draft EIR recognizes that "the ranges of various plant and wildlife species could shift or be reduced", and that there is a potential impact of development on deer habitat, it does not address the potential impact of climate change on the deer habitat and migratory paths. This impact could be **potentially significant.**

The Deer Herds Map (last updated in 1983) also assumes that deer habitat will not be affected by global climate change, even as the draft EIR recognizes that the wildlife ranges might well be affected.

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Community Development & Services Agency

Therefore, the Deer Herds Map is insufficient and does not address the potential impact that global climate change may have on the Map.

The General Plan policies NR5.13 and NR5.14 specifically address development in deer habitat areas.
Policy NR5.13: *New developments shall be located and designed to avoid any adverse impact to critical habitat and foraging areas, migratory routes, and wildlife travel corridors for migratory deer herds, as identified by the California Department of Fish & Game.*

Policy NR5.14: *Within the designated winter and critical winter range of the Mooretown and Downieville deer herds, the County will strongly discourage any development that could substantially adversely affect these species. Where Rural Community Boundary Areas occur within the winter and critical range for these species, new developments shall dedicate permanent open space and provide minimum lot sizes designed to avoid substantial adverse impacts to these species.* ***The County will communicate with the California Department of Fish & Game regarding open space dedication and lot sizes needed to avoid impacts to deer herds"*** (emphasis added).

I have been participating in the Yuba County Water Agency FERC relicensing process for over a year now. I am concerned about what that the "communication" mentioned above is to contain and cannot find its contents detailed anywhere. I am also the Chair of the Yuba County Fish and Game Commission, which was approved by the Board of Supervisors by way of Resolution 2010-01 to participate in the FERC relicensing process and I can't help but wonder why there is no proposal to present that communication to the Fish and Game Commission before being sent to the California Department of Fish and Game so as to ensure that such communication does not conflict nor interfere with the efforts of the Commission on behalf of Yuba County in this FERC relicensing process. 1 cont'd

Furthermore, since these policies do not address the potential for deer habitat alteration due to climate change, these policies are potentially based on the flawed assumption the deer habitat areas with not be affected by climate change, even while the EIR recognizes that "the ranges of various plant and wildlife species could shift or be reduced".

How is the draft EIR going to correct the flawed science (that there will be no significant climate change affecting habitat even though the best science says there will be climate change) that Policies R5.13 and NR5.14 are based on?

The draft EIR does not adequately address the fact that "adverse impact to critical habitat" may not materialize because climate change may alter the deer habitat areas in such a way that these areas are no longer suitable deer habitat.

Conclusions:

1.The draft EIR does not sufficiently address the impact that global climate change may have on deer herd habitat, and has not sufficiently detailed any changes in deer herd habitat since the last study on the subject in 1983.

2. The General Plan update as written with respect to environmental impacts could adversely affect the Yuba County Water Agency FERC relicensing.

I look forward to receiving further information to ensure that the Yuba County Water Agency FERC relicensing process is not interfered with and to assist the Planning Department to interface with the Yuba County Fish and Game Commission with the development of any communication the the California Department of Fish and Game, including development of studies to delineate current deer herd habitat. 1 cont'd

Sincerely,

s/ Deborah Byrne

1 The comment discusses the potential for climate change to impact deer habitat. The comment further states that the 1983 Deer Herds Map is insufficient and does not address global climate change. The comments are fully addressed in the two responses to the Letter from the Yuba Fish & Game Commission.

As noted, it is not possible at this time to model the effects of climate change at the local level, with the level of detail necessary to predict effects on habitat for specific species. As acknowledged in Section 6 of the EIR, the degree to which the 2030 General Plan could contribute to a significant cumulative climate-change related biological resources impacts is unknown at this time. The 1983 map is the most recent map of resident and migratory deer ranges available. The Department of Fish and Game (DFG) was contacted for more up to date deer herd information, but updated mapping and analysis has not been completed. Therefore, this is the best available information on which to base the analysis of impacts on deer herds in this programmatic document. It would be speculative to try and predict how deer herds in Yuba County would respond to climate change and to design site-specific mitigation based on the potential future physical conditions resulting from climate change. Please refer to policies NR5.13 and NR5.14. See also Section 6.1.4 of the EIR, under the heading "Biological Resources," where the County discusses potential biological impacts of climate change. Please also refer to responses to the letter from the Yuba Fish & Game Commission.

Wheatland

City of Wheatland

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February 8, 2011

RECEIVED
FEB - 9 2011
Yuba County Dept. of Planning

Mr. Dan Cucchi, Project Planner
Yuba County Planning Department
915 8th Street, Suite 123
Marysville, CA 95901

Re: Yuba County General Plan Update Draft Environmental Impact Report

Dear Mr. Cucchi,

Thank you for the opportunity for the City of Wheatland to comment on the Yuba County General Plan Update EIR (GPU EIR). The GPU EIR is a programmatic EIR which appropriately relies on the proposed General Plan policies to reduce the environmental impacts resulting from the buildout of the plan. The GPU EIR provides valuable background information for the required environmental issues and will serve the County as the basis for future environmental reviews in Yuba County. 1

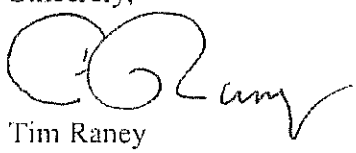
However, the City of Wheatland has a primary concern regarding the GPU EIR reliance on the Valley Growth Boundary as a policy to mitigate impacts from urban development. The City of Wheatland has identified and proposed a future Sphere of Influence bounded by Forty-Mile Road, Ostrom Road, the Nevada County line, and the Placer County and Sutter County lines. A portion of this future Sphere of Influence lies within the County's proposed Valley Growth Boundary. While the City of Wheatland supports the efforts by the County to restrict areas of urban growth to areas that can reasonably receive public services from the County, the City of Wheatland requests that the identification of the Valley Growth Boundary should not provide any restriction to the annexation and development of the land by the City of Wheatland. 2

As an example, the GPU EIR addresses impacts caused by the buildout of the GPU on the conversion of agricultural lands, such as Prime or Unique Farmland or Farmland of Statewide Importance. One of the primary purposes of planning within unincorporated Yuba County outside of city spheres of influence should be the preservation of large areas of agricultural land. Urban development should be focused to existing and surrounding developed areas while the agricultural land of the County is preserved. In the area where the County's proposed Valley Growth Boundary and the City's proposed Sphere of Influence coincide, however, it would be inappropriate for the County to set aside the land for agricultural preservation, thereby restricting the City from implementing its long term vision and ability to provide municipal services to future urban areas. 3

The City of Wheatland requests that Yuba County add language to both the General Plan and the GP EIR specifically stating that the identification of the Valley Growth Boundary will not interfere with the City of Wheatland's proposed Sphere of Influence and any proposed annexations in this area for urban development. We further request that the County establish a policy supporting the urban development within the incorporated cities in order to promote a rational pattern of growth and an efficient extension of municipal services. 4

Thank you for considering the City of Wheatland's comments as you prepare the Final EIR for the Yuba County GPU. Please do not hesitate to contact me should you have any questions regarding the items in this letter. 5

Sincerely,



Tim Raney
Community Development Director
City of Wheatland

cc: Steve Wright, City Manager

1 The comment restates various aspects of the project description and intended uses of the EIR. The comment is noted and does not require a response.

2 The comment requests that the County not restrict areas that might be annexed or developed by the City of Wheatland. The 2030 General Plan applies only to unincorporated areas of the County. However, coordination with the cities will be required to implement several General Plan policies and actions. The County intends to collaborate with other agencies in implementing the General Plan, including Wheatland and Marysville. As noted in the General Plan Implementation Chapter, the County will use the policies included throughout this General Plan as a decision making guide for a wide range of the County's discretionary actions. The County does not dictate land use change within the City of Wheatland. The County does not direct changes to the City of Wheatland Sphere of Influence. The County will consider development proposals in new growth areas and existing developed areas, requiring project revisions or conditions in order to ensure General Plan consistency. Relevant language from the Community Development Element includes:

Policy CD14.2	*The County will coordinate with the cities of Wheatland and Marysville for proposed planning actions or development approvals involving land within their respective spheres of influence.*
Policy CD14.3	*The County will support an orderly framework for communication with Wheatland, Marysville, Beale Air Force Base, LAFCo, service providers, SACOG, Sutter County, and other regional service providers and agencies.*
Policy CD14.4	*The County will coordinate with special districts, cities, LAFCo, SACOG, Caltrans, joint powers authorities, and other relevant agencies to provide efficient local and regional infrastructure, public facilities, and public services.*
Policy CD14.5	*The County will participate in tax-sharing agreements with relevant agencies, consistent with General Plan goals and policies.*
Policy CD14.9	*The County will support agreements with Marysville and Wheatland that promote mutual goals for fiscal sustainability, growth management, review of spheres of influence, transportation planning, agricultural preservation, emergency access and response, flood protection, renewable energy development, regional infrastructure provision, and other important planning and environmental issues, consistent with the General Plan.*
Policy CD14.10	*The County will support agreements with Marysville and Wheatland on appropriate building standards, public utility*

connections, sewer and water service, and other matters that promote cost-effective development of unincorporated areas within the Valley Growth Boundary and viability for future incorporations.

As shown in the above referenced policies and other material in the General Plan and General Plan EIR, the County has considered City actions in development of the General Plan and EIR.

Also, the City asks that the County's Valley Growth Boundary not restrict areas from annexation and development to the City of Wheatland. The County's General Plan applies only to unincorporated Yuba County. The County's policies are not restrictive of annexation to or development in the City of Wheatland. The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration.

3 This comment notes that the General Plan EIR addresses agricultural impacts. The comment suggests that the County's General Plan should include agricultural land. The County's agricultural policies and Open Space Diagram includes areas for agriculture and other types of open space. The comment states that it would inappropriate for the County to set aside land for preservation of agricultural land in areas within the City's proposed sphere of influence. The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration.

4 The comment requests that language be added to the 2030 General Plan stating that the Valley Growth Boundary would not interfere with the City of Wheatland's proposed sphere of influence and any proposed annexations. The comment also requests that the County add a policy supporting the urban development within the incorporated cities in order to promote a "rational" pattern of growth and an efficient extension of municipal services. The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration. As noted previously, the County will coordinate with other public agencies on investments, such as infrastructure and public facilities to support land use change consistent with the General Plan. Coordination with the cities will be required to implement several General Plan policies and actions. The County intends to collaborate with other agencies in implementing the General Plan, including Wheatland and Marysville. See response to Comment 2. The County has considered City actions in development of the General Plan and EIR. The County's General Plan applies only to unincorporated Yuba County. The County's policies are not restrictive of annexation to or development in the City of Wheatland.

5 The comment thanks the County for consideration of the City's comments. No issues are raised and no response is required.

Davis

February 5, 2011

Henry Davis
P.O. Box 255
15741 Indiana Ranch Road
Dobbins, CA 95935

Yuba County Supervisors
Planning Commission
Dan Cucchi, Project Manager
Kevin Malen, Community Services Director
Wendy Hartman, Planning Director

Re: Yuba County Draft EIR

I have several comments and questions pertaining to the Natural Resources section of the EIR for the Yuba County General Plan 2030 (GP), in particular NR 6 cultural resource section. The indented or underlined text is directly from the EIR.

> 4.5 CULTURAL RESOURCES
> This section summarizes an analysis of the potential impacts to cultural resources attributable to buildout of the 2030 General Plan. This section identifies potential impacts by examining the baseline sensitivity for cultural resources and comparing this sensitivity to the areas where development could be accommodated under the 2030 General Plan.

Comment 1, Baseline sensitivity and comparison to buildout.

The examination of the baseline sensitivity referred to above comprises three items:

1) A discussion of the historic and prehistoric environmental setting.
2) Table 4.5-1 labeled Known Sites in Yuba County.
3) An archaeological sensitivity map, Exhibit Natural Resources 6 (ER6)found in the General Plan.

1

The only functional comparison between baseline sensitivity and the areas where development could occur under the 2030 General Plan is the sensitivity map which claims to determine low, moderate and high potential for cultural resources. This map is limited to archival information, does not include data on Federal land and does not compare sensitivity potential to buildout. There is no predictive model for the potential for historic and prehistoric resources in a county with an environmental setting with a "rich historic past" and where "many remnants of a rich Native American history can be found throughout the county today". (pg.4.5-4) Hammonton, Browns Valley, Brownsville, Camptonville, Clipper Mills, Dobbins, and Smartsville are historic gold mining districts and should be considered highly sensitive for cultural resources. Prehistoric cultural resources have been documented from the Yuba and Feather Rivers to highest elevations in the County. There may be no areas in the whole county which have low potential for cultural resources. Map ER6 is of little or no value as a tool to determine potential for cultural resources.

DOCUMENTED CULTURAL RESOURCES SITES WITHIN YUBA COUNTY

The County directed an extensive record search by the North Central Information Center (NCIC) of the California Historic Resources Information System to support this General Plan Update. The NCIC was asked to provide information regarding documented cultural resource sites within Yuba County, excluding federal lands. Federal land was excluded because the County's planning policies have little if any influence on these lands which instead are governed by the relevant federal agencies. Based on the extensive records search, a series of cultural resource exhibits have been prepared to guide policy development and environmental analysis under the 2030 General Plan and EIR.

Comment 2, Record search, documented sites and cultural resource exhibits.

The omission of all sites on Federal land is inconsistent with the EIR statement:

> "Known sites tend to be clustered in regions where surveys have been done for proposed projects such as roadway or highway corridors and regions near urban or hydroelectric activity, because these types of projects include requirements for identification of cultural resources. This should be considered when reviewing actions in less-developed areas, as the density and types of known sites are presumed to continue into unexplored areas."

Excluded data (on Federal land) should be considered in determining the sensitivity of adjoining or "unexplored areas". While it may be true that "the County's planning policies have little if any influence on [federal lands]", the reverse is not true. Site density on Federal land should have influence on the County's planning policies when determination of potential for cultural resources on adjoining land is concerned. By what authority does the County exclude a vast body of cultural resource data compiled by California and the Federal Government? 1 cont'd

The records search referenced above resulted in "a series of cultural resource exhibits" (4.5-8). However, only two (Table 4.5-1 and map Exhibit Natural Resource 6) are in the General Plan EIR. Are there other cultural resource exhibits not in the GP or EIR? If so, what type of data is in them and is the confidential data protected? How will they be used and who will have access to them?

> The numbers and types of sites in these exhibits are listed in Table 4.5-1. It is important to note that these sites have been identified generally during the course of archaeological survey efforts resulting from planned development of some kind, including federal projects, new construction, or other similar activities. The marked site density visible in the central portion of the county is a result of, among other things, surveys conducted for the proposed Marysville Dam. Known sites tend to be clustered in regions where surveys have been done for proposed projects such as roadway or highway corridors and regions near urban or hydroelectric activity, because these types of projects include requirements for identification of cultural resources. *This should be considered when reviewing actions in less-developed areas, as the density and types of known sites are presumed to continue into unexplored areas.* However, examining groupings of similar site types helps to more accurately predict types and densities of sites in similar geographic locations within Yuba County. (4.5-8)

The above discussion about Table 4.5-1 states that the data is a result of previous archaeological survey efforts. The marked site density in the central portion is noted as largely a result of the Marysville Dam Project. Site density is itself largely a result of archaeological survey. This fact "should be considered when reviewing actions in less-developed areas". Therefore site density should not be the only consideration for cultural resource sensitivity. Will the County have staff examine Table 4.5-1 to evaluate "groupings of site types" and "predict types and densities of sites in similar geographic locations"? Table 4.5-1 is not a feasible method to, "guide policy development and environmental analysis under the 2030 General Plan and EIR".

A records search does not provide sufficient data to establish baseline sensitivity for cultural resources in the County. Predictive models and methods for identifying and protecting buried archaeological sites should be addressed. One example of a published document available to Yuba County on this subject is: **A Geoarchaeological Overview and Assessment of Caltrans District 3 Cultural Resources Inventory of Caltrans District 3, Rural Conventional Highways** (Jack Meyer and Jeffrey S. Rosenthal April, 2008) This document was prepared and edited by FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP, INC. 2727 Del Rio Place, Suite A, Davis, California, 95618. Yuba County is in Caltrans District 3 and is included in this study. Why are pertinent scientific studies not included in GP EIR NR6? The use of modern archaeological methods is feasible and will provide data for sensitivity assessments that may avoid or reduce significant impacts to cultural resources prior to construction. 1 cont'd

IMPACT ANALYSIS
IMPACT 4.5-1
Damage to Identified Historical Resources and Unique Archaeological Resources. The 2030 General Plan contains policies and a growth template that would allow construction and development, as depicted in the Land Use Diagram. Yuba County has a high density of identified cultural resources. Many of these resources, upon evaluation, are likely to qualify as historical resources or unique archaeological resources under CEQA. Construction activity under the General Plan could affect one or more of these resources, resulting in significant impacts by either direct disturbance through excavation or by changes to the setting. These impacts are potentially significant.

Comment 3, Impact 4.5-1

The discussion of impacts to identified historical resources states a total of 2,876 resources identified within Yuba County. The analysis declares this a "high density of identified cultural resources". However, this number does not include sites on Federal land as previously stated. It also does not include unidentified sites. If 2,876 known sites represent a high density, then the County may have a very high density when Federal and predictive sites are added to the number. A predictive model used in the 1994 Yuba County General Plan suggested 8,650 archaeological sites in the County. This would mean only about 1/3 of these sites have been recorded.

Relevant Policies and Actions of the 2030 General Plan

Goal NR6–Cultural Resources of the Natural Resources Element of the 2030 General Plan indicates that Yuba County policy is to identify, protect, and preserve Yuba County's important prehistoric and historic resources. This goal is to be implemented through the following policies: 2

Policy NR6.1: New developments involving the movement, scraping, or leveling of soil in areas of moderate or high potential for prehistoric resources shall conduct archeological background research, site analysis, and surveying to inform site design and avoid impacts to prehistoric sites.

Comment 4, County Goals, Policies and Action related to Impact 4.5-1

Policy NR6.1 is the first mention in the EIR of a Yuba County Policy requiring discretionary projects (new developments) involving soil disturbance to conduct archaeological background research, site analysis, and survey. Although the analysis states that sites can receive significant impact from, "excavation or by changes to the setting", no County actions or policies address mitigation for changes to the setting. Archaeological sites can and have been adversely impacted by cattle grazing, horse trails, logging equipment and other less invasive methods than those mentioned in Policy NR6.1. Soil disturbance is the only activity for which the County requires archaeological background research, site analysis, and survey under Policy NR6. Would the County require archaeological review before granting a discretionary permit, for example, to a public event in an undeveloped setting if no planned earth work was intended? Discretionary projects that would increase public access to sensitive locations could result in the loss of or damage to significant cultural resources. Equestrian and pedestrian trails can cause direct impact through soil disturbance as well as indirect impact by increasing public access. The County should require a records search for all discretionary projects regardless of the planned soil disturbance, to avoid impacts to identified cultural resources and attain CEQA compliance.

Policy NR6.1 also holds the first mention of a Yuba County Policy pertaining to levels of protection for cultural resources in areas of low, moderate, and high potential for prehistoric resources. It establishes the precedent and policy of requiring archaeological studies only on projects in areas considered to be of moderate or high potential for *prehistoric* resources (pg 4.5-12). Archaeological monitoring of projects is required only in areas of high *prehistoric* sensitivity. This policy appears to be based on the fallacy that absence of evidence is evidence of absence. The 1994 Yuba County General Plan states, "There are no areas of non-sensitivity for cultural resources within the entire state, and certainly not in Yuba County, which is known to have a generally high sensitivity for cultural resources". Has this fact changed in the last 17 years? Or, is the County changing policy? The County should at a minimum require an archaeological records search from the North Central Information Center of the California Historic Resources Information System for all discretionary projects, regardless of assumed sensitivity of the area, to avoid impacts to identified cultural resources and attain CEQA compliance. 2 cont'd

Policy NR6.1 fails to address identified cultural resources in areas considered to have low potential for cultural resources. This policy will not mitigate impact to identified cultural resources unless they fall within the high to moderate zone. This is inconsistent with the discussion under Documented Cultural Resources in the GP EIR.

> "Known sites tend to be clustered in regions where surveys have been done for proposed projects such as roadway or highway corridors and regions near urban or hydroelectric activity, because these types of projects include requirements for identification of cultural resources. This should be considered when reviewing actions in less-developed areas, as the density and types of known sites are presumed to continue into unexplored areas".

New development in areas of "low" sensitivity are not required to provide the minimum cultural resource assessment required by CEQA. CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (Title14, Section 15002[i] of the California Code of Regulations). The County can not "identify, protect and preserve" already documented cultural resources without requiring at a minimum an archaeological record search for all discretionary projects regardless of perceived sensitivity.

Policy NR6.1 only addresses *prehistoric* resources. This may be a clerical mistake. However, in cultural resource issues *historic* can include *prehistoric*, but *prehistoric* does not include *historic*.

Policy NR6.3 fails Goal NR6 and does not mitigate damage to identified cultural resources in that it assumes a qualified person will be on-site to identify, protect and preserve a paleontological and/or prehistoric resource. Only those projects in areas of "high" sensitivity require an archaeological monitor and no requirement is made for a paleontologist. No one will identify, protect and preserve a paleontological and/or prehistoric resource and "stop work for consultation to avoid further impacts" on project areas with assumed low to moderate sensitivity.

Policy NR6.4 will help to reach the Goal NR6 only if all areas where roads, water and sewer lines, and storm water infrastructure will be constructed are investigated to determine how to avoid impacts to identified cultural resources. No requirement is made for those projects to identify, through an archaeological records search, previously documented cultural resources unless they are in an area determined to be high or moderate sensitivity. 2 cont'd

In summary, contrary to what is stated in Impact 4.5-1, Policies NR6.1, NR6.3, and NR6.4 fail to aid in achieving Goal NR6 to identify, protect, and preserve (and therefore mitigate impact to) Yuba County's important identified prehistoric and historic resources by: 1) attempting to prioritize areas that will be subject to CEQA, 2) not requiring a records search for all discretionary projects, 3) assuming an archaeologist and paleontologist will be on site when not required. Goal NR6 can only be reached if the County will require at a minimum an archaeological records search for all discretionary projects to determine if known archaeological sites need to be identified, protected and preserved per state and federal legislation and regulation.

> **Action NR6.1**: Environmental Review and Mitigation. Building on the analysis in the General Plan Program EIR, development projects that could have significant adverse impacts to prehistoric or historic resources will be required to assess impacts and provide mitigation. The following steps, or those deemed equally effective by the County, will be followed.

Comment 5, Action NR6.1

There is no analysis in the GP Program EIR on which to build requirements. Action NR6.1 does not specify who will determine which projects "could have significant adverse impacts" to prehistoric and historic resources or what criteria will be used to make that determination. Will the sensitivity map, Exhibit Natural Resources 1, be an "in or out" test used by the County to determine which projects "could have significant adverse impacts" to cultural resources? This is in conflict with bullet five under NR6.1 which states, "Determination of impacts, significance, and mitigation shall be made by a qualified professional archaeologist or architectural historian, as appropriate". If Yuba County's policy is to determine impact, significance and mitigation will a qualified archaeologist and architectural historian be on staff? 3

IMPACT 4.5-2
Damage of Previously Unidentified Cultural Resources.
Buildout of the areas designated for development within the planning area identified 2030 General Plan has the potential to damage or disturb previously unidentified cultural resources. The density of known cultural resources within Yuba County is high; indicating that additional resources occur that have not been recorded and which could be damaged by construction prior to discovery. This impact is potentially significant.

Comment 6, Impact 4.5-2

All the comments under Impact 4.5-1 are also appropriate for Impact 4.5-2 except those specific to identified sites. The relevant policies and actions listed under 4.5-2 are discretionary, weak and ambiguous and provide only lip service to mitigate the potentially significant impacts to unidentified cultural resources. 3 cont'd

Policy NR6.1 will only apply to projects which include, "movement, scraping, or leveling of soil in areas of moderate or high potential for prehistoric resources".

Action NR6.1. (See comment 5)

Records searches do not reveal unidentified sites. Yuba County can only meet Goal NR6 if the Policy NR6.1 is changed to include a records search AND archaeological survey for all discretionary projects regardless of perceived ground disturbance of sensitivity, to identify, protect and preserve previously unidentified cultural resources. This is the standard recommended by the North Central California Information Center and adopted by many California counties.

IMPACT4.5-3
Disturbance and Damage to Human Remains. Build out of the 2030 General Plan would allow construction in areas that could contain previously undiscovered buried human remains. Previously identified cultural resources within the County include prehistoric archaeological sites with human burials. In addition, historic archaeological deposits may include human remains and cemeteries. It is possible that ground-disturbing work that would be performed during build out of the General Plan will encounter such remains, and potentially result in damage. This impact is potentially significant.

Comment7, Impact 4.5-3 4

The following statement is made in the discussion, "The density of previously identified resources within the County in general suggests... construction could inadvertently damage and disturb buried human remains". Density of identified resources was determined with data for sites on Federal lands omitted. Still, the density suggests the possibility of damage to human remains. An ethnographic study involving the local Native American community is a feasible measure and should be included in the County policy to mitigate this potentially significant impact.

This statement is also made in the discussion, "Where the surface manifestations of subterranean deposits have been removed by agriculture or have been covered by recent soil deposits there

may be no indication that such remains exist, thus such remains may not be avoided prior to construction." This is a conclusion not based on or supported by evidence. Existing Geoarchaeological studies are a feasible method to mitigate damage to human remains by identifying areas with potential for buried archaeological deposits. The County may gain important information by requiring involvement with Native Americans *before* attempting to determine whether or not a project could have significant adverse affects on cultural resources. Consultation with Native Americans at a pre-planning stage may identify sites with human remains which the discussion under Impact 4.5-3 states, "... may not be avoided prior to construction". These are feasible measures not included in the steps to mitigate impact to human remains. CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less-than-significant level (California Office of Historic Preservation 2001a, 2001b; see also 14 CCR Section 15126.4[a][1]).

Relevant Policies and Actions of the 2030 General Plan, Policies NR6.1, NR 6.2, NR 6.3, NR 6.4 and Action NR6.1 will not meet Goal NR6 to identify, protect, and preserve, and reduce the risk of inadvertent damage to human remains. The policies and actions are based on unfounded conclusions and do not consider all feasible mitigations. There is no evidence that suggests only areas of moderate to high sensitivity used in Policy NR6.1, should be required to conduct archeological background research, site analysis, and surveying to inform site design and avoid impacts to human remains. The County cannot follow state and federal regulations by requiring environmental assessment for impacts to human remains if those impacts are never known due to policies that exempt archaeological review for projects in areas perceived to be low for sensitivity. Policy NR6.2) will not mitigate impacts to human remains per state and federal regulations unless all feasible measures are taken to avoid such impacts. The use of Policy NR6.1 would mean Policy 6.3, a stop work order to protect potential paleontological and prehistoric resources (including human remains) could only be imposed in project areas determined to have high sensitivity . Policy NR6.4 is only protocol for avoidance after cultural resource assessment and is unrealistic given the exclusion from such assessment of project areas considered to be low sensitivity. 4 cont'd

> **Action NR6.1:** Environmental Review and Mitigation. Building on the analysis in the General Plan Program EIR, development projects that could have significant adverse impacts to prehistoric or historic resources will be required to assess impacts and provide mitigation. The following steps, or those deemed equally effective by the County, will be followed:

The EIR states: No regional or local plans, policies, regulations, or laws pertaining to cultural resources are applicable (pg 4.5-4). Regulations on human remains are provided under state and federal law. What authority does Yuba County have to deem other steps equally effective when protecting human remains?

The sensitivity map has little or no value to assess potential impact to human remains. The map only represents site density based on known sites. Isolated indentified sites with human remains could exist in areas that are low in sensitivity on a site density map. Under the proposed policies, even previously recorded sites with human remains will not be identified, protected and preserved because no record search is required for projects in areas perceived to be low for cultural sensitivity. 5

The steps listed to mitigate impact 4.5-3 include two bullets pertaining to Native Americans. Under Action NR6.1, the Native American Heritage Commission and the local Native American community will only be involved if the project area "could have significant adverse impacts to

prehistoric or historic resources". This is not taking, "all action necessary to provide the people of this state with... historic environmental qualities...and preserve for future generations examples of the major periods of California history" (California Public Resources Code [PRC] Sections 21001[b] and 21001[c]). 5 cont'd

Comment 8, Mitigation Measures

The Mitigation Measure for Impact 4.5-1, which uses Goal NR6, Policies NR6.1-7 and Action NR6.1, does not constitute the feasible mitigation available to reduce impacts on known cultural resources. There is no policy requiring the minimum of a records search for all projects. There is no policy requiring a professional archaeologist to monitor ground-disturbing activities except in areas of high sensitivity.

The Mitigation Measure for Impact 4.5-2, using the same goal, policies and action as Impact 4.5-1 does not constitute the feasible mitigation available to reduce impacts on previously unidentified cultural resources. There is no policy requiring a records search for all projects. There is no policy requiring a professional archaeologist to monitor ground-disturbing activities except in areas of high sensitivity. 6

The Mitigation Measure for Impact 4.5-3, using the same goal, policies and action as Impact 4.5-1 does not constitute the feasible mitigation available to reduce impacts on interred human remains. There is no policy requiring a records search for all projects. There is no policy for preplanning involving Native Americans. There is no policy for an ethnographic study to protect possible burial sites. There is no policy for consulting local Native American communities unless the project meets the threshold proposed in Action NR6.1. There is no policy to research available scientific data to detect possible buried archaeological sites. There is no policy requiring a professional archaeologist to monitor ground-disturbing activities except in areas of high sensitivity.

Comment 9, Omissions.

A serious discussion of the omissions of cultural resource analysis, sensitivity, impact and mitigation are, like certain evaluations in the analysis for this General Plan Program EIR NR 6, beyond the scope of this document. However, a pertinent example of the important omissions in the EIR is the lack of evaluation of the largest recreation area and a sustantial economic resource for the County. New Bullard's Bar Reservoir is managed by the Yuba County Water Agency. It has 57 miles of shoreline, an elevation of 1,957 feet above sea level and an environment rich in cultural resources. The GP EIR omits the potential for significant cultural resources lost or substantially damaged through the construction of new facilities and/or modifications to the licensed power facilities that are in part the responsibility of the County. The hydro-electric facilities are regulated by the Federal Energy Regulatory Commission (FERC). There is no mention of the County's plans regarding FERC compliance in the management of New Bullard's Bar Reservoir in the GP EIR. The only reference to cultural resources in the Bullard's Bar area are blobs on a map. 7

Comment 10, Summary

The 2030 GP EIR NR 6 is based on a shallow boilerplate analysis of the cultural resource potential of Yuba County. NR 6 uses a cookie cutter approach and is only specific to Yuba County in the discussion on history and the data from the NCIC. Paleontology receives only a brief mention. NR 6 is student level work and is grossly inadequate in all areas. 8

Impact 4.5-1 analysis is weak and only addresses the idea of indirect impact. Impact 4.5-2 analysis simply states that "unidentified cultural resources could be damaged by construction prior to discovery". Impact 4.5-3 analysis suggests that damage to human remains would be limited to "ground disturbing work... " This is not serious analysis of possible impacts to potentially significant cultural resources.

Archaeological review, when required, completely ignores areas perceived to be low sensitivity. Mitigation policy requires only the minimum of a records search for moderate to high areas of perceived sensitivity. A professional archaeologist is only required to monitor ground-disturbing activities in areas of high sensitivity for *prehistoric* resources, not *historic* resources. Native Americans are excluded (when a low sensitivity is determined) from a process which is supposed to protect human remains. This is ironic, considering most unknown burials in Yuba County, the State of California and the Americas are Native American.

The 2030 Yuba County General Plan Draft Environmental Impact Report does not meet its own goals stipulated in section NR 6 by the policies and actions proposed to mitigate impacts to cultural resources. Assumptions are made about the County's ability and authority to determine sensitivity, what constitutes impact, and which impacts to cultural resources may or may not be avoided. The criteria used to trigger an environmental review though CEQA is discretionary, weak and ambiguous. Neither the partial data sensitivity map, the soil disturbance threshold, or the proposed actions and policies show any evidence of serious effort on the County's part to "take all action necessary to provide the people of the state with... historic environmental qualities... and preserve and preserve for future generation examples of the major periods of California history" (California Public Resources Code [PRC] Sections 21001[b] and 21001[c]).

8 cont'd

A County policy to use a map to assume low sensitivity for cultural resources is not a feasible measure. It is a feeble measure. It is a potentially dangerous "cultural resource exhibit" that could be used to circumvent CEQA requirements and cause significant but avoidable impacts to the County's cultural resources for years. Information on location of cultural resources is confidential and not subject to the Freedom of Information Act. The exhibit, Natural Resources 1, should be removed from the County GP to avoid potential damage to significant cultural resources. This is a feasible mitigation measure.

The 1994 Yuba County General Plan states:

> "When archaeological sensitivity maps are used to make Initial Study determinations of potential effects on cultural resources, these resources can be exempted from further consideration during the CEQA process. After several years of such practice, in which neither records searches nor archaeological surveys are conducted in areas perceived to be of low sensitivity, the fact that no cultural resources are recorded in these areas reinforces the belief that no cultural resources exist. Developments approved in these areas without the benefit of a cultural resources investigation may affect cultural resources that do exist".

Seventeen years later the County is attempting to enact a policy that proves the efficacy of that statement. The County should, "take all action necessary to provide the people of this state with... historic environmental qualities...and preserve for future generations examples of the major periods of California history" (California Public Resources Code [PRC] Sections 21001[b] and 21001[c]).

Comment 11, Recommendations.

NR 6 should be completely redone with a serious approach to the County's cultural resources. Omitted data on Federal lands should be included. Impact analysis should include indirect impacts. Mitigation measures should address other feasible alternatives. Ambiguous and discretionary language should be removed from the policies and actions. Exhibit Natural Resource 6 should be removed from the GP and not used in County planning decisions. If the County is unwilling to take, "all action necessary" as required by CEQA, NR 6 should be amended so that Policy NR6.1 requires:

1) A minimum of a records search from the NCIC for **all** discretionary projects within the county, regardless of perceived sensitivity or potential for ground disturbance. This should include all County projects requiring a permit from other agencies.
2) An archaeological survey for any discretionary project that has any direct or indirect potential to impact cultural resources at any phase of buildout as recommended by the NCIC or a qualified cultural resources professional.
3) Consultation with Native American groups prior to determining potential impact.

8 cont'd

The final paragraph from the 1994 Yuba County General Plan gives an ironic end to these comments.

> In conclusion, the only reliable method for determining whether a project will potentially affect cultural resources, thus assuring compliance with CEQA and other regulatory provisions, is to undertake a records search, and if the indicated by records search findings, a complete archaeological survey. Archaeological sensitivity maps are of limited value in the planning process. Their use can result in the release of confidential information to unauthorized artifact collectors or the inadvertent destruction of cultural resources when such maps are used to support a decision not to require a records search and archaeological survey. (pg 15-28, 1994)

With regards to the cultural resources section NR 6 of the 2030 General Plan Environmental Impact Report, Yuba County should take a step backward in order to move forward.

1 This comment argues that the General Plan EIR inadequately describes the sensitivity of Yuba County for cultural resources. Several points are offered in support of this comment. Specifically, the commenter states that:

- The information on recorded cultural resources should be retrieved from federal land, that the potential for cultural resources may be higher than estimated by the County, and that the potential presence of cultural resources on federal lands should influence County policies on nonfederal lands.

- The records search does not provide sufficient data to establish baseline sensitivity for cultural resources in the County. Predictive models should be used based upon geoarchaeological data.

- The comment also asks where technical data that identifies cultural resource site locations and sensitivities will be stored.

While the commenter argues that the sensitivity for cultural resources in the County is higher than the estimates provided in the General Plan DEIR (a conclusion that the County reached based upon the retrieval of thousands of records identified in Table 4.5-1 of the DEIR), revising the description of the sensitivity for cultural resources would not materially change the significance conclusions of the DEIR because, as noted, cultural resource impacts are described as significant and unavoidable. CEQA requires that the lead agency use substantial evidence to reach conclusions in the EIR, which in turn is defined as fact and expert opinion supported by facts (California Public Resources Code Section 21080[e]). Substantial evidence does not consist of argument or speculation (California Public Resources Code Section 21080[e]). Disagreement among experts does not make an EIR inadequate (14 Cal. Code of Regulations Section 15151). In this case, because any upward revision of the sensitivity for cultural resources within Yuba County would simply reinforce the fact-based conclusions of the EIR, the information the commenter suggests would not materially alter the content of the EIR.

The record search data was used to generate exhibits for a background paper identifying the cultural resources sensitivity of Yuba County at a general level. This information will be kept at the Yuba County Planning Department; location pertaining to the exact location of cultural resources will be confidential.

The General Plan EIR is a program-level analysis of the potential for impacts on cultural resources, and which, by itself, does not approve or allow any physical construction project. CEQA specifically provides for the review of programs and policies, such as a general plan at a broad level of detail (14 Cal. Code of Regulations Section 15152). The General Plan DEIR concludes that impacts to identified cultural resources, previously unidentified cultural resources, and interred human remains that would occur under buildout of the 2030 General Plan are potentially significant and unavoidable. This conclusion was reached based upon several facts. First, the record search identifies several thousand known cultural resources within Yuba County. Federal lands were not targeted by the extensive record search that was conducted to support the General Plan, which is appropriate since the County does not have entitlement authority over federal

actions on federal lands and the County does not anticipate land use change subject to its entitlement authority on lands owned by the federal government. Second, the proposed 2030 General Plan identifies undeveloped land that, upon approval of project-level CEQA review that could occur during implementation of the 2030 General Plan, would be subject to ground-disturbing construction in areas that are sensitive for cultural resources based upon the record search. A predictive model to predict the instance of cultural resources in the County is not necessary or useful in reaching the conclusions in the DEIR. Because the record search data, by itself, indicates that Yuba County is sensitive for cultural resources, the DEIR reasonably concludes that buildout of the 2030 General Plan may result in significant and unavoidable cultural resource impacts.

In response to this comment, the geoarchaeological study referenced in this comment was retrieved and reviewed (Meyer and Rosenthal 2008). This report concludes, in essence, that older archaeological resources are associated with older landforms and that younger cultural resources (within the prehistoric era) are associated with newer landforms. While the report does provide a general overview of where such landforms occur, this is an inference that can be made without an exhaustive study of geomorphology. In response to this comment this report will be added to the record of information retained by Yuba County and to inform review of future project-level actions that would occur under the General Plan.

It is also important to note that specific projects that would be accommodated as part of General Plan buildout would be subject to project-level CEQA review, where more detailed analysis of cultural resource sensitivity and impacts would be required. This requirement is inherent in the tiering principle provided in CEQA where general impact discussions provided in program-level documents are followed by subsequent project-level review (14 Cal. Code of Regulations Section 15152[a]). The comment is duly noted.

2 This comment argues that Policies NR6.1, NR6.3, and NR6.4 are not sufficient to implement Goal NR6 of the General Plan.

This comment is noted and the relevant policies have been revised for clarity with regard to future project-level review of projects that would be accommodated under the 2030 General Plan.

The scope of analysis in the DEIR is limited to the proposed project, which includes changes to the County General Plan and does not directly include permitting requirements for public events. The text of Goal NR 6, Cultural Resources, and Policies NR6.1 through N6.5 have been revised. In addition the text of Action NR6.1 has been revised.

The revised text identifies requirements for review and mitigation of potential for significant impacts on cultural resources with relevant methods such as record searches at the North Central Information Center, technical studies such as pedestrian surveys, geoarchaeological sensitivity analysis, and Native American consultation, including ethnographic studies. The precise nature of projects that could occur under buildout cannot be anticipated at this time and there is no formula for the exact methods that are appropriate for each project. However, the revised policies and action do identify standards for review and mitigation. Projects that would occur under the 2030 General Plan will be reviewed on an individual basis, using methods that are appropriate given the level of previous study and the nature of the project (discretionary vs. ministerial).

Please refer to revisions provided in Section 4.5 of the EIR and the Natural Resources Element of the General Plan.

3 This comment suggests that the text of Policy NR6.1 should be revised to require record searches and cultural resource surveys for projects that would occur under General Plan buildout. As indicated above in response to comment 2, the text of the Draft 2030 General Plan policies relating to cultural resources and Action NR6.2 has been revised to address this comment.

Please refer to revisions provided in Section 4.5 of the EIR and the Natural Resources Element of the General Plan.

4 This comment asserts that the significance conclusion of Impact 4.5-3 is not based upon fact. The comment further asserts that geoarchaeological studies and Native American consultation may be useful in identifying areas of sensitivity for buried human remains. The commenter objects to any General Plan policy that would limit the level of technical studies required for cultural resources based upon sensitivity inferences made from the location of known resources on file at the North Central Information Center. In conclusion, the commenter argues that the General Plan policies designed to identify potential cultural resource impacts and avoid such impacts are not adequate.

The conclusion that buildout of the 2030 General Plan may result in impacts on previously unidentified human remains in Impact 4.5-3 is supported by fact. It is not feasible to identify all buried cultural resources (including interred human remains), prior to ground-disturbing construction for a project or for all projects that could be accommodated under a comprehensive general plan update. Even where the technical work identifies particular archaeological sites that may contain human remains, testing and data recovery excavations typically only retrieve a small sample of the entire resource (perhaps less than 10% of the total deposit by volume). Thus, even in the best case scenario when cultural resources are discovered and managed prior to construction, portions of identified deposits remain after investigation that may contain human remains. Ground-disturbing construction that could occur over such resources that have been previously identified, evaluated, and treated may nonetheless contain human remains that would be damaged by construction.

The commenter urges the County to incorporate additional mitigation measures to identify buried human remains in advance of construction for projects that would occur under General Plan buildout. These suggestions have been incorporated into the revised text of Policies NR6.1 through NR6.5 and Action NR6.1. Furthermore, the revised policies and action deemphasize the connection between the level of effort that would be performed to identify and avoid cultural resources and the potential sensitivity of the project site based on existing record search information.

It is also worth noting that while the revised Action NR.1 requires compliance with state law relating to the discovery of human remains, County policy cannot change the application of state and federal law—compliance with state and federal law is implicitly required for buildout of the 2030 General Plan. For example, if a particular development proposal would result in the placement of fill within waters of the United States, approval from the US Army Corps of Engineers under the federal Clean Water Act would be required. Review would also be required under Section 106 of the National Historic Preservation Act (NHPA, 16 US Code Section 470f).

In addition to these requirements, revised Action NR6.1 requires archaeological and Native American monitoring of construction, where appropriate. If human remains or other cultural resources are identified during construction work would be stopped and the find would be evaluated and appropriate mitigation or avoidance would be developed. Accordingly the range of methods indicated under revised Action NR6.1 is appropriate given that the adoption of the 2030 General Plan would not, by itself, allow any particular construction project to occur because such projects would be subject to CEQA review under tiered documents.

5 This comment objects to the use of the sensitivity map previously included in the 2030 General Plan (Exhibit Natural Resources-6. Prehistoric Resource Sensitivity) to narrow the scope of technical cultural resources studies that would be required for future project-level review of development projects under the General Plan. The commenter urges the County to incorporate additional mitigation measures for Impacts 4.5-1 through 4.5-3.

This comment is noted. As described above, the County has revised policies and Action NR6.1.

6 This comment urges the County to adopt additional methods to identify and avoid impacts to cultural resources as mitigation for Impacts 4.5-1, 4.5-2, and 4.5-3.

Revised Action NR6.1 identifies various methods that are appropriate to identify and avoid cultural resources during later project-level review. In addition, construction monitoring and discovery protocols have been included in the revised Action NR6.1. These methods of managing cultural resources are described generally for this program EIR, as authorized under CEQA (14. Cal. Code of Regulations Section 15152, 15385). The precise requirements that are appropriate for individual projects that would occur under General Plan buildout cannot be defined further because, absent specific development proposals, it is not possible to determine exactly which methods would apply.

7 This comment urges the County to evaluate the management of cultural resources at New Bullard's Bar Reservoir as part of the 2030 General Plan EIR.

This comment is noted. The commenter indicates that the EIR omits analysis of "significant cultural resources [that may be] lost or substantially damaged through the construction of new facilities and/or modifications to the licensed power facilities that are in part the responsibility of the County." Specific activities at Bullard's Bar reservoir are not contemplated in this document, and accordingly are not analyzed in the DEIR. The scope of impacts analyzed in an EIR is limited to the environmental effects of the proposed project– in this case, the 2030 General Plan – rather than actions outside the scope of the project (14 Cal. Code of Regulations Section 15126.2[a]). However, the policies and the action drafted to reduce cultural resource impacts of projects that could be accommodated under the 2030 General Plan could apply to a range of activities, including potentially those related to land use change, utility work, and other activities in and the County's reservoirs.

8 This comment summarizes previous issues addressed by the commenter. Specific issues summarized in the comment include objection to the use of the archaeological sensitivity map for determining the level of effort for future projects and the need for additional management and mitigation measures for cultural resources.

This comment is noted, the substance of these issues has been addressed above in responses 1 through 7.

Linda Fire

Linda Fire Protection District

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February 9, 2011

Dan Cucchi
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RE: Comments on Draft Environmental Impact Report
County of Yuba General Plan 2030

Mr. Cucchi,

The Linda Fire Protection District (the "District") reviewed the Draft Environmental Impact Report (the "DEIR") for the County of Yuba (the "County") General Plan 2030 (the "Project"). Based on our review, the District has some concerns over the extent to which the DEIR addresses the impacts that the Project will have on the District. We believe that such concerns can be adequately addressed through specific language and policy statements that can be incorporated into the General Plan update process. The District has had a strong, cooperative relationship with the County and anticipates a continued coordinated effort throughout the implementation of the General Plan 2030 to ensure that the citizens of the County are provided an adequate level of fire protection.

Specifically, the District believes that the DEIR should address in greater detail, the impacts to the District's fire protection services for the build out contemplated by the Project. The build out of the proposed General Plan will cause an economic burden in order to maintain the level of service currently achieved by the District. This economic burden will result in a lower level of service for all residents within the District boundaries if mitigation measures are not put in place. Although a DEIR is not required to provide an analysis of the economic effects of a project, because the economic effects of the Project could reduce the level of fire protection services to residents, the economic effects as they relate to public safety services should be considered. 1

Property taxes are the primary source of funding for fire districts in California. Historically, property taxes alone have not been sufficient to fund the operational needs and meet the capital obligations of the District. Alternative funding mechanisms, such as assessments and impact fees have been required in order to meet the current level of service provided by the District and adequately meet the public safety needs of District residents. Although the future property tax revenue generated through the contemplated build out identified in the DEIR is unknown, it is reasonable to assume that such property tax revenue will continue to be insufficient to provide adequate fire protection and public safety services to a growing community.

The DEIR does indicate that new development will be required to mitigate its impacts on public services; however, since the District is an independent special district without control over land use decisions, it is

imperative that specific mitigation measures are set forth from the beginning to protect the long term financial welfare of the District. As development occurs and limited local funding is allocated to a wide array of services provided by the County, the District has a concern that a secure level of funding will be available to the District to ensure adequate fire protection can be provided to all future residents.

For example, the State of California has recently taken extraordinary measures to reduce its deficits resulting in enormous impacts on the general funds of counties throughout the State. As such, counties are faced with needing to identify alternative funding mechanisms to meet their own operational and capital obligations. The District wants to ensure that fire protection facilities and services are not jeopardized in order to enable the County to meet its financial obligations. By setting forth policies related to providing for fire protection and public safety services from the onset of development, it helps to ensure the ability of the District to provide adequate services in the long run. 1 cont'd

The District feels that the DEIR should specifically state mitigation measures that will be necessary for all new development within the District's boundaries to provide alternative revenue sources to support the level of service required by the District's residents. Such alternative revenue sources could take a variety of forms, but may include the formation of assessment districts and/or community facilities districts, the imposition of impact fees or other similar revenue generating mechanisms.

The District requests that language be included in the Community Development policy section of the General Plan Update that specifically identifies the requirements that will be imposed on new development related to fire protection. For example, in the General Plan Update, there are policy statements related to law enforcement facilities funding and response time goals. Similar statements should be included for fire protection to show the development requirements that will be imposed on future development to ensure adequate fire protection. 2

It is imperative that the District and the County work together to ensure that adequate levels of fire protection and public safety are provided to residents. We ask that throughout the General Plan Update and any subsequent planning documents, that the County demonstrate support to the District by explicitly stating that enhanced funding will be required in order to provide adequate fire protection facilities and services. 3

We appreciate the opportunity to comment on the DEIR and are available should you have any questions or concerns related to our comments.

Sincerely,

Richard H. Webb
Chief

1 This comment indicates that there are concerns related to the extent to which the DEIR addresses impacts of the General Plan on the Linda Fire Protection District.

Funding for fire services is addressed by various policies in the County's Draft General Plan, including Policies CD 12.5, CD12.6, CD12.7, and CD12.8:

Policy CD12.5 New developments shall demonstrate the availability of adequate fire flow pressure, storage, system gridding, hydrant spacing, and sprinkler systems prior to approval.

Policy CD12.6 The County will condition new developments and collaborate with local fire districts to locate stations so that first fire response can be provided within 6 minutes in 95% or more of cases within the Valley Growth Boundary.

Policy CD12.7 The County's target for fire protection is an ISO (Insurance Service Organization) rating of no greater than 5 within the Valley Growth Boundary and no greater than 8 for Rural Communities.

Policy CD12.8 New developments shall contribute fees, construct and dedicate facilities, and/or use other mechanisms acceptable to local service providers to provide for law enforcement and fire protection facilities and services needed to serve new growth.

While State CEQA Guidelines Section 15124(c) states that the project description shall contain, among other items, a general description of the economic characteristics of the project, economic impacts are not a topic of environmental impact analysis under State CEQA Guidelines. While fiscal impacts are not required to be considered in CEQA analysis of environmental impacts, funding for public services to accommodate new development is considered within the Draft General Plan. Refer to Section 4.12, which addresses at a programmatic level environmental impacts associated with services and facilities needed to serve General Plan growth. Please refer to Section 4.14 of the EIR, which addresses at a programmatic level environmental impacts associated with utilities needed to serve General Plan growth.

As noted in Section 4.12, the 2030 General Plan would accommodate development in new growth areas, as well as redevelopment in existing communities, that would involve construction of new physical structures and population. These new structures and population would create additional demand for fire protection services, over current demand levels. Some land use change and development accommodated under the General Plan would continue to be served by existing facilities without the need for expansions or new construction. However, buildout of the General Plan would increase the demand for services that would likely require the construction of new fire protection and emergency response facilities in order for the relevant fire protection agencies to meet their level of service standards, including response times, if applicable. In the event that one of the fire protection agencies requires the development of additional fire protection facilities in order to maintain current levels of service, the construction of new facilities could have

adverse effects on the physical environment. The majority of new development under the 2030 General Plan would occur within the Valley Growth Boundary. It is anticipated that new fire protection facilities would be constructed within planned development areas in the Valley Growth Boundary. Fire protection facilities, along with other public facilities, would be expected to be located within the overall footprint of development envisioned as part of the 2030 General Plan in the Valley Growth Boundary.

It is not possible at this time to describe the precise location and characteristics of fire response facilities that may be required. Land use change that occurs in Rural Communities served by foothill fire protection districts could require additional facilities. However, these facilities would be expected to be developed within Rural Community areas, the development of which is considered throughout the environmental chapters of this EIR. The impacts of construction and operation of facilities serving the Valley Growth Boundary and Rural Communities are included in the programmatic analyses described throughout this EIR. Both direct and reasonably foreseeable indirect adverse effects are analyzed at a programmatic level in each of the individual subject area sections of this EIR.

The General Plan provides an overall guide for development and conservation in the County over the long-term, including ensuring adequate access to the full range of public services, facilities, and infrastructure. To support the County's goal for fire protection, the 2030 General Plan includes policies intended to maintain adequate levels of service for fire protection for both existing and new residents. Implementation of these policies and actions from the 2030 General Plan listed above would ensure that new development, including potential development that could occur in higher wildfire risk areas in the foothills, is in compliance with fire codes and regulations designed to reduce the risk of a catastrophic wildfire. The County's proposed policies and actions also address fire response and the provision of fire protection. The 2030 General Plan addresses funding and construction of fire protection service facilities to serve new development. The 2030 General Plan also addresses the wide range of public health and safety problems that could lead to the need for emergency response, reducing the potential for such problems and ensuring the effectiveness of response, if needed.

2 The comment requests specific language in the 2030 General Plan to ensure that new development will provide adequate funding or facilities for fire protection. The commenter is directed to Policy CD12.8 within the Community Development Element which requires new development to contribute funds, construct, or otherwise provide for law enforcement and fire protection facilities needed to serve new growth.

3 The comment reiterates suggestion that the 2030 General Plan include language to ensure that new development be held responsible for providing for fire protection facilities or funding. The commenter is directed to Policy CD12.8 within the Community Development Element, which requires new development to contribute funds, construct, or otherwise provide for law enforcement and fire protection facilities needed to serve new growth.

MJUSD

Marysville Joint Unified School District

1919 B Street ~ Marysville, CA 95901 PH: 530 749-6174 FX: 530 741-3718

February 7, 2011

RECEIVED
FEB - 9 2011
Yuba County Dept. of Planning

Mr. Dan Cucchi
Project Planner
Yuba County Planning Department
915 8th Street, Suite 123
Marysville, CA 95901

Subject: Comments on the Draft Environmental Impact Report for the Yuba County General Plan

Dear Dan,

Thank you for the opportunity to comment on the Draft EIR for the Yuba County General Plan. On September 13, 2010, the Marysville Joint Unified School District (District) provided comments on the General Plan as it related to school policies. This letter is attached for your review.

The following are specific comments concerning the Draft EIR (page 4.12.2):

The District currently complies with SB 50 which was passed in 1998 for funding new school facilities. The District has made every attempt to maximize State facilities bond money through this program.

A School Facility Needs Analysis is completed every year as required by law to determine the level of school impact fees. Currently, based upon the September 2010 School Facility Needs Analysis, the District is levying a Level II fee of $4.41 per square foot on residential development. In addition, the District levies a Level I fee of $.47 on all commercial and industrial square footage. 1

As pointed out in the Draft EIR, Level III developer fees are collected when the State declares it is out of funds for new construction (California Code of Regulations, Section 65995.7). Level III developer fees would include both the District's share and the State's share which under the current School Facilities Needs Analysis (2010) would be $8.82 per square foot of residential development. The additional funds collected under the Level III fees would be reimbursed to the developer if the state share became available.

The District would like to point out that there is a good possibility that the Level III fee will be implemented sometime in the near future. The last State Facilities Bond (Prop 1D) was approved in 2006. No school bond was on the ballot in 2010 and since school bonds are only placed before the voters in even numbered years, the next possible school bond would be in 2012. In addition, available state school bond funds have not been sold in a timely manner forcing school districts in California, such as the Marysville Joint Unified School District, to wait on an unfunded list since December 2008 for school project funding.

The combination of lack of State bond sales, the potential of exhausting state bond authority and the State not placing a new bond on the ballot will create a significant financial impact on the District. 1 cont'd

Please add the following to the School Siting Criteria on page 4.12.3:

1. California Government Code Section 53094: This article does not require a school district to comply with the zoning ordinance of a county or city under certain conditions. A school board, by a two thirds (2/3) vote, may adopt a resolution to this effect for school uses on property owned by the District.

2. CEQA Section 21151.2: This section states that the District must submit a notice to the planning commission in writing of the intent to purchase property. The planning commission has 30 days to respond in writing. If the response does not agree with the acquisition of the property, the District must wait an additional 30 days to acquire title. The District does not have to respond to the planning commission recommendation and the governing board does not have to make written findings when taking action on the proposed school project. 2

3. California Education Code, Section 17210 and 17213.1: School sites need approval from the Cal EPA Department of Toxic Substances Control prior to acquiring property for school use. This approval is especially difficult in the Foothill areas of Yuba County where natural occurring asbestos is sometimes located. Acceptable levels for school sites are at lower levels than for residential uses.

In conclusion, the District feels that there will be a significant adverse impact on school facilities if Level III developer fees are imposed on residential development and/or if the State is no longer able to approve and issue bonds for construction of new facilities. Impact 4.12-3 on page 4.12-20 indicates that the collection of school fees will result in a less then significant impact. 3

It is requested that the County note this school facility funding issue in the General Plan. All future development projects will be financially impacted if State facility funding is not available or is altered due to the serious economic issues facing the State.

Thank you again for the opportunity to review the General Plan Draft EIR and for considering our comments.

Sincerely,

Mark Allgire
Assistant Superintendent Business Services

Marysville Joint Unified School District
1919 B Street Marysville, CA 95901 (530) 741-6000 • FAX (530) 742-0573

September 13, 2010

Dan Cucchi, Project Planner
Yuba County Planning Department
915 – 8th Street, Suite 123
Marysville, CA 95901

Subject: Yuba County Draft General Plan; Comments from the Marysville Joint Unified School District

Dear Dan:

On behalf of the Marysville Joint Unified School District, we would like to submit comments on the Draft General Plan for Yuba County. Since we are most concerned with the elements that impact schools, we will provide comments on those elements of the Draft General Plan and provide some additional proposed language for the plan. In this letter we also wish to characterize the unique needs of the District, and discuss State and District standards and requirements for school facilities.

Overview of Marysville Joint USD

The Marysville Joint Unified School District is a growing school district serving the communities of Marysville, Linda, Loma Rica, Olivehurst, Challenge, Brownsville, and Arboga in Yuba County, California. The District operates twenty-four schools, serving students in grades kindergarten through twelve with additional programs for pre-school and adults. 4

Enrollment in grades K-12 for the 2009-10 school year was 10,073. Many schools are operating close to maximum capacity and rely on temporary classrooms to accommodate students. Several projects are being designed to provide additional space.

Residential Housing and Enrollment Growth

Historically, the District has experienced rapid growth in enrollment over the last nine years. For the last five years, there has been an average new residential construction rate in the District of approximately 438 units per year totaling 2,189 homes. The rate of new housing has been much less for the last two years.

Five-Year projections:

Projecting the average rate forward and adjusting for economic slowing, we would expect that approximately 2,000 units of residential housing will be built within District boundaries over the next five years. Future enrollment projections indicate that school enrollments for 2015-16 school year will be 11,734, an increase of 1,661 students.

Ten-Year projections:

The District also tracks residential units that (1) have been approved and ready for construction, (2) approved tentative tract maps, and (3) projects that are being considered but not formally approved. The following is a summary of these categories, based on 2008 data: (numbers are approximate.)

- 4,700 Units Ready For Construction
- 4,800 Units Approved Tentative Maps
- 8,400 Proposed Projects

In evaluating the need for new school projects the District uses an average student generation factor (updated every two years) of .560 K-12 students per housing unit. This can be further broken down as follows:

- 0.319 students for K-6
- 0.075 students for 7-8
- 0.166 students for 9-12

4 cont'd

Using student generation factors, new dwelling units projected from approved projects, tentative tract maps and projects under consideration would generate approximately 9,700 students. This would require the site acquisition and construction of up to fourteen new schools over the next ten years.

District Facility Needs

The most pressing facility needs of the District are summarized below:

- Alicia Intermediate School Site: Accommodate the replacement of the Alicia Intermediate School, as a result of health and safety issues at the site.
- New Intermediate School Site in East Linda Area: We plan to develop a new school site in the East Linda to accommodate the Alicia students and enrollment growth in the East Linda Area. This site on Hammonton Smartville Road is currently in eminent domain.
- New Middle and High School Sites in Arboga/Plumas Lake Area: We plan to develop 75 acres of District-owned property in the Arboga/Plumas Lake area to accommodate enrollment growth in the area.

- New High School Site in Loma Rica Area: Look for a suitable site in the Loma Rica area to accommodate enrollment growth in the area, initially operating as a grades 7-12 school.
- New/Rehabilitated Elementary and Intermediate Schools in Loma Rica Area: The construction or replacement of elementary and intermediate schools may be needed in the Loma Rica Area to address enrollment growth and/or health and safety issues.
- Improvement/Rehabilitation/Additions – All Sites: The District is planning to make improvements, rehabilitations, and/or additions at all school sites in the district.
- Enrollment Growth and Future Schools: Studies of projected enrollment growth from new development in the South area alone indicate that the District will need at least 14 future school sites over the next ten years.

4 cont'd

State and District Standards for School Facilities

In planning for School sites and facilities, the following state standards and guidelines should be considered:

1. School Acreage Needs; CDE Guidelines and District Policy:

The California Department of Education (CDE) recommends certain minimum school site sizes based on grade levels and student enrollment. District policy has established an optimal school site size based on these factors, as listed below.

12.0-15.0 acres for an elementary school of 500-600 students
25.0 acres for an intermediate school of 800-1,000 students
50.0 acres. For a high school of up to 1,500-1,800 students

2. Safety Issues and CDE Approval:

5

In most cases, CDE will review and approve the future site, so it is important that proposed sites be evaluated in terms of CDE standards, which are found in California Code of Regulations, Title 5, Sections 14001 to 14036. The Title 5 Standards cover a wide range of safety issues, including proximity of the site to earthquake faults, major power lines, gas pipelines, railroads, and other hazards. CDE also considers the importance of providing utility and public works infrastructure to be in place prior construction of new school facilities.

3. Toxic Issues and DTSC Approval:

It is important to evaluate proposed school sites for toxic issues, such as pesticides and naturally occurring asbestos, prior to school site selection. These evaluations should be based on requirements established by the State Department of Toxic Substances Control, which will make the final determination regarding the safety of the site.

CDE considers all these factors in evaluating the size and location of new school sites.

Comments on the Draft General Plan

The District is most concerned with the proposed policies in the plan that will directly impact schools. Most of these policies are found in the Community Development Element, especially in the section on Infrastructure, Facilities and Services. Please be assured that the District generally supports several important policies in the Yuba County Draft General Plan, as noted below.

Page	Policy #	Subject	Text
45	CD12.10	Impact Fees	*The County will ensure that new development projects provide impact fees, land dedication, school construction, or other measures acceptable to local school districts.*
47	CD14.5	Pedestrian and Bicycle Access	*The County will coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.*
47	CD14.6	Joint-Use Facilities	*The County will support joint-use facilities, shared maintenance, and projects with other local service agencies and districts that are coordinated to provide enhanced public levels of service and/or long-term cost savings.*
47	CD14.7	Joint-Use Parks and Libraries	*The County will support and encourage joint-use parks for school and community use, joint-use parks for recreational and drainage conveyance and detention, for school and community use, and other appropriate joint-use facilities.*
49	CD15.8	Joint-Use Parks	*The County will encourage the joint-use of parks for school and public use, as well as stormwater detention, as appropriate.*
49	CD15.9	Safe Access	*The County will require that new developments include safe and convenient access to nearby schools and work with the local school districts to ensure safe access.*

5 cont'd

Additional Proposed Language

The District wishes to provide some additional proposed language for the Draft General Plan, as noted below.

1. Planning for School Sites/Facilities Policies:

    a. The County will work cooperatively with school districts in monitoring housing, population, and school enrollment trends, and in planning for future school facility needs, and shall assist school districts in locating appropriate sites for new schools
    b. The County will ensure that utility and public infrastructure be in place prior to the construction of new school facilities.
    c. The County will ensure adequate road and frontage improvements, necessary hook-ups to all utilities, and adequate area for bus turnouts.
    d. The County will designate future school sites free of toxic contamination.
    e. The County will amend existing Specific Plans to reflect current State and District standards and requirements for school site location, site size, and infrastructure needs.

2. Joint-Use of Facilities and Sites: The County will encourage the use of schools as community centers to provide a range of services.

3. Facility Needs/Funding and Timelines

    a. The County will work to ensure that the provision of adequate school facilities is a community priority.
    b. The County will work closely with school districts together to secure adequate funding for new school facilities and, where legally feasible, the County will provide a mechanism which, along with state and local sources, requires development projects to satisfy an individual school district's financing program based on their impaction.
    c. The County will coordinate with residential developers and school districts to ensure that needed school facilities are available for use in a timely manner. The County will, to the extent possible, require that new school facilities are constructed and operating prior to the occupation of the residences which the schools are intended to serve.
    d. The County will support full mitigation for school construction.

5 cont'd

We thank you for your consideration of these comments. Please contact me at (530) 749-6115 if you have any questions.

Sincerely,

Mark Allgire
Assistant Superintendent, Business Services

Marysville Joint Unified School District

1919 B Street ~ Marysville, CA 95901 TEL 530 749-6174 ~ FAX 530 741-3718

LETTER OF TRANSMITTAL

To: Dan Cucchi
Company: County of Yuba, Planning Department
Address: 915 8th Street, Suite 123
Marysville, Ca 95901

Phone:

Date: 9 February 2011

RE: Yuba County Draft EIR

Program: Marysville Joint Unified School District

Project: Yuba County General Plan

Delivered Via Hand

Item:

☒ Attached ☐ Under separate cover via

Copies	Date	Description
1	2.7.2011	Comment letter on the Draft Yuba County CEQA EIR

Transmitted:

☐ For your information ☒ Review and comment ☐ For your use
☐ As requested ☐ Revise and resubmit
☐ Other

Remarks:

Michal Healy, Director of Planning and Design
Facilities Department

CC:

RECEIVED
FEB 09 2011
Community Development & Services Agency

1 The comment provides information about school related legislation, school facility planning, impacts fees, bond funding for schools, and issues related to bonds on ballot measures and delays in selling sate school board bonds. The commenter indicates that there are significant financial impacts on the School District due to issues associated with school funding. This comment does not suggest that the DEIR is in any way inadequate for addressing environmental impacts of the 2030 General Plan. Policies such as CD12.10 and CD12.15 demonstrate the County's commitment to adequate provisions for school facilities and funding.

2 The comment suggests the addition of language regarding school siting criteria be added to Section 4.12.2, "Environmental Setting," of the EIR. Please refer to the School District comment letter, which is provided in this section. Please refer also to Section 4.12.1 of the DEIR, which includes a summary of relevant regulations related to public services and facilities, including school facilities. The DEIR summarizes California Education Code requirements related to school funding. The DEIR summarizes California Department of Education guidance for school facilities site selection and building characteristics. As noted, certain health and safety requirements are governed by state statute and CDE regulations, such as issues related to proximity to airports, proximity to high-voltage power transmission lines, presence of toxic and hazardous substances, high-pressure gas lines, hazardous air emissions and facilities within one-quarter mile, and proximity to railroads.

3 The comment indicates that if Level III developer fees are imposed on residential development or if the State no longer is able to approve and issue bonds for construction of new facilities that there would be a significant adverse impact on school facilities. The comment requests that the 2030 General Plan acknowledge the possibility of financial impacts to the District if State facility funding is altered or unavailable. This comment is forwarded to the Board of Supervisors for their consideration.

The DEIR comprehensively addresses potential impacts related to school services in Section 4.12, including a description of existing conditions and regulatory requirements, impact analysis, and significance characterization. As noted, school facilities will be needed in Yuba County, impact fees would be required to go toward funding and construction of any additional facilities needed, and the California State Legislature has declared the school impact fee to be full and adequate mitigation under CEQA. Although a cumulative shortage of public services and facilities would not represent a significant environmental impact under CEQA because these are no physical impacts on the environment, such a shortage could lead to the need to develop additional public-services facilities, which could in turn lead to significant construction- and operation-related environmental impacts. Please refer to Section 4.12 of the EIR.

The County does not set school impact fees and, as such, does not intend to conduct analysis of the relationship between impact fees and school construction costs. According to Government Code Section 65995 (h):

"The payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section

65995 and, if applicable, any amounts specified in Section 65995.5 or 65995.7 are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities."

According to Government Code Section 65996 (b):

"The provisions of this chapter are hereby deemed to provide full and complete school facilities mitigation and, notwithstanding Section 65858, or Division 13 (commencing with Section 21000) of the Public Resources Code, or any other provision of state or local law, a state or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization, as defined in Section 56021 or 56073, on the basis that school facilities are inadequate."

4 The comment provides an overview of the Marysville Joint Unified School District. The comment does not include any issues related to the contents or adequacy of the DEIR. The comment is included in its entirety for Board of Supervisors consideration.

5 This comment provides state standards and guidelines for school sites. The comment suggests additional language for the 2030 General Plan. The comment does not include any issues related to the contents or adequacy of the DEIR. Changes have been made to general plan policies which reflect these suggestions. In particular, the commenter is directed to Policy CD12.10 and CD12.15.

Gon, Tony

Oregon House/
Dobbins Comm.

From: Cucchi, Daniel
Sent: Wednesday, February 09, 2011 8:34 AM
To: Gon, Tony
Subject: FW: 2030 General Plan Draft EIR Comment
Attachments: homecohdcom1public_htmlfilesCommunity Planning Committee Minutes.pdf

Please include the email as a cover to the attachment as well.

Dan Cucchi
Project Planner
County of Yuba
(530) 749-5470
Add your voice to the General Plan Update!
www.yubavision2030.org

RECEIVED
FEB - 9 2011
Yuba County Dept. of Planning

From: community planning [mailto:cohd@cohdcommunityplan.org]
Sent: Tuesday, February 08, 2011 11:45 PM
To: Cucchi, Daniel
Subject: 2030 General Plan Draft EIR Comment

February 8, 2011

Mr. Dan Cucchi

Yuba County Planning Dept.

915 Eight Street, Suite 123

Marysville, CA 95901

Dear Mr. Cucchi:

Re: 2030 Yuba County General Plan Update,

Draft EIR (DIER) (SCH No: 2010062054)

Community Planning Minutes

The community planning website for Oregon House/Dobbins would like to submit the community planning committee minutes to date.

Thank you,

Oregon House/Dobbins Community Planning Website

cohd@cohdcommunityplan.org

By: Main Planning Committee
Posted: 7/23/2010
Subject: 7/13/2010 Community Planning Committee Minutes

MINUTES of 7/13/10 DOBBINS/OREGON HOUSE COMMUNITY PLANNING COMMITTEE Hosted by DOACT

Prior to the printed agenda being introduced, Greg Crompton read a position paper covering the topics of the invitation to Kevin Mallen, the apparent uncertainty of the committee as to the timing of its input into the GPU process, the committee's apparent need for guidance (hence the idea of inviting Mr. Mallen), and the suggestion that the Committee's goals of reducing the County's intrusive regulations over our private property rights could be better pursued through political action.

Some attendees expressed regret that Mr. Mallen was un-invited, noting that past meetings have been "chaotic" and Committee members appear to need some guidance. Mr. Mallen had been contacted independently after the invitation, and he agreed by email that postponing his visit until after the release of the draft GPU might be useful; however this may not have reflected the majority view of the committee. Neither the invitation nor the postponement was discussed at the last committee meeting; thus clearer communications are encouraged to avoid future misunderstandings.

Agenda Item 1—Janet Marchant (as temporary secretary) introduced the Agenda; no additional agenda items were tabled. The 6/29/10 Planning Committee meeting was briefly reviewed.

Agenda Item 2—Discussion of the July 7 Scoping Meeting on the EIR for the GPU. Charles Sharp read a brief summary of the event, noting that Planner Dan Cucchi had stated that planning staff were researching grant funding for Community Plans, and that no separate EIRs will be required by individual communities—which would be "tiered under" the main EIR. Dalia Cahill said the presence of several people from our community was important, and that we "asked the most questions." She recommended that whenever important meetings might impact our community, people should try to attend.

There was a motion from Nick Spaulding, seconded by Tom Richards, and carried by vote of hands, that a letter be written from DOACT—as monitoring entity of the Planning Committee—to a) record our interest in the EIR scoping process, and b) to thank them for their efforts to find grant funding for Community Plans. Rod Hisken suggested that the letter should "open the door" to an on-going collaborative relationship with County planners, and express our community's vital interest in the County's planning process. Greg Crompton explained that approval from DOACT (or the DOACT Board) would be needed before he could sign the letter, and Nick Spaulding, with help from Rod Hisken, agreed to prepare a draft.

Erik Johnson made a motion that Janet Marchant serve as the Committee's Secretary, seconded by Rod Hisken and carried by show of hands.

Agenda Item 3. – Reports from sub-committees that have met.

Mission Statement Sub-Committee: members have talked and are working on alternative statements; they will also compare the Statements in the 2 previous plans.

Land Use Sub-Committee: members are studying land uses in other Counties and also reviewing the River Highlands plan.

Website Sub-Committee: working on the Discussion Forum page to allow for exchanging opinions, and explained briefly how to communicate with the website, and with other planning members via the website. This committee will organize a workshop to teach members how to use the website.

Boundary Sub-Committee: they met, but wish to wait until the GPU Draft is released. Nick Spaulding suggested that they should in the meantime try to find out how the current community boundary was originally determined; Nick had tried to find out from the County, but no one knew the history. Erik had also

drawn a blank on this research.

By-Laws Sub-Committee: Charles Sharp reported that he had posted a set of by-laws from another Community Planning group in California, modified to fit our area. He said this was only a first step—as it will be long process. He also suggested a name for the committee: "Planning Committee for Dobbins-Oregon House". He also showed an "area of affiliation" map intended to cover an area where most people affiliated with our community (by property ownership, business ownership or residency) lived.

On the topic of By-Laws, Shirley Crompton reminded the group that DOACT was formed as a community organization, so why was the planning committee wanting to set up a new organization with a new set of by-laws, if that was indeed the intent, or did the planners wish to be under the umbrella of DOACT.

Discussion of this question included the benefits of being a subcommittee of DOACT, or whether the single project-focused nature of the Planning Group would require a separate set of by-laws. It was suggested that the By-Laws Subcommittee should study the DOACT By-Laws as well as by-laws from existing Community Planning groups in California and report back to the main committee. Greg Crompton explained that if being a subcommittee of DOACT is preferred, then the main committee meetings would need to properly publicize the meetings (via Rabbit Creek Journal, etc.) but that the subcommittees could meet at their convenience. The subcommittees would report to the main committee; then the recommendations of the main committee would be presented at a general or special meeting of DOACT. DOACT would not need to vote on the material. At the stage something would be presented to the County, DOACT would need to approve it if a recommendation in support of the Plan is to be included.

1 cont'd

It was agreed to discuss this further after a report from the By-Laws subcommittee. There was no Motion on the discussion.

Agenda Item 4 & 5 –Work of the Subcommittees.

Discussion of ways of communicating among members of each group via the website, and beginning tasks for the subcommittees to get started on. It was recommended that volunteers who have not yet joined a subcommittee should try to do so.

Henry Davis reminded volunteers of the idea of everyone writing down their own list of 10 (or fewer) what they want the community to look like, and what is right or wrong with our community. It was agreed that the website will email everyone a link to post their ideas. Donna Corson suggested that sharing our personal views would help to find consensus, and attendees agreed that sharing our views will help to focus our ideas and provide some direction.

It was also suggested that these lists be compared against what is provided in the previous community plan as well as what is recommended in the 2001 Community Action Plan.

Agenda Item 6 – Temporary Officers - Discussion of rotating system of temporary officers for the committee. Janet Marchant agreed to facilitate one more meeting.

Agenda Item 7 – next meeting of the main Planning Committee will be 7pm, July 27 at the Grange.

By: Main Planning Committee
Posted: 8/8/2010
Subject: 7/27/2010 Community Planning Committee Minutes

MINUTES OF PLANNING COMMITTEE MEETING
JULY 27, 2010
DOBBINS GRANGE
Number of Volunteers in Attendance: 25

1. Janet Marchant called the meeting to order and read the minutes of the last meeting held on July 13, 2010.

2. She also stated that she was leading only this meeting and that a Secretary to take minutes of the meeting was required.

3. Bryan Dozzi volunteered to take minutes as Secretary for this meeting.

4. Janet Marchant passed out copies of the Agenda for the evening's meeting and asked that people download it from the web site to save cost,then she read the Agenda for the Meeting that evening.

5. Henry Davis raised a point as to who is eligible to vote at the meetings. Janet Marchant stated since this group of volunteers were operating under the auspices of DOACT, then their requirement of 3 meetings attendance for qualification of voting rights. After a little discussion, it was stated that anyone who attends these meetings is eligible to vote and this was the general consensus of all present.

1 cont'd

6. Henry Davis suggested as many different means be utilized to bring the information of the Committee out to the community at large not just the internet and the local papers. Janet Marchant said the Communication/Transparency Committee would take due note of this suggestion for future meetings.

7. Nicholas Spaulding then raised a point of the need to have an accurate map of what the forthcoming County Community Plan entailed for our community as he stated the current map being displayed was not accurate.

8. Charles Sharp said he would post an accurate map on the local community plan website.

9. Janet outlined the work done by volunteers who wrote letters to the County re the EIR as pertaining to Agenda Item 2 of the evening. Five volunteers submitted letters and these letters are posted on the website. Peter Hammontre said these letters are also with the County.

10. Janet then proceeded to Agenda Item 3; Subcommittee Reports.

11. Charles Sharp presented the Bylaws Subcommittee information. He passed out a 2 page summary of work in progress. A lively discussion arose as Greg Crompton felt the Bylaws Subcommittee was over stepping its boundaries re DOACT bylaws and resulting conflicts. Nicholas Spaulding pointed out through a blackboard diagram where possible confusion might arise re the idea of "subcommittees" and that only the Chairman of the larger Subcommittee would act as a liaison for the various planning subcommittees to

DOACT.

12. Tom Richards stated that as a viable subcommittee we must have our own bylaws if we are to be looked upon as a presenting a community consensus on County plan issues,Shirley Crompton stated that it appeared what the Committee was doing was a waste of time.

13. Dahlia Cahill responded that this present volunteer committee was set up to review the forthcoming County plan and EIR and secondly to draw up a local Community plan that had our local community interest at heart.

14. More discussion took place and to save time Janet Marchand called for a vote as to whether the Bylaws Committee continue to proceed. The issue of the legality of any vote was brought up and it was addressed by Ron Hisken, Henry Davis, Eric Johnson, Sheryl Holt. There was a lot of disorder that was finally calmed and the general consensus was to allow the Bylaws Committee to continue its work in progress.

15. Jenny Cavalier presented the Land Use Subcommittee report. She stated that they were emphasizing the need for a a town center with cottage industries at its hub. They were reviewing and gleaning information from the 2001 DOACT plan and the more recent 2010 plan which they found very useful. She stated that they were waiting for the Draft to come out before hard lining any material. This view was reiterated by Dahlia Cahill another member of the same subcommittee.

16. Jenny then asked Hal Stocker when he figured the draft would be out. Hal stated he had spoken to the County rep and he stated "in a couple of weeks" to which Hal added he doubted this timeline. He also expressed doubt that the County plan would be fully enacted by the December 2010 deadline. 1 cont'd

17. Ron Hisken then presented the Mission Statement information. He said their subcommittee was working well and he valued the input from the this subcommittee's volunteers. He stated that at present it was premature to forward a mission statement and it was best to wait until the draft came out from the County. This subcommittee also drafted a list of bullet points to aid in the furthering of discussion and ideas re the community plan. Copies of the bullets were passed out for anyone interested.

18. Tom Richards presented the information from the Boundary Extension subcommittee. He said that a response to the DOACT commentary presented by Greg Crompton at the first meeting of the subcommittee was posted on the Community plan website and open for comments by all interested.

19. Dave Soares asked Janet Marchant concentrate the meeting at this time on appointing a Chairperson to hold the meeting in order. Janet asked for nominees for the Chairperson and Eric Johnson nominated Dave Soares and seconded by Bryan Dozzi. An unruly discussion then ensued in which Dahlia Cahill, Jenny Cavalier, Charles Sharp, Nicholas Spaulding and others felt it was too premature to elect a Chairperson. Pete Hammontre stated that Dahlia had to make an amendment to the motion and she did after further discussion ensued. Greg Crompton intervened and stated that as far he was concerned in all he had done for DOACT Dave would be a really good Chairperson. A vote was taken on the amendment and it was not carried. A vote on the nomination of Dave Soares was taken with 14 for 5 against and 6 abstainees. Dave Soares would be the Chairperson for the next meeting.

20. Janet Marchant stated that it would be useful to utilize the Alcouffe Center on days it was open to the

community so it was suggested the next meeting be held there. It was also suggested that subcommittees could meet there also.

21. Nicholas Spaulding then raised an issue as to where the group was heading and stated that given the forthcoming Draft and the EIR. it would be best if those volunteers interested in pursuing a local community plan be allowed to continue on their own path while the rest of the volunteers concentrate on the EIR and the County plan draft. Nick's idea was noted but no direct action was taken.

22. Donna Corson wished it to be noted that her inclusion in the letter forwarded to the County re the EIR in which her name was included was not authorized and she did not want to be associated with the content of the letter.

1 cont'd

23. Dave Soares called for the meeting to be adjourned, but before the vote was called for Janet Marchant wanted the next meeting date and place clarified. The next meeting was to be held on THURSDAY, AUGUST 19 at the Alcouffe Center at 7 PM.
24. Eric Johnson seconded the meeting be adjourned.

a) Minutes compiled from Notes Taken and Cassette tape kindly supplied by DOACT's Greg Crompton.

b) Attendance Record supplied by Shirley Crompton

Bryan R. Dozzi.
Secretary for July 27, 2010 Meeting.

By: Main Planning Committee
Posted: 8/24/2010
Subject: 8/19/2010 Community Planning Committee Minutes

Minutes of Planning Committee Meeting: August 19, 2010

Number of Attendees: 23

1. Dave Soares, Chairperson, opened the meeting and read the Agenda for the meeting.

2. He asked that a Co-Chairperson, a Secretary and a Treasurer be nominated and be elected during the meeting. After a small discussion, Bryan Dozzi was to take minutes for the meeting until a Secretary was elected.

3. Subcommittee reports were asked to be given.

4. Mission Statement: Donna Corson reported there was no information at this time. It was noted Catherine Summers had withdrawn from further participation in the subcommittee. Donna further stated that the process was not simple and would take time.

5. Greg Crompton drew attention to an error in the Minutes of the last meeting, specifically Item 15. It was duly noted for correction and accepted for revision by the Chairperson.

6. A discussion arose as to where the Minutes of the Meeting were posted and also about notification of the time and place of the meeting.

7. It was pointed out that the minutes were posted on the COHD website and notification of the meeting was posted in the Rabbit Creek Journal as well as on the COHD website and on the poster boards in Dobbins and Oregon House.

1 cont'd

8. The Chairperson raised a point as to the trying to consolidate the two websites used in the community to avoid confusion. It was noted at this time that Jonathan Beth, the creator of one of one of the sites would be unable to attend further meetings due to schooling if meetings were held Tuesdays or Thursdays. The Chairperson said he hoped the meetings could be held on a day other than Tuesday or Thursday.

9. A question arose as to the access of the general public to the sites and there seemed to be confusion as how the sites coordinated with each other and, in general, how they operated. Tom Richards asked that the matter be tabled until the next meeting with clarification on the issued at hand presented more thoroughly.

10. There was a point raised as to appointing a Secretary. Lew Neal nominated Bryan Dozzi and Dave Soares seconded the motion. Bryan accepted the nomination.

11. Boundaries subcommittee was addressed by Tom Richards. He stated there were discussions underway and more information would be presented at the next meeting.

12. Land Use Subcommittee information was addressed by Eric Johnson, He stated he had been in contact with 20 landowners of the south side of Collins Lake and had six more to contact. They were all in agreement that the 1996 Fish and Game 20/40 land parcel ordinance be changed to allow for 5 acre parcels.

13. He also mentioned that in the new Draft it was stated that 4 out of 5 Supervisors could vote to change a part of the Plan. Dave Soares stated that it depended on the part to be changed being an ordinance or a policy. An ordinance is more binding than a policy. Clarification on this point was called for and tabled to the next meeting.

13. In the subsequent discussion that followed, it was clearly noted that this Planning Committee's intention was to see how the General Plan would affect us here in the Foothills. Eric Johnson also pointed out that in the Draft it is stated business in the Foothill's is to be encouraged but the rural lifestyle be maintained without increase in population. It was also pointed out by Sheryl Holt that in a previous endeavor to encourage business here in the Foothills the idea was to create business that allowed for revenue to be generated but people would not remain here. It was pointed out that because of Special District status, we have a lot of power to wield as to how the General Plan can be changed if it adversely affects us. The County has to be made aware of this fact.

14. Land Use was addressed by Jenny Cavalier. She stated part of the subcommittee was on holiday and that the land use info be tabled to the next meeting.

15. Dave Soares introduced the idea of an Air and Water subcommittee. He stated that it was an important part of our lifestyle. In the discussion that followed it was noted that though he would like to be on the this particular subcommittee Dave Soares was declining to do so due a conflict of interest that might arise because he was the Chairperson. Tom Richards stated he had no objection to Dave being on this subcommittee but Dave stated it could be used to create dissension as it could be said as Chairperson he was influencing the direction of the subcommittee. It was also noted that 3 water districts effect the Foothills community and each of these water districts' effects on the community at large be examined. Tom Richards raised a point that air/water should be separate subcommittees. The issue was tabled and this subcommittee would progress as is and if it became too unwieldy, a separation would be made. Lew Neal volunteered to be on this new subcommittee.

16. Dave Soares raised an issue that a Proposition limiting the control of the County Planning Department be put forward. It was pointed out it was too late to do so and the cost to do so was $3000.00. Greg Crompton stated though it was too late now to do anything the Planning Committee should work on this item and present at a future meeting.

17. Agenda Items for Next Meeting

1 cont'd

18. Janet Marchant raised a point as to the direction of the Planning Committee and its seemingly slow pace. She also noted it was up to each subcommittee to get something going so discussion could take place. She asked Dave Soares what he planned to do to speed up the pace.

19. Dave answered that he agreed with her about the necessity to speed up the process and stressed it was time that the subcommittees actually present information for general discussion. He said he felt his job was to coordinate this action. He stressed it was necessary for the subcommittees to conceptually describe what direction they wished to go and subjectively put the direction into words. It was further noted that each subcommittee should have a leader.

20. Dave Soares asked if anyone present who wasn't on a subcommittee wished to join a subcommittee. Judy McCarty elected to join Lew Neal on the Air-Water Subcommittee.

21. Sheryl Hott wanted to make sure the Planning Committee addressed the obligation to protect community members personal information if they access and use the any site associated with the planning process. Dave Soares asked her to prepare some points which she thought might be useful to the further this aim.

22. It was also noted that transparency of any site used to collect and disseminate information must be of utmost priority. This idea was noted by members of the Communication subcommittee and info to be presented at the next meeting.

23. Dave Soares also wished that at the next meeting a consensus as to which of the two sites available would be utilized for future communication.

24. Donna Corson drew attention to the 10 Bullets presented by the Mission Statement subcommittee at

the last meeting and asked if any input had been noted. The general consensus was that they were noted but no real viewpoints were put forward. It was suggested in the discussion that followed that they are a good start for initiating feedback on the issues facing the Planning Committee.

1 cont'd

25. The next meeting was scheduled for September 1, 2010 at the Alcouffe Center

26. Eric Johnson moved the meeting be closed. Lew Neal seconded the motion. Dave Soares adjourned the meeting.

By: Main Planning Committee
Posted: 9/5/2010
Subject: 9/1/2010 Community Planning Committee Minutes

MINUTES OF THE COMMUNITY PLANNING SUBCOMMITTEE
OF SEPTEMBER 1, 2010.

The meeting was held at the Alcouffe Center.

No. of Attendees: 17

1.Dave Soares, Chairperson opened the meeting with a Roll Call. He asked that this subcommittee consider electing a Vice-Chairperson and a Treasurer as he believed such additional elected members would be nodded soon.

2. Minutes of the last meeting of August 19 were read . An error was pointed out by Pete Hammontre re item 13 pertaining to a misinterpretation of the idea of Special Districts and it was duly noted to be corrected by the Chairperson and the Secretary.

3. Jenny Cavaliere moved that the Minutes be adopted as read and amended. Janet Marchant seconded the motion.

4. Old Business was addressed with the first item being the coordination of the information sites utilized in the community. Janet Marchant addressed this business.

Janet gave an explanation of how the Cohd site operated utiilizing a very user-friendly handout provided by Charles Sharp the site technical advisor. 1 cont'd
Using the handout as a guide, she went through the different facets of the site and how they were interconnected and what they held.
A question arose from Dahlia Cahill as to whether the site could be used to contact each user of the site at the same time with a message.
It was pointed out that such a message would have to go through the Site Administrator before it would post.

Next Bryan Dozzi gave an explanation of how the Dobbins-Oregon House Exchange operated. He utilized a handout with info supplied by this site's Administrator, Jonathan Beth. It was noted that that Jonathan site was more a blog type site but still very useful to our community effort at providing useful information.

Jonathan Beth asked Charles about a particular aspect of the cohd site : Views : questions and Comments. Charles replied that it was an older subheading and had been updated to Posted Comments / Questions.

5. Next item of Old Business was a handout prepared by Sheryl Holt on website security and distributed to the subcommittee by Henry Davis. Both Charles Sharp and Jonathan Beth stated there were safeguards on their sites but would utilize any pertinent info from Sheryl's handout and incorporate it into their sites.

Jenny Cavaliere asked that a link to Fires be provided on the Cohd site and Charles stated he would do so.

6. Dave Soares asked that the Cohd site be adopted as the official site for the Subcommittee. Jenny Cavaliere moved that the Cohd site as set up by Charles Sharp be the official information site of the Community Planning Subcommittee.
Laurie Pringle seconded the motion.

7. Subcommittee Reports was next on the Agenda and input from the Mission Statement Subcommittee was called for. It was noted by Tom Richards that Ron Hisken was in Napa . Janet Marchant stated that this Subcommittee had prepared a list of bullets as part of the Mission Statement process that they wished the

subcommittee as a whole to comment on.
Charles Sharp pointed out that this Bullet handout was on the website under the appropriate subcommittee heading.
As there was no further discussion on the matter, it was tabled until the next meeting to await subcommittee input on the Bullets and new info from the Mission Statement people.

Dave Soares asked Charles Sharp for input from the Bylaws Committee.
Charles stated that as far as he understood the Bylaws Subcommittee had been rendered not necessary.
A discussion followed as such:
a) Dave Soares believed it was necessary to have Bylaws, but objected to the word Bylaws, as this he saw brought conflict with the DOACT bylaws and thus he thought "rules " for procedure was a better term.

b) Henry Davis raised the point hat a previous meeting it was voted that no bylaws were needed and most importantly, there was no motion to make the present subcommittee and official subcommittee of DOACT
Lew Neal agreed with Henry and said she wanted a motion to the effect that the present subcommittee become an official subcommittee of DOACT.
Peter Hammontre also agreed with Henry and Lew and said the subcommittee had nixed having Bylaws.
Greg Crompton stated that as far as DOACT was concerned this subcommittee would be better off to have its own rules of procedure and that confusion and dissension arose because of the idea that people thought the DOACT bylaws were being put in a very bad light. Charles Sharp stated that it was a bit ludicrous to proceed willy-nilly without some sort of rules of procedure.
Peter Hammontre stated why not use Robert's Rules of Order. Dave Soares pointed out very few had Peter's command of the rules and it could not be counted on they he be at each and every meeting.
Tom Richards stated he felt it was very necessary that this subcommittee have its own set of rules.
The discussion was finally brought to a close by the Chairperson calling for a motion from the floor.
Sandy Grabowski made a motion that the present Subcommittee become an official Subcommittee under the auspices of DOACT. 1 cont'd
Lew Neal seconded the motion.
Motion was unanimously adopted.
Tom Richards made a motion that the present Subcommittee create its own set of rules of Order.
It was seconded by Laurie Pringle
The motion was unanimously carried.
Henry Davis asked that for the consideration of the general public that the Rules of Order and Minutes be posted on the local community bulletin boards. There was a unanimous agreement that this be done.
Bryan Dozzi was asked to post the rules of the subcommittee on the bulletin boards in the community and he stated he would do so at the earliest convenience.
The Rules were posted at the moment on the official website.

8. Next the Land Use Subcommittee report was asked for. Janet Marchant stated that the Land Use people had passed onto to her for cross-referencing against the copy of the General Plan, their information on Land use. They wished to see if it was in keeping to what was in the Plan under Land Use.

9. Jenny Cavaliere stated that the Land Use subcommittee wisahed to have a camera ready document so that it could be utilized in a presentation, if need be, to the County and would be acceptable to the County. Janet then asked that the discussion be tabled until the next meeting so she could do her cross-referencing.

10. Safety, Fire and Evacuation subcommittee report came next. Tom Richards stated that the members on the subcommittee wished to prepare the same kind of pervasive document as the Land Use people. He drew particular attention to what he believed was a missing point in our ongoing discussions and that was General Plan Amendment procedures. He pointed out in his comments that, using a bed and breakfast as his example, that an individual wishing to open such a business legitimately and in compliance with existing and pending County Plan regulations would give the project because of the prohibitively high cost of doing

so which he estimated at between 100,000 to 300,000 dollars.
He detailed in his discussion, because of the hurdles an entrepreneur would have to face, it was of utmost importance to be able to amend the General Plan locally without the costly procedure now in place.

Pete Hammontre asked if Conditional Use Permits could be utilized in such cases and Tom pointed out , businesswise, funding for the endeavor would not be given to the individual from loan agencies such as a bank because conditional use permits can be taken away at the discretion of the County so the loan agency would be left holding a useless asset.
Tom was adamant in his assertions that unless General Plan amendment procedure be put into place future community development would be stifled.

Dave Soares interjected that he thought Tom's desire to have General Plan amendment as part of our process a bit premature as our endeavor was just in its infancy.
Walter Butcher agreed in principle with Tom and further stated that it was very necessary for us to see how what we are doing i.e. the scope of our present endeavor fitted into the General Plan of the County. He stated it is imperative that by the next meeting all of us have a clear understanding of where we stand with regard to our community plan in relation to the General Plan.

Dave Soares called for a motion to that effect.
Walter Butcher made a motion that a discussion be initiated at the next meeting to see how our subcommittee 's community plan dovetails into the County's General Plan.
It was seconded by Tom Richards.
It was unanimously carried.

1 cont'd

11. Dahlia Cahill raised an ancillary point in the discussion by pointing out that there was great dissatisfaction by the general public at the last County Plan meeting because of the short deadline given for public input into the draft of the Plan as it is now existent.. She gave the date of September 13 as the deadline which she stated is way too short for the Plan to be examined and commented on. She asked that as an official subcommittee that we write a letter of protest to ask for an extension on the public comments deadline.

Tom Richards made a motion that we, the subcommittee , ask the County to extend the public input date by 30 more days. Lew Neal seconded the motion. It was carried. Greg Crompton then stated that under his executive mandate in DOACT he could write a letter to the same effect. It was unanimously agreed such a letter would carry more weight with the County and the Board of Supervisors.
Dave Soares stated he would personally contact our Supervisor Hall Stocker to ask him to have the County extend the date of public input.

Greg Crompton stated he hoped the extension was sufficient time for the subcommittee to synopsize the Plan and have it in a form palpable for the community at large to understand at a general meeting.
Bea Cardoza pointed out that by our previous rejection of having Dan Cucchi attend our meeting we had missed a great opportunity to be accepted as a reliable community consensus point.

Pete Hammontre pointed out he doubted whether 30 days was sufficient time to prepare something the community at large would understand and accept and proposed a 6 month extension.

Charles Sharp also pointed out there are glaring procedural legal errors of how the Plan was put out without a proper EIR assessment. Walter Butcher also stated that he felt the adoption of the General Plan could not be stopped but that the extension would allow for the company behind the push to have the Plan ratified to face public input and have to deal with such input in a more than cursory way. It would also noted that a public outcry would cause the Board of Supervisors to become actively involved in the process because their constituents' concerns. Peter Hammontre hoped our objections would not jeopardize our final objectives and further stated that the use of retaining a land attorney be not borne by DOACT. Tom

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Richards stated that was not the intention of his comments and that he was pointing out a way to make the County pass attention. Dave Soares finally brought the discussion to a close by reiterating the fact that Greg would write a formal letter of protest on behalf of DOACT and the rest of us do our part in letting the County know, in whatever way we feel best able, that an extension is an absolute necessity. 2 cont'd

12. Under New Business Dave Soares opened by asking for a vote of thanks for Janet Marchant's role as Chairperson during the first two meetings. Shirley Crompton also asked for thanks for the work of the Subcommittee Secretary.

13. Janet Marchant asked that more new subcommittee's be formed such as a Plan amendment committee which also entail County permitting procedures.

Janet Marchant proposed that more subcommittees be formed one of which would involve how the County did its permitting business as well as procedures for amendment of the General Plan.
Lew Neal seconded the motion.
The motion was carried.

14. Public Input. Dahlia Cahill presented a cogent discourse on the harmfulness of Senate Bill S510: The Food Safety Modernization Act. She handed out some articles on the ill effects it would have on all of us especially the kind of draconian laws that it entailed that would, if implemented, cause virtually all organic and small food growers to curtail their enetrprises. It would also eventually lead to the shutdown of even home garden production and neighborhood sharing of food crops. 3

12. Dave Soares called for the meeting to be adjourned. The next meeting would be held at the same Alcouffe venue on September 15, 2010 at 7:00 PM.

Janet Marchant moved that the meeting be adjourned
Lew Neal seconded the motion.
Dave adjourned the meeting.

By: Main Planning Committee
Posted: 9/22/2010
Subject: 9/15/2010 Community Planning Committee Minutes
Minutes of DOACT Subcommittee on Community Plan
September 15, 2010.
Alcouffe Center

1. Greg Crompton opened the meeting and outlined the Agenda for the evening. He also had CDs of the Draft of the General Plan and handouts pertaining to his ensuing discussion.

2. He pointed out some points in the General Plan that, as they are stated in the Draft, could impact our communities negatively if left as they are.

3. He drew attention to the following points under Public Health and Safety:

a) Fire Risk Section 2.9 & 2.10

b) Community Development: pg. CD54 & pp.CD69-70
c) Public Health & Safety: Section 3.12 & Section 3.13

4. Discussion followed where other points of contention re the Draft were pointed out

a) Vision: pg 6; Public Health & Safety Pg. 4: 1.1

Property rights under Natural Resources.

4. It was agreed that by the next meeting each of the subcommittees go over the Draft with specific attention to the part that concerns their particular committee and flag any point that one believes would impact our communities negatively.

3 cont'd

5. A motion was put forward by Janet Marchant that DOACT write a letter to the Board of Supervisors to clarify and reaffirm their commitment to having the County allow 90 days for public input into the Draft before it is ratified. Tom Richards seconded the motion. It was unanimously adopted.

6. Dave Soares pointed out the necessity to get the Fire Safe people and the Water District people behind us in order for whatever we put forward to the County re the Draft has more weight. These groups , he pointed out , have overriding mandates re items in the Draft that the County may wish to implement that are not in keeping with what we here bin the foothills wish implemented. He stated that, in some cases, the County may deliberately wish to skirt around things so as to promote their version of what a community should be like and the Fire Safe and Water District people can thwart such endeavors through their state mandated powers.

7. Janet Marchant handed out her work on the correlation between 1996 GP and 2030 GP re Land Use She stated it was very similar to the 1996 Plan.

8. Dahlia Cahill pointed out that it was of extreme importance for the Natural Resources section to be scrutinized for it contained points that would impact our property rights negatively and our Foothills way of life.

9. Tom Richards stated that he and Charles Sharp would ask a very astute Land Use attorney, Thomas Eres, to attend our next meeting and they would bear the attorney's cost mutually. He said this man could really help us to focus our attention on key points in the Draft that would affect us badly if we did not

address them. The unanimous majority thought this idea was very good. Charles and Tom were thanked for their initiative.

10. Dave Soares reemphasized the necessity for each volunteer to go over the Draft and find points of contention that need to be addressed and bring the info to the next meeting. It was also emphasized that items found to be of questionable worth be flagged and posted to the cohd website with specific policy reference and section number noted.

3 cont'd

11. The next meeting was scheduled for September 29, 2010 at 7:00 PM.

12. Bea Cardoza moved that he meeting be adjourned. Lew Neal seconded the motion. Motion carried and the meeting was adjourned.

By: Main Planning Committee
Posted: 10/3/2010
Subject: 9/29/2010 Community Planning Committee Minutes
Minutes of DOACT Subcommittee on The Community Plan : September 29,2010.

1. The Chairperson, Dave Soares brought the meeting to order. He called on Walter Butcher make his presentation to the subcommittee. As Walter had not yet arrived, his presentation was tabled to a later part of the meeting.

2. Dave then called on Tom Eres, a land attorney, brought to the meeting under the auspices of Tom Richards and Charles Sharp, to address the subcommittee on community plans and the impact of the current draft of the County General Plan on our fledgling endeavor.

3 cont'd

3. Mr. Eres put forward the following ideas, comments and opinions.

4. His general comments and overview of the current GP process is that it is basically a staff/consultant driven document. He stated that it is so because of the fact the Planning Commission gauged that the public response to the formulation of the plan through attendance at various meetings was minimal. Thus, they created an unwieldy top-down document.

5. He also saw that as it exists the GP is fraught with administrative hurdles that would cause most anything brought forward for ratification to be stretched out indefinitely or cause the people involved to abandon the project ratification sought.

6. He then pointed some serious drawbacks to the viability of the plan as it is now stands. He showed how, at present, there is no EIR (Environmental Impact Report). The absence of such a document, which is of critical importance to the adoption of the GP, is a major Planning Commission error. He also pointed out that the GP does not even take into consideration the information contained in the Sphere of Influence Review and Updates and the Municipal Services Reviews and Updates. He pointed out the information in these LAFCO prepared documents illustrate the County's infrastructure and how the GP would affect the services available within the County over the duration of the GP timescale.

4

7. He also made the important point that the General Plan is like "the Constitution" of the County as it is to be the foundation for all future development within the County. It is therefore ill -advised to rush through the adoption of the GP without seriously seeing its overall implications and impact on the County. This means more public scrutiny and input.

8. He advised us to utilize a tried and true method of political process utilizing the ideas of : Ends, Means and Ways whereby the ultimate goal is set as a vision based on community core values, we gather the consensus of the Community on how this goal is to be achieved, and we find the means to fund the process. In following such a procedure, he pointed out the input gotten from the community could then become part of the Community Plan to be submitted to the Planning Commission and Board of Supervisors.

5

9. This process also "legitimizes" our endeavor with respect to the existing County ordinances and bylaws. He used examples of septic systems and zoning laws to illustrate his point. He further elaborated that by incorporating our –values into our Community Plan we, ourselves, are in control of the future growth and prosperity of our local community It is now not a top-down process where we, as County residents, are

relegated little or no say in how our community can develop.

10. He also stated that it is of major importance for us to consider the implementation of a Community Advisory Committee. This Committee would be one chosen from among our neighbors to act as the ultimate liaison between we, the people, and County government. He pointed out that, in his experience, such a Committee has more respect in the eyes of the overriding government body because it is recognized that the Committee represents the majority of people in the community. It also allows for diversity within the community on development issues to be handled democratically where all parties concerned have a voice in the final outcome.

11. He also mentioned that we must let the Planning Commission know and also the Board of Supervisors of our intent to form such a Committee and he also stated we should be too overly concerned with deadlines but try to meet them to the best of our abilities.

12. He also advised us to try to incorporate as large an area of influence as we possibly can rather than starting small and asking later for expansion. It is always better to downsize rather than upscale after the fact re boundaries as too much political hassle is encountered at the County level.

13. Dave Soares, then, asked for questions from the attendees to address to Mr. Eres.

14. Donna Carson asked for clarification on the idea of the creation of the Council and its method of operation. As stated above, the Council would be an elected body subject to Supervisory scrutiny and subject all the processes normal political appointees are subject to. The strength of the Council is in its ability to prepare and put forward Resolutions, Guided Opinions or Discussion Paper formats for ratification at the County level. The beauty of it all is that the County knows it is the consensus of the majority that is the meat of the items put forward and therefore requires the proper deference to such actions. 5 cont'd

15. Greg Crompton asked if such a Council formation would lead to untenable and over-burdensome strictures in the community sighting another community's fiasco with the process we are undertaking. Mr Eres answered, that you do not have to do anything about existing County ordinances etc. if it is not necessary. That way the Council operates with more flexibility.

16. Nicholas Spaulding asked about the timing of our current endeavor, given the current political atmosphere, and if Mr. Eres knew of any "cookie Cutter" community plans we could get access to in order to speed up and streamline our current endeavor. Walter Butcher asked a similar question stressing what Mr. Eres thought were key issues in regard to the current General Plan. He answered that, as far as his experience led him to believe, the passage of Prop 23 would be met by an already in-place set of changes by the consultants and that the speed of our endeavor should not of undue concern. He also mentioned that there are currently Community Plans on the web that we can access that might be of great use to formulating the content and language of our Community Plan. He also went on to point out that the current GP is based on a "Sustainable Community Map" format which in his view, and the majority of those in attendance, agreed is not a viable way to set up future development in the County.

17. He also drew attention to the "green" emphasis of the GP and its State and Federal overriding mandates. He also pointed out that the forthcoming Prop23 vote would seriously affect any "green" bias in the GP if it was passed.

18. Eric Johnson asked how he could incorporate absentee property owners from the Collins Lake area in

this on-going community plan endeavor as he did not have contact addresses for some of them. It was suggested that he could write a letter to them and seek their opinion on matters that would affect them. Kimberley Hayes also offered to help Eric to find addresses and contact these people if he so desired.

19. Janet Marchant asked if he thought the forthcoming Prop 23 referendum would make the current DP useless. Mr. Eres thought that if Prop 23 passes it would force the Planning Commission to discard a great deal of the GP , but he also restated that he believed the consultants already have a plan in the background to cover such an eventuality.

20. Walter Butcher presented a 3 page discussion paper on how a community could evolve and the paper was to be looked over and utilized in forthcoming subcommittee discussions. A more comprehensive discussion of the details of thee paper was tabled until the next meeting. 5 cont'd

21. Dave Soares asked that the next meeting be held in one week's time and it was scheduled for October 7, 2010 at 7:00 PM at The Alcouffe Center. There would be a change of room locations due to another meeting being held in the current meeting room.

22. Janet Marchant moved that the meeting be adjourned. The motion was seconded by Donna Corson, Dave Soares adjourned the meeting.

By: Main Planning Committee
Posted: 10/13/2010
Subject: 10/07/2010 Community Planning Committee Minutes
MINUTES of 10/07/10 COMMUNITY PLANNING MEETING

1. Roll Call and Minutes. Minutes were agreed passed per being posted on Community Planning website.

2. Discussion and approval that Kevin Mallen be invited to the 10/20/10 meeting of the Planning Group, as we want to indicate our openness to assistance from planning staff and we are at the stage of study of the General Plan Update where we can have a useful exchange. The volunteers also want Mallen's input on how to integrate the Community Plan into the GPU process. D. Soares will arrange.

3. Discussion of timing and format of our input to GPU to the Planning Commissioners and GPU Project Planner, Dan Cucchi. General agreement that individuals can submit their own written input directly, and that the group will also submit a written document. The timing of submission was discussed, including the importance of giving input timely—not on the 59th day of the 60 days, but at least at the half way point.

4. Discussion that the GPU Draft makes allowances for Community Plans, so that if we prevail with our suggested changes to the GPU, and our Community Plan fits the revised GPU, it can be integrated into the approval process.

5. Discussion of land use attorney Tom Eres' suggestions at the previous meeting, including the boundary question, and whether we should reach out to other Foothills communities. No resolution taken. 5 cont'd

6. John Winks asked about the pending Congressional Bill to regulate organic farming; discussion that this was another example of bureaucratic overreach which threatens our property rights. It was noted that the GPU Draft protects agriculture in general.

7. Discussion of how to involve the timber interests, which have been hurt by over-regulation. Possibly we may invite a representative of Chai Company or Soper-Wheeler to one of our meetings.

8. D. Soares suggested we consider the New York Flat reservoir in the Plan.

9. The remainder of the meeting was spent going over the GPU Draft with reference to a list of issues from Greg Crompton and other attendees. We covered up to page 50 of the Community Development Section (Section 5) and covered Sections 1-4.

10. Agreement to continue this detailed review at the next meeting, set for 10/13/10.

Attendees: John Winks, Walter Cotter, Jane Cotter, Dave Soares, Laura Pringle, Donna Corson, Janet Marchant, Shirley Crompton, Greg Crompton, Tom Richards, Charles Sharp, Kay Menzel, Earl Menzel, Dalia Cahill

By: Main Planning Committee
Posted: 10/16/2010
Subject: 10/13/2010 Community Planning Committee Minutes
MINUTES OF DOACT SUBCOMMITTEE ON COMMUNITY PLAN:

OCTOBER 13, 2010.

No. of Attendees: 12

1. Dave Soares, Acting Chairperson, opened the meeting with role call and called the meeting to order outlining the agenda for the evening's meeting.

2. Janet Marchant, Acting Secretary for the last meeting, stated the Minutes of said meeting were posted and available for perusal on cohd. website and on Non-attached website.

3. Janet also drew attention to the townhall meeting Supervisor candidate Andy Vasquez was having in Linda re the General Plan draft and its repercussions on his Area. She urged those present to try to attend the meeting and also to pressure our Supervisor and rest of the Supervisors for a thorough examination of the existing GP draft.

4. Nicholas Spaulding provided a phone number @ 749-7510 where more info on upcoming townhall meetings of a similar nature could be accessed.

5. Laurie Pringle pointed out an error in the Minutes of the last meeting in which the date for the invitation of Kevin Mullen to a Subcommittee meeting should read 10/20/2010 instead of existing 9/20/2010. Error was duly noted and to be corrected online by the Acting Secretary, Bryan Dozzi.

5 cont'd

6. Greg Crompton ,then, presented the rest of his assessment of anomalies in the Draft . He continued on from pg. 50 of the Draft.

7. A copy of his presentation was distributed among those present and his points of contention were presented and discussed.

8. Highlights of his presentation which were also highly endorsed by those presented included several references to ambiguous terminology and faulty references such as in Community Development Sect 61 & 63; 70:CD16.6 ;CD72,79 and especially CD80. Under Public Health and Safety exception taken with respect to HS4;6;7;13;14 . Details on website.

9. Nick Spaulding asked if Greg could put these observations in a letter to the Planning Commission attention to Tony Hon who he found out is the coordinator for getting public submissions such as Greg's to the Staff and Supervisors for their perusal and action. He agreed to do so.

10. The general consensus of those present was that input in the kind of detail presented by Greg Crompton was the way to get the GP draft properly assessed by the staff and the Planning Commission.

-2-

1. Dave then asked Charles Sharp to make his presentation on what he found to be of contention in the Draft. Charles passed out a copy his observations and discussion followed.

2. Highlights of his presentation were: a) HS3.12- re septic systems ;Vision pg 6 re parcel sizes;

Implementation ;consensus 4 of 5 ; NR7.13-re fees and actions. Other points on line in website.

3. He was also asked to submit this assessment to the staff which he agreed to do so.

4. Following both presentations a general discussion developed as to what to do when Kevin Mallen comes to the next meeting. It was generally agreed that we proceed in the same manner as we did when the land attorney, Tom Eres came and spoke to us.
5. Nick Spaulding asked whether Walter Cotter could submit a letter to the Planning Commission in his capacity as a water board member . Walter stated he could not without consulting the rest of the members on the board.

6. It was pointed out by Dave Soares that the County in its creation of the Draft has in many cases overstepped its legitimate governmental mandate. The County has not considered how their recommendations are overruled by State and Federal jurisdiction.

7. It was generally agreed that an effective way to get the attention of the planning Commission was through letters that were backed by community members who are in positions of influence on committees or boards. These types of letters carry more weight politically. Dave Soares also stated he would contact Hal Stocker personally to ask him to attend the next meeting to be attended by Mr. Mullen. Greg Crompton stated that the Rabbit Creek Journal should be contacted to list the forthcoming meeting and this was agreed to be done. It was also emphasized that the letter containing Greg's and Charles points put forward by Doact was to be labeled as a work-in-progress type and not a final summation of the Subcommittee's endeavors. It was also duly noted that we have to be ready with a finished catalogue of objections to the Plan at least one week or maybe sooner before the Council's November 17 meeting on the Plan. Dave Soares stated we should be present there in numbers and with a copy of our submission in hand.

5 cont'd

8. The next meeting was scheduled for Oct 20 at 7:00 PM at the Alcouffe Center. The agenda for the next meeting was to be based on the Greg Mullen input and our questions. Everyone was asked to continue reading and analyzing the Draft for further anomalies and to bring their questions to the meeting.

9. Dave Soares adjourned the meeting.

By: Main Planning Committee
Posted: 10/24/2010
Subject: 10/20/2010 Community Planning Committee Minutes
Minutes of DOACT Subcommittee on Community Plan : October 20, 2010.
Venue: Alcouffe Center
No. of Attendees : 32 on Attendance Record /40- 45 Headcount

1. Dave Soares, Acting Chairperson, opened the meeting and welcomed the invited guest , Mr. Kevin Mallen, Planning Supervisor, to the meeting. Mr. Mallen was to address questions from the Committee and community members present on the draft of the General Plan.

2. Mr. Mallen gave a brief introduction in which he outlined the time line of the current General Plan emphasizing the fact that a 60 day stay of adoption was initiated September 22. On November 9, 2010, the Planning staff will submit a presentation to the Board of Supervisors detailing what alternatives the County has with regard to the EIR that was a mandatory requirement in the formulation of the General Plan. He also stated that because of the necessity to review the impact of said EIR on the Plan, submissions by the public to be collated and reviewed and other issues that may arise, he foresaw the General Plan being ready for Supervisor final review and adoption in March – April 2011.

3. He went on to say that in response to queries received at his office, he wished to point out that in the Draft all sections that are not numbered and categorized by section are not official goals or policies to be implemented in the General Plan. Such unnumbered sections are were outlines and guidelines suggested by Mr. Mallen and the Planning Staff to help the Board in its review of the General Plan.

4. Next, Mr. Soares, opened the meeting to questions from those present.

5 cont'd

5. Nicholas Spaulding asked Mr. Mallen for clarification on the method fore General Plan amendment, and the fact that it takes 4 of 5 Supervisors to change anything in the Plan, but only 3 of 5 to adopt the Plan. He also noted that the wording of the Plan stated that an amendment could only be adopted if that amendment was in keeping with the goals and policies of the General Plan which , in reality, means amendments to the GP cannot be made.

6. Mr. Mallen answered that in reference to the question, the requirement of 4 of 5 consent was a symbolic thing in which the reasoning was that if the General Plan is to be a good , meaningful document, then its contents should not be altered except for a very good reason. It also protected the goals and visions set out in the General Plan. It was a subject of debate and not set in stone.

7. Mr. Spaulding asked a second question which asked if a vote of 4 of 5 would be necessary for adoption of a rural community plan such as the one the Subcommittee was working on at present.

8. Mr. Mallen answered that he saw no necessity for even a vote to be taken if a rural community plan was submitted to the Board of Supervisors for inclusion in the Community Plan. He saw a problem arising if the rural community plan really veered off from the goals and visions of the General Plan.

9. Mr. Spaulding also asked what would be the procedure to change any goals or visions in the General Plan.

10. Mr. Mallen answered such a change would require a 4 of 5 majority vote. He also stated that the final draft wording would be such that ambiguous statements would be clarified so a consistent meaning would be presented.

11. A question was asked if a rural community plan can differ from the General Plan. He answered, yes it could, but not such that it differed greatly from the goals and visions of the GP.

12. Charles Sharp asked would a boundary change require an amendment change.

13. Mr. Mallen answered that it depended on how far the boundary was asking to be moved and whether or not it is adding resident capacity to an already set limit on the areas infrastructure and growth.

14. Greg Crompton asked if a cottage industry operating out a private residence would require a special permit under the General Plan.

15. Mr. Mallen answered that so long as that business did not impact itself to a very great extent on its neighbors and current infrastructures i.e. road access and egress then he saw no problem in that business not requiring any permit. He stressed the idea that if such a business did not adhere to federal and state ordinances and complaints about its operation arose in the community, then the County would by necessity, as being an arm of the State government, have to step into the matter.

16. Dan Lucerno addressed Mr. Mallen stating that the County's approach to the implementation of regulations re the ability for an entrepreneur to start and maintain a business in the County was seriously flawed. He stated that if an individual was licensed both on a State and Federal level, the County's regulations stifled that individual's ability to operate as an entrepreneur and asked that the County be more flexible. 5 cont'd

17. Mr. Mallen, citing the example of a wine production and tasting room proposal being currently considered, stated that on the surface the proposal seems okay. However, State and Federal regulations, make the proposal much more complex, especially re public health and safety regulations. He stated the County is not out to inhibit business growth but have an obligation to intervene if the business creates an unregulated situation within the community. The County will do its best to find a means to allow a new business to flourish and try to stay out of the way.

18. Janet Marchant pointed out to Mr. Mallen and those present that the current endeavor being undertaken by the Subcommittee wished, as part of the Community Plan, to establish a Board approved Council that would at this level screen any new community business proposals and put it before the whole community to see if it is acceptable. In this way, less County involvement in local business is advanced and the community gets what it wants in terms of business development.

19. Greg Holman asked if the County had say in the loosening of overly stringent State regulations i.e. disability access.

20. He answered the County had the obligation to follow State regulations and see to their implementation in any endeavor where the general public would be a part of us. He stated again that the County attempts to give as much latitude in the setup of a business within the County as is lawfully and obligatory possible.

21.Janet Marchant raised a point about the archeological regulations being proposed within the GP. The map provided was skewed to the point that it imposed an undue hardship on any new undertaking in that part of the map that fell within the County's present data on the possibility of such archeological sites being located there. 6

22. He stated this part of the GP needed clearer wording and elaboration. 7

23. Another question was put forward if you could increase the boundary without allowing an unscrupulous party to take advantage of a loophole and increase the impact of a project on the communities infrastructure causing unnecessary problems such as increased traffic on smaller county roads as an example.

24. He answered that if you increase the boundary then there had to be give and take within the community where some areas would be less dense than others and that the County monitors any projects impact through increased population density to see if the in-place infrastructure can handle the increased density load.

25. Nicolas Spaulding asked how the creation of the Collins Lake community was formed without the County referring to the Dobbins-Oregon House community for its opinion on this move.

26. Mr. Mallen stated it was just a County formality and was not meant to take away anything from the community. They wished to give names to previously unnamed areas in the County. The owner of the Collins Lake recreational complex stated that as far he was concerned he saw nothing detrimental being done by this naming process and that he still felt part of the Dobbins-OH community.

27. Janet Marchant asked Mr. Mallen if there was legal language that could be implemented in the GP to protect those community individuals who do not wish to see additional impact on the rural character of the community through unbridled development. Mr Mallen answered it was his observation that a significant increase in community boundary called into play other mitigating factors such as population density increase. If such an increase in a boundary did unduly impact on the rural community character it would be allowed, If it did not then it would be in conflict with the goals and visions of the community plan. 7 cont'd

28. Janet Marchant further answered if a build out boundary was a little wider would it make the increase less dense. Mr. Mallen stated that it would.

29. Dalia Cahill asked how the public input was being assessed and if all the input items were considered.

30. Mr Mallen answered that all public input was looked at and assessed by the planning staff and collated with views and recommendations in a package to be submitted to the Board of Supervisors for their review and approval.

31. She also pointed out some items in the Natural Resources section referring to restrictions on an individual's right to manage oak trees and other trees on their property. She also referred to the requirements for creek setback in the same way. Peter Hammontre and others also stated such tree cutting restrictions was not in keeping with State fire safe regulations.

He answered that there was some ambiguity in the such items and that, as was pointed out, State regulations were not being considered for their impact on the these items in the GP. He also referred to the septic system item in the GP and stated this item needed to be clarified and that the County was not going to go to each individual residence that has a system and examine it. He also pointed out that the County has not enforced certain State requirements such as the biannual requirement of a septic system check to see if it is not affecting ground or well water. He stated the County tries its best to not over-regulate.

32. Nicholas Spaulding added a comment about the language in the GP re the preservation of existent deer herds and habitat as being another example of unclear and restrictive language. Mr. Mallen reiterated his point that such unclear sections in the GP would be reviewed and clarified before becoming part of the final draft of the GP.

33. Peter Hammontre asked if there was a provision made in the GP to protect community members from having a community plan submitted by a person or persons for adoption into the GP without that community's majority consensus. Mr. Mallen answered any community proposal would be reviewed and its validity as being a consensus submission considered as mandatory for inclusion in the GP.

7 cont'd

34. Mr. Soares asked if there any more questions and there were none and so he stated the next meeting of the Subcommittee would be on October 27, 2010 in the same venue at 7:00 PM. He adjourned the meeting.

Minutes prepared by Bryan Dozzi, Acting Secretary.

By: Main Planning Committee
Posted: 11/8/2010
Subject: 10/29/2010 Community Planning Committee Minutes
Minutes of DOACT Subcommittee on Community Plan October 29, 2010. No. of Attendees :7

1. Dave Soares, Acting Chairperson, opened the meeting and noted the low attendance was no doubt due to the World Series game on the TV. It was noted to not schedule a meeting on such nights.

2. He then called on Janet Marchant who had a presentation on her opinion of the results of a meeting held with the Planning Board that afternoon.

3. She noted the meeting was organized by Eldon Fowler of Yuba First who wanted to interface with the Committee to ask questions and provide some additional public input into the Draft review process.

4. Janet outlined her observations as follows.

5. a) She had initial disappointment in the manner in which the Planning Committee had a "big government" mindset in which they believe more government is better for the community in the long run and this attitude is reflected in the scope and wording found in the Draft.

6. b) They, however, were forthcoming in their response to questions posed about the Plan and admitted there were unclear sections and ambiguous language in the document. They believe that overall it is a thorough document.

7 cont'd

7. (c) On asking them about the discrepancy between the goal to preserve agricultural land and the other goal stated to develop the Hwy65/70 Bypass corridor . They answered the land being developed was part of the Valley Growth Boundary and not in reality agricultural land anymore. It was pointed out by Dan Lucerno and Bryan Dozzi that such a discrepancy was typical of County policy re development. Janet mentioned it seemed goals were driven by "money".

8. There was a question posed to the Planning Committee about flood plain development and why Magnolia Ranch was being allowed to proceed though it was in the flood plain. They answered it was under review.

9. Dave Soares pointed out that such development discrepancies probably due to the fact that Yuba County does recognize the Williamson Act whereby a County who adopts it as part of their Plan can set aside agricultural land in a land bank for the sole purpose of agricultural development only. Dan Lucerno also added the fact that so much agricultural land was being sold was because of the prohibitive restrictions imposed by the County on an individual operating an agricultural business . Lots of people have just given up because it is not profitable and sold out to developers or such.

10. Janet went on to say the Planning Committee were very willing to meet with the public but wished to have a categorized catalogue of items submitted to them a few days prior to the meeting so they could go over the items and provide some feedback. They said the procedure would greatly help them. and at the same time, speed up the review process.

11. Janet let it be known to them that the current feedback system from the Committee was inadequate. They stated that utilizing the procedure mentioned above, they believed public input would be properly addressed and changes from such input would be made to the Plan.

12. Another attendee asked if the Plan would be totally revised and a new copy prepared. They replied no and that only changes to the document would be posted and then incorporated in the final Draft.

13. Greg Crompton pointed out that the Plan could be termed "enabling legislation". By the term , he meant that the Plan, when adopted by the Board of Supervisors, would allow for the creation of any number of ordinances some of which could be a very far cry from what was intended by the wording of the Plan. Dave Soares added that is why he saw the draft, as it exists, as a very dangerous document with the possibility existing that it could be used to implement restrictions on individual and property rights and there would be little recourse left except to enter into costly litigation with the County. He also stated that instead of bashing the General Plan, we should put forward viable, realistic alternatives about policies that could be implemented through the General Plan. He used an example of electric cars.

7 cont'd

14. It was agreed that a community plan that reflects the overwhelming majority of the community was what was needed as a counterbalance to outside imposed restrictions on our rural way of life. It was a consensus that the community needs to be proactive in stating its goals and having these goals a part of a community plan to be incorporated into the General Plan.

15. Dan Lucerno pointed out that in the meetings he has attended concerning our own community plan, he has seen little input from the various subcommittees. Dave Soares pointed out that he agreed with him about the lack of information being put forward, but stated there was a great deal of information prepared by subcommittee members that just has not been brought to the table. After some discussion, Dave Soares stated he would bring his report on Water/Air for review by the Subcommittee at the next scheduled meeting. Bryan Dozzi also mentioned Dahlia Cahill's work on the Natural Resources section was also due review time at a future meeting.

16. It was agreed to meet on November 10, 2010 in the same venue at 7:00 PM. The meeting was adjourned.

Minutes prepared by Bryan Dozzi, Acting Secretary.

By: Main Planning Committee
Posted: 11/17/2010
Subject: 11/10/2010 Community Planning Committee Minutes
Subcommittee Meeting Minutes: November 10, 2010.

NO. of Attendees: 10

1. Dave Soares, Acting Chairperson, opened the meeting and welcomed all present including our County Supervisor Hal Stocker.

2. He asked that the Minutes posted to the COHD website be accepted as posted. Janet Marchant seconded the motion and the Minutes as posted were accepted.

3. Dave Soares then presented the Air/Water Subcommittee report on their evaluation of the Draft of the General Plan.

4. A copy of the report is available in its entirety on the COHD website.

5. Dave Soares reemphasized the point made in the presentation about recycling and how the County was not availing itself of the opportunity to study and implement a recycling plant here in the County. He used the example of Eastern US city recycling businesses who operate in a green way while at the same time paying for themselves through salvage of precious metals like found in TV's and innovative use of the waste for fuel and water irrigation.

6. The omission of New York Flat dam from the plan was brought up. It was pointed out that the dam is part of an Agreement in which Yuba County fulfilled its part of the Agreement but to date no dam is present. This led to a further discussion in which subcommittee members Eric Johnson and Tom Richards gave ancillary information about other proposed dam projects.

7 cont'd

7. Dave Soares pointed out that money for water retention projects here in the foothills would be gladly funded by S, Cal areas in return for guaranteed water delivery.

8. Nicholas Spaulding stated that input from the public is being posted on the Plan website every two weeks.

9. Sandy Grabowski pointed out to Dave that some his presentation needed to be edited to be more "politically correct" in order for the ideas contained therein to be graciously accepted by the Staff.

10.Nicholas Spaulding asked that Dave create a finalized version to be scrutinized by the Subcommittee prior to any public document be issued. Dave Soares said he would have a finalized document ready for scrutiny by the next meeting.

11. Tom Richards proposed that we as a volunteer group are in support of a potential community plan and that we wish to see amendments to the General Plan. Janet Marchant seconded the motion. It was unanimously accepted.

12. Janet Marchant pointed to the greenhouse gas section of the Draft as being too overbearing and asked Tom Richards to elaborate on his recommendation to the Staff on how to simplify the information. He stated we should point out that we recognize the importance of green house gas emissions but that the County

hold off on implementation of their stated goals in the Draft until the time that concept from which the recommendations were made be more scientifically corroborated than at present.

13. Nicholas Spaulding pointed out that because the County is very dependent on State and Federal funding in order to keep afloat their GHG approach was tailored by the consultant firm to maximize their chances at obtaining outside funding for their emission control programs.

14. He also made the point that we should make sure we emphasize the point that the County stick to what the present law allows and not volunteer the County's individuals in an experiment in their present overzealous approach to solving green house emission in the County as presented in the Draft in order to attract funding for the initiatives put forward therein. He also pointed out that the voters in this County are opposed to any expansion of present green house gas emission standards until further studies show such action is scientifically valid and also necessary.

15. Nicholas Spaulding and Charles Sharp pointed out to Hal that there was a specific agenda in the Draft re air quality that targeted individuals as sources of GHG emissions and wished to charge them for their carbon footprint . He used the example of smart meters in his explanation. He once again stressed. using the recent agreement forged by the Association of General Contractors with the State regulatory board in charge of emissions, that the County was overstepping their boundary in this matter and should be called to task to realign itself with a more realistic goals for air quality. Also, it was using standards that were made for application to very large areas and not for a County of our size. 7 cont'd

16. Hal Stocker was asked for his opinion on this GHG issue and he stated he had a hard time seeing how it applied to Dobbins-Oregon house and it was pointed out to him specific language in the Draft makes it compulsory that certain very restrictive standards be adopted by individual property owners.

17. Nicholas Spaulding suggested that we the subcommittee prepare a document of our complaints with specific references to these complaints for Mr. Stocker to review and take before the Staff and his fellow Supervisors. This idea was unanimously accepted and it was agreed that our chief complaints be forwarded by email to him and Janet Marchant via the COHD website by the next meeting.

18. Janet Marchant also mentioned she hoped that presentations made by individuals are read and not just laid aside. She referred to the info passed out by Charles Sharp re GHG and water issues in a lawyer's letter he had received regarding a proposed development project.

19. The next meeting was scheduled for November 17 at 6:30 PM at the Alcouffe Center. The meeting was adjourned.

Minutes prepared by Bryan Dozzi, Acting Secretary.

By: Main Planning Committee
Posted: 11/30/2010
Subject: 11/17/2010 Community Planning Committee Minutes
MINUTES OF DOACT SUBCOMMITTEE ON COMMUNITY PLAN: NOVEMBER 17, 2010.

No. of Attendees : 5

1. Dave Soares, Acting Chairman opened the meeting and outlined the evening's Agenda.

2. The Minutes posted to the COHD website were adopted as posted and Bryan Dozzi, Acting Secretary, asked for feedback as to the form and content of the Minutes so as to improve the quality of the information provided therein. Committee members said they would pass on any critiques they had if so warranted.

3. Dave Soares, stated that Nicholas Spaulding was to present a summation of the points of contention sent in by various Committee members and the community at large. He was absent from the meeting due to his attendance at the Planning Commissioner's , as well as Charles Sharp, who was attending the same meeting. This point was stated by Janet Marchant.

4. Janet Marchant, also pointed out , that Nicholas was first attending a meeting of the Tea Party caucus. The idea to attend such a meeting came about from the meeting of the Yuba First group the previous evening .

5. Janet elaborated on a strategy that was put forward by those present that it was necessary for all concerned to push the Supervisors to push the Planners to be much more accommodating to the concerns expressed about the shortcomings of the Draft. It was noted that the attitude of the Planners seemed to be one of aloofness and an apparent disregard for the views of opposition to the Plan as it now exists. Also, it was pointed out that at present there were no real changes incorporated into the Plan except correction of spelling errors and data omissions.

7 cont'd

6. Tom Richards related a point dating back to the 1996 Plan discussions in which a Committee like ours actually took the 1996 Plan and rewrote it according to what the consensus believed to be an acceptable Plan. He went on to say that the rewrite was accepted right into the Plan without any opposition. Furthermore, he added that it was his belief that unless we do such a thing again no change would occur in the present draft as demonstrated by the attitude of the Planners.

7. Janet Marchant stated that it was hoped that added voices of opposition to the shortcomings of the Plan could be gotten at the Tea Party meeting on a "political" level so as to force the Planners to deal with their superiors who in turn are mandated to present their area's consensus. It was envisioned that getting a larger and larger group of concerned citizens involved in the process would allow for the rewriting of the very obvious invasion of property rights in the articles now existing in the Draft. It was the aim to keep the Plans focus only on the 7 mandated elements and cut down or eliminate the optional elements which are the main source of the individual rights encroachment

8. In a discussion that followed Tom Richards pointed out the danger that exists, in certain parts of our community such as Ure Mountain, where there is no adequate escape route available to evacuate the people in case of a worst case scenario wild fire. He stressed the point that an issue such as this one is not being addressed anywhere and is missing from the Plan.

9. Dave Soares pointed out to Tom that it was necessary that we obtain accurate maps to show how, where and why it was necessary to have such roads first of all in place and secondly in a useable state.

10. Dave Soares stated that we should make it a point to meet with the Yuba First group to establish and nourish a working relationship based on what we have come up with re our community plan endeavor. He also pointed out that if we come up with a revised Plan and present it to the Planning Commission, by Sate law, they have to accommodate it into the Plan. If it requires a petition or what have you then, we could jointly petition that such a revision be enacted.

11. It was also stressed is that whatever we draw up has to be such that it truly represents the Foothill people. It was also pointed out that if the County looks upon this Plan as their Constitution, then as a community, we have the right to put forward a Bill of Rights to that Constitution and have that Bill of Rights incorporated into the Plan.

12. There was mentioned it is imperative that we solidify our info into a community plan as soon as possible before the spring deadline. Greg Crompton pointed out that there was no strict deadline on the submission of individual community plans. The current Plan could be adopted and , stated in the Plan, our community plan could be incorporated at any later date.

13. It was suggested by Tom Richards that he, and others interested in doing so, rewrite the Plan and submit I to the Planner Commissioners as a revised document for their review. It was agreed that this was a good idea, and at the same time, we continue drafting a local community plan as we have been doing .

7 cont'd

14. It was also noted that Dave Soares and Greg Crompton send in their reports to the Planning Commissioners under their own names using their committee titles for added emphasis and clout.

15. Janet Marchant stated she inform the Committee of the next meeting of Yuba First.

16. Tom Richards submitted a sample ballot form he drew up for the time when we would put our own community plan before the people of Dobbins/Oregon House for approval for submission to the Board of Supervisors. It was a concept for discussion.

17. Dave Soares was asked if he would draft an article that could be submitted to the various newspapers in the County outlining what we are doing and how the community at large is being involved in the community plan process whether they wish to be involved or not. He stated that he was going to submit his report to such media with the addendum that they could publish it in entirety, parts thereof or be informed of what was currently occurring with regard to the foothills reaction to the Draft.

18. Tom Richards handed out copies of the Boundary subcommittee report for critique by the Committee. It was to be reviewed by the next meeting.

19. Tom Richards then drew the Committee's attention to a letter from the Fish and Game Department in which any future easements for wildlife had to accompanied by an endowment. This sort of thing he pointed out was a gross incursion of "big" government into our community lives. There was a unanimous consensus on this point.

20. It was also emphasized that all subcommittee members be made more aware of the fact that what we are involved in is a bona fide plan of community action in which we will put forward to the Board of Supervisors our own particular community plan which has been agreed upon by the majority of the residents in our respective communities.

21. The next meeting was scheduled for December 1, 2010 at the Alcouffe Center at 7:00 PM.The meeting was adjourned.

By: Main Planning Committee
Posted: 12/5/2010
Subject: 12/1/2010 Community Planning Committee Minutes
Minutes of DOACT Subcommittee on Community
Plan: December 1, 2010

No of Attendees: 10

1. Dave Soares, Acting Chairman, opened the meeting.

2. He called upon Charles Sharp to give his opinion on what he observed at the recent Yuba First meeting he attended.

7 cont'd

3. His main point was that it was held in unanimous agreement that unless political pressure is applied through the a unified county resident push on the Board of Supervisors, little change, if none at all, will be made to the present Draft .

4. He also mentioned that the Yuba First group was preparing a submission that would give a dollar figure cost to the individual property owner of particularly noxious items in the Plan such as required artifact surveys, fireplace and septic system regulations. This approach was seen as a more direct means of pointing out the unrealistic nature of a lot of the Plan as it is now worded.

5. Dave Soares stated he hoped for more cooperation with this group so as to strengthen the consensus on the need to change the in accordance to the wishes of the county residents and not the Planning Commission. He planned to attend the next meeting of Yuba First to be held on December 14 at Gary's Restaurant in Marysville.

6. Charles Sharp also pointed out that though Kevin Mallen stated in his meeting with us here that certain sections were in need of revision, to gate we do not know where, when or how these changes are going to be made .

7. Deborah Morowski asked who sat on the Planning Commission and who prepared the Plan. Her question was answered by Janet Marchant

8.Dave Soares wished once again to draw the Subcommittee's attention to the idea of preparing a document to submit to the County which clearly defines our community's individual property rights against

incursion from County over-governing. | 7 cont'd

9. From last meetings tabled items, Tom Richards , illustrated through the use of a community area map the existing escape routes in case of fire and proposed routes for the same purpose. He pointed out the very grave danger posed to residents who reside in Ure Mountain area, Yuba Nevada Road area, South of Rice's crossing in the Regent Way area if a catastrophic fire from the North occurred here.

10. He pointed out that with a combined community consensus and effort from the County adequate and safe escape routes accessible to both public and private vehicular traffic could be constructed and maintained. He stressed the point that joint community and public cooperation was necessary for such a thing to occur and he pointed out the current Draft of the Plan did not address this issue. Thus, he stated our own community plan was necessary to see such a project implemented. 8

11. In the discussion that followed, it was agreed that the problem had to be addressed in a formal way in order to get funds to create and maintain the fire escape routes .

12. Tom Richards proposed that the volunteer Subcommittee draw up a proposal in conjunction with the Fire Safe Council , Cal Fire and other related bodies to seek County action and funding to implement safe evacuation routes out of the dangerous areas outlined in Tom Richard's presentation. Erik Johnson seconded the motion. The motion was unanimously adopted.

13. Erik Johnson passed out a letter his subcommittee had passed out to 30 residents in his particular area around Collins Lake outlining our Subcommittee's intended purposes and the drawing up of a community plan for our area. To date he had received positive feedback from 10 property owners.

14. Discussion regarding where to get funding for the evacuation routes resulted in Dave Soares volunteering to contact Pat Beecham for leads to the agencies that could have such funds available.

15. In light of upcoming important meeting on December of the Planning Commission, it was agreed the next meeting of the Subcommittee would concentrate on a unified presentation from ourselves. It was announced again that Yuba First was meeting on December 14 at 5:30 PM at Gary's Restaurant in Marysville. It was also stated the Planning Commission meeting was on December 15. 9

16. The next meeting was scheduled for 7:00 PM on December 8 in the Alcouffe Center. Dave Soares adjourned the meeting.

Minutes prepared by Bryan Dozzi, Acting Secretary .

By: Main Planning Committee
Posted: 12/10/2010
Subject: 12/8/2010 Community Planning Committee Minutes
Minutes of DOACT Subcommittee Meeting December 8, 2010. No. of Attendees: 6

1. Dave Soares, Acting Chairman, opened the meeting.

2. Nicholas Spaulding's presentation of collected General Plan complaints for presentation to Hal Stocker on behalf of this Sub-Committee was tabled to another meeting due to his absence.

3. Janet Marchant spoke about the necessity to coordinate our objections, and hopefully be able to coordinate our efforts with the work being done by Eldon Fowler's Yuba First Committee.

4. Laurie Pringle's question about the nature of Yuba First was answered by Janet Marchant and others present.

5. Charles Sharp pointed out that Dan Cucchi said the EIR Draft for the Plan would be out this week, and so far, there was nothing posted on the County website. He also noted that this EIR document would be in all likely hood a massive document and, given its complexity and anticipated mass, the Supervisor's have a little over a week to review it before their meeting re their continued review of the Plan as per the Plan's scheduled time line. All present thought this procedure was an attempt to push forward the adoption of the Plan without serious objections being dealt with in a systematic manner. 9 cont'd

6. He also pointed out that when the EIR comes out it should intensely scrutinized and each and every point of disagreement be noted for future reference by attorneys in any law suits arising from the people's objections to the contents of the EIR and the General Plan.

7. Dave Soares elaborated on his presentation on a ballot initiative in the case that the County blocks us from implementing our own Community Plan into the General Plan He pointed out the procedure for it to be able to be put forward and how the County Clerk, Terry Hanson would be the person to whom the initiative would be presented in order to proceed forward if County opposition was against it.

8. He also elaborated on his 4 page document sent to the Board of Supervisors and the Planning Committee as well as the Territorial Dispatch and Rabbit Creek Journal not for publication but as documentation of our Subcommittee's concerns in the case we encounter difficulties down the road.

9. It was also put forward that we coordinate the complaints being collected by Nicholas Spaulding and push our agenda in cooperation with Hal Stocker our Supervisor.

10. Dave Soares and Bryan Dozzi restated the necessity for the County to have enacted a Bill of Rights for individuals within the County to protect our property and individual rights if they are infringed upon by the contents of the General Plan which is taken to be the Constitution for the County until 2030.

11. After a short discussion, it was agreed that the next meeting of this Subcommittee be held on Wednesday, January 5, 2011 at 7:00 PM . It was also noted that Yuba First meeting was on Tuesday,

December 14, and that the Planning Commission Meeting was at 6:00 Pm at the Yuba County Office Complex on Wednesday, December 15, at 6:00 PM. Efforts by all volunteers to get there and to inform other interested community members about the said meetings was encouraged.

9 cont'd

12. Dave Soares adjourned the meeting.

By: Main Planning Committee
Posted: 1/9/2011
Subject: 1/5/2010 Community Planning Committee
Minutes of DOACT Subcommittee Meeting on Community Plan
January 5, 2011.
No of attendees: 12

1. Dave Soares, Acting Chairman, opened the meeting.

2. He called on Janet Marchant , Communications Subcommittee volunteer, to comment on the ongoing direction of the Community Plan Subcommittee . She stated that another Communications Subcommittee member, Charles Sharp had an update .

3. Charles had a handout that he , Tom Richards and Dave Soares had presented to Dan Cucchi in a pre-Christmas meeting. Mr. Cucchi stated that what was in the handout re Implementation Strategy of our community plan was a good starting point and that the process was heading in the right direction.

4. Dave Soares read out the Implementation section to aid in the any subsequent discussion to follow. Its basic premise was based on the development of housing in our community and the extent to which buildout was to be viewed and assessed for any future development within the community..

5. Charles went on to outline that the current Implementation Strategy, as read, could be modified to contain less hard number factors and to stay within the limits set out in the General Plan in terms of numbers of population growth and housing units.

6. Janet Marchant, utilizing the current Draft and page references (Pg. 20 Community Development section), pointed out the relevant details referring to this Strategy to refresh everyone on what the details were all about re any new development as projected by the County for our community here in Oregon House/Dobbins. 9 cont'd

7. A discussion took place in which the general consensus was that what we were doing was to keep within the projected scope of the current Draft for projected population expansion here and yet through a community plan control how that growth would take place especially with regard to putting a cap on the number of parcels allowed for buildout. It was also emphasized that very clear and concise language understood and agreed upon by the whole community at large would need to be used in our community plan to make sure large scale, unwanted development could not take place in the community. It was also pointed out that that given the current General Plan wording the projected buildout was already there and without an Implementation Policy as set forth above we, as community, would have no control over what development could take place

8. Further to this discussion, Janet Marchant moved that all subcommittee members be encouraged to read the material handed out by Charles Sharp for the next meeting and to contact others on the Subcommittee to clarify any misunderstanding re this Implementation Strategy. It was unanimously adopted. It was also to be posted on the cohd. website and to be forwarded to all Subcommittee volunteers by email.

9. Hal Stocker, our Supervisor who was in attendance, added that the County was on the defensive re population expansion in the Foothills due to State scrutiny of such, and that the County did not want to be at loggerheads with the Attorney General's Department re an increase in Foothills population density they believe to be excessive given both current and projected infrastructure. Such a position would lead to a suit from that office as has been the case with other Counties in the past.

10. Another discussion followed based on the idea of the fact that allowing more parcels of land i.e more 5 acres subdivisions would allow land values for large property owners to grow thereby allowing them to be more conducive to allow easements for fire routes to be negotiated with Cal Fire. It was also pointed out that , at present, the General Plan has no provisions for such to happen given their projected numbers. It was pointed out that the figures currently posted in the General Plan are not realistic and based upon

putting the County in a good light to receive State and Federal grant money.

11. Eric Johnson pointed out that right now in our community we lack viable commercial building sites and that our own community plan would see to the establishment of such sites.

12. Charles Sharp presented an Executive Summary as shown on his handout. It was an introduction to what a community plan might entail based on a reworking of previous plans and ideas from our community. In the discussion that followed it was emphasized that it was necessary for all Subcommittee members to read this handout and other documents already tabled and comment on these so that we can begin to formulate some form of documentation that we can begin to circulate within the community to ascertain a general consensus of what this community wants in our community plan.

9 cont'd

13. Greg Crompton moved that our Subcommittee collect and summarize in a brief manner the glaring inconsistencies in the General Plan which the average community member can relate to and bring them to a general meeting of DOACT . There, he stated, we should present the summary and recommend that the various points of contention be forwarded to the Planning Department under DOACT letterhead on behalf of the community. The motion was seconded by Lew Neal. It was unanimously adopted.

14. Eric Johnson had a presentation re letters he has collected from landowners in his area which was tabled to the next meeting.

15. The next meeting was scheduled for January 12, 2011 at the Alcouffe Center at 7:00 PM. The meeting was adjourned.

By: Main Planning Committee
Posted: 1/17/2011
Subject: 1/12/2011 Community Planning Committee
Minutes of DOACT Subcommittee on Community Plan: January 12, 2011.

No. of Attendees: 8

1. Dave Soares, Acting Chairman, called the Meeting to order.

2. He brought attention to Reports from Subcommittees and as Eric Johnson had a Report tabled from January 5 meeting was not in attendance to present such report the matter was again tabled . 9 cont'd

3. A discussion followed re Ideas to G Crompton for DOACT Letter to the County.

4. Janet Marchant reiterated the overall consensus of the Subcommittee re the current Plan being a template based upon the continued intervention of big government intervention into local community way of life. Greg Crompton pointed out the necessity to include all comments on the Plan in the form of letters written already to the Planning Commission to be included in the DOHACT presentation .

5. Following from the above, Janet led the discussion by outlining the salient points of contention the Subcommittee had collected,

6. The points were as follows: 1) 4 out 5 majority required to change anything in the Plan; b) archeological survey requirement; c)septic system issue; d) threat of down zoning; e) tree canopy issue; f) lack of real life fire safe policy; g) native grass issue; h) verification of the ability to submit a local community plan without a GP Amendment process; i) regulation of ground water and surface water issues; j) provision for the establishment of cottage industries without undue regulation; k) Green House Gas policy of Plan; l) substantial lack of public input into the Plan and the lack of County Planners response to property owner objections; m) enabling wording of many parts of the Plan whereby flexibility in interpretation is left in the hands of the County Planners instead of a limitation placed on flexibility of interpretation of what is stated in the Plan; n) zoning bylaw issue; o) restrictive action points referring to the aesthetics of private property; p) the requirement of New York Flat Dam promised construction inclusion in the General Plan; q) Issue of the Plan being prepared prior to the publication of the EIR; r) VMT (Vehicle Miles Travelled) issue; s) deer migration land issues. 10

7. Those present then agreed to bring to the next meeting prepared documents of submission to the DOACT letter referring to items in the list previously outlined above. Charles Sharp reminded the Subcommittee of the deadline of February 7 for submissions of comments on the EIR of the Plan. He stressed the point that these submissions had to be addressed in writing by the Planners according to the law unlike the letters already sent to the Planners. 11

8. Greg Crompton reiterated the inconsistencies re fire safe policies and there was also voiced the inconsistencies for emission standards . 12

9. Greg Crompton informed the Subcommittee that the next General Meeting of DOACT was to take place on January 26 and all submissions for inclusion in the DOACT letter should be ready by then.

10. The next meeting of the Subcommittee was scheduled for January 19, 2011 at 7:00 PM in the Alcouffe Center. 13

11. Dave Soares adjourned the meeting.

By: Main Planning Committee
Posted: 1/31/2011
Subject: 1/19/2011 Community Planning Committee Minutes
MINUTES OF DOACT SUBCOMMITTEE ON COMMUNITY PLAN:JANUARY 19, 2011.

NO. OF ATTENDEES: 14

1. Dave Soares, Acting Chairperson, opened the meeting.

2. Dave read out the Preamble to the Brown Act :54950 for the information of the Subcommittee to point out that the way in which the current process of review of the DGPU by the County staff is seriously in conflict with the Brown Act.He added that the Planning Commission in just forwarding their recommendations to the Board of Supervisors without public input is against State law. He ventured further in suggesting how the last Planning Commission meeting fell out seemed to him to have been a contrived performance orchestrated prior to the said meeting and done in a secret behind- doors meeting of the Commissioners.

3. Charles Sharp added that the whole "dance" being done by the Staff is just a tactic by which the Staff will ensure continued employment through the ratification of the DGPU designed to be very potentially "grant funding" receptive in its perspective and meaning.

4. Dave Soares added that we may have to resort getting an injunction keeping the Staff from doing anything with the Plan thus resulting in the Plan being , at least, tabled until the consultant contract runs out in August. Charles Sharp pointed out that we had another 60 days past the DEIR comment deadline and the Board of Supervisors meeting on that day for action.

5. Eldon Fowler provided a short historical background to the the DGPU in explaining how the Board of Supervisors signed the contract with the consultants on February 7, 2007. In the ensuing discussion , Greg Crompton pointed out that there was nothing wrong in the contract signing, but, it was the manner in which the Staff and Planning Commission handled public input . He sited the last Planning Commissioner's meeting as an example where no public input was seriously considered during the meeting. 13 cont'd

6. Eldon Fowler ,in the discussion, also added a history of the the DGPU process from August 2010 to the present. In August 2010 the Planning Staff and Deputy County Council came before the Board and stated that the ordinances to be part of the DGPU had to be streamlined in order to comply to existing State law. The Board asked for a list of the changes required and they were provided on a 2 page hand-written memo at the next meeting. The changes were ratified by the Board and in doing so the Planning Commissioners were essentially removed from the process.The language used was "the decision making body" would have the sway in all further discussions of the DEIR, thus eliminating Planning Commission input into this critical stage of the DGPU process. He went further to say that at the last Supervisors meeting held in January 2011, Andy Vasquez asked that the August decisions be reviewed and placed back on a future Supervisors Board meeting. This request was met with hostility by certain Supervisors and County Counsel pointed out that doing so would put all dealings with regard to the DEIR and DGPU since that time under a cloud of uncertainty. It was agreed the whole current process is seriously flawed and is in a mess.

7. Janet Marchant agreed that the whole process was a mess and probably illegal lending support for Dave's and Charles' suggestions for plans of action to counter the absurdity of the process.

8. Tom Richards pointed out that, in his discussions with Supervisors, it was apparent that the County had reached the expenditure limit re the consultant contract and that the fact that the consultants had to be involved in drafting any changes, such changes would be charged as a change order . Thus, there were no changes forthcoming as we have all witnessed. He further indicated that the current predicament was not the fault of the public but due to Planning Department negilgence with regard to this issue.

9. Janet Marchant mentioned that the Sacramento County General Plan was put on hold because of the similar problems we have been discussing and that if this body saw fit to delay a GP implementation why

cannot Yuba County do the same.

10. In answer to a question by Bryan Dozzi as to why we should pursue an injunction, Tom Richards popinted out that Tom Ares who had prerviously provided valuable insight into a GP process stated we would be wasting our time and money to do so. He stressed that we should attack the process through the newspapers and media. Charles Sharp added that a referendum might be a way to achieve success in stalling or curtailing the current "mess".

11. Janet Marchant stressed that the plans of action suggested were all well and good but that we must concentrate on prsenting a viable easy to understand set of items to be presented to the community at the forthcoming DOHACT General Meeting slated for January 26. She also mentiopned a rally could be satged at County headquarters with lots of media involvement to stress the seriusness of our position of opposition to the current process She also suggested we get Congressmen and State legislature namnes involved to get more public attention with regard to the process.

12. Eldon Fowler informed the Subcommittee that his group, Yuba First, had moved in their recent meeting to enact a town meeting format into this ongoing process whereby the individual Supervisors would be asked to state their affirmation or negation of the current DGPU in a an open public forum. They , as he stated, would be forced in this type of open format to "defend" their positions on the DGPU .He said that it would change the way they look at things.
Tom Richard says that Tom Aries said that the Supervisors also have to hear what he termed footsteps behind them meaning if they continue to ignore us, try to placate us as thery have been doing, then the people would know perhaps there is a better rep out there for us to elect to the Supervisors position.

13. In the continued discussion it was pointed out , according to Elden Fowler, there are 2 Supervisors who don't wish to see this DGPU enabled as it stands. It is up to all of us the get one of the other Supervisors to see our side of the picture and so vote to delay this DGPU process.
The general consensus of those present was to make sure at the forthcoming meeting on January 26 to ask Hal to state his position on this matter.It was alos pointed out that Hal had as a platform that he would abide by the will of the people. His position on the matter would go a long way to showing whether or not he was going to stick to his committment to the people. Also, the open forum, allows for respectful dialogue among all. 13 cont'd

14. Janet Marchant said we could work out together with Hal on revisions into the GP that would be mutually acceptable and thus he would back us on our desire for a delay in the implementation of this current DGPU. Tom Richards also stated we could point out to Hall the DEIR statement that there is no significant fire danger up here in the foothills as one of many inconsistencies in the DPU and DEIR that needed to be revised. Eric Johnson and Tom Richards also gave their information on the access roads situation and how we are at impasse with the County and fellow neighbors on a methodology with which to proceed.

15. Greg Crompton stated that in reference to the points, already in place for a letter to the Planning Staff and Supervisors, be summarized in some cases and fleshed out
in others, so that at the January 26 meeting, the community would have a an easy-to understand format on which they could vote approval or not on the points presented. It was also unanimoously agreed the emphasis of our concern would be directed, not at the community boundary expansion, but the fire safe provisions in the DGPU and the DEIR.

16. Eric Johnson presented his tabled presentation on a letter he sent out in which he asked all the property owners in his area who would be effected by a community boundary expansion to state their position on such a move and also if they agreed on presenting our own community plan to the the Board of Supervisors for inclusion in the General Plan. He also pointed in the letter our ongoing revision process and references to the content of theDGPU that would effect us detrimentally as property owners.

17. Janet Marchant made a motion that the Subcommittee recommendations for revision of sections of the DGPU be included in a letter along with our recommendation that the DGPU be delayed for more public

input and that this letter be read at the next General Meeting of DOACT on January 26. It was seconded by Lew Neal.

18. A discussion followed during which a consensus was reached on a viable presentation strategy with each volunteer responsible for addressing any concerns from the public at the January 26 meeting about the items that they had earmarked to analyze. Greg Crompton was to act as the coordinator of the strategy and Janet Marchant would help finalize the letter. 13 cont'd

19. Dave Soares adjourned the meeting.

1 The comment provides the minutes from numerous Community Planning Committee meetings. Items discussed in the comment relate to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment letter in its entirety is included for Board of Supervisors consideration and no additional response is required.

2 The comment suggests that there were procedural errors in General Plan review by not providing an EIR. The public comment period for the DEIR is based on, and follows all requirements under CEQA Guidelines Section 15105. A Notice of Preparation ("NOP") of the Draft EIR was filed with the Office of Planning and Research and each responsible and trustee agency and was circulated for public comments from June 17th, 2010 through July 16th, 2010. The County prepared, noticed, published, and circulated, a DEIR for review. A Notice of Completion ("NOC") and copies of the Draft EIR were distributed to the Office of Planning and Research on December 10th, 2010 to invite comments. The County provided a longer period of time than required in order to allow greater public review and input. An official 60-day public comment period for the Draft EIR was established by the Office of Planning and Research. The public comment period began on December 10, 2010 and ended on February 9, 2011. A Notice of Availability (NOA) of the Draft EIR was mailed to all interested groups, organizations, and individuals who had previously requested notice in writing on December 10, 2010. The NOA stated that the County has completed the Draft EIR and that copies were available at www.yubavision2030.org, the Yuba County Community Services & Development Services Agency, Planning Department, 915 8th Street, Suite 123, Marysville, or at the Yuba County Public Library, 303 2nd Street, Marysville. A public notice was placed in the Appeal-Democrat on December 10, 2010, which stated that the Draft EIR was available for public review and comment. A public notice was posted in the office of the Yuba County Clerk on December 10, 2010.

The purpose of a general plan EIR is to evaluate the proposed goals, policies and actions in the proposed general plan and analyze the potential environmental impacts resulting from implementation of those goals, policies and implementation programs. Development of a general plan and its EIR is an iterative process, with the general plan goals, policies, and actions informing the EIR analysis and vice versa. The 2030 General Plan and EIR were drafted in tandem as a part of a single cohesive and mutually supportive process. As a part of the policy development of the 2030 General Plan, the County explicitly considered narrative policy, actions, and diagrammatic policies that could reduce environmental impacts associated with General Plan buildout.

The comment provides the minutes of a Community Planning Committee meeting discussion regarding the Committee's belief that an extension of the public review period for the Draft General Plan is needed. The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment letter in its entirety is included for Board of Supervisors consideration and no additional response is required.

3 The comment provides the minutes from numerous Community Planning Committee meetings. Items discussed in the comment relate to Yuba County policy and do not

include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

4 The comment discusses the absence of an EIR for the general plan update. The DEIR for the 2030 General Plan was released for public review on December 10, 2010.

5 The comment provides the minutes from numerous Community Planning Committee meetings. Items discussed in the comment relate to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

6 The comment raises concern about archeological regulations proposed in the General Plan. The comment claims that the County's mapping of prehistoric resource sensitivity would impose a hardship on development. This comment relates to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration. The DEIR provides a program-level analysis of the potential for impacts on cultural resources based, in part, on a countywide search of records related to cultural resources. The DEIR concludes that impacts to identified cultural resources, previously unidentified cultural resources, and interred human remains that could occur with implementation of the General Plan are significant and unavoidable.

7 The comment provides the minutes from numerous Community Planning Committee meetings. Items discussed in the comment relate to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

8 The comment raises concern about the need for fire escape routes. Please refer to the response to Greg and Shirley Crompton, February 8, 2011 letter Comment 1.

9 The comment provides the minutes from numerous Community Planning Committee meetings. Items discussed in the comment relate to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

10 The comment lists areas of concern regarding the General Plan. This comment relates to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration. The comment suggests that the County's fire policies are inadequate. Please refer to the response to Greg and Shirley Crompton, February 8, 2011 letter Comment 1, which addresses this comment.

11 The comment discusses the submission of comments on the DEIR. This comment does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

12 The comment discusses inconsistencies in fire safe policies and emissions standards. Please refer to the response to Greg and Shirley Crompton, February 8, 2011 letter Comment 1, which addresses this comment.

13 The comment provides the minutes from numerous Community Planning Committee meetings. Items discussed in the comment relate to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

Sharp 2

February 9, 2011

Mr. Dan Cucchi
Yuba County Planning Dept.
915 Eight Street, Suite 123
Marysville, CA 95901

Dear Mr. Cucchi:

Subject: 2030 Yuba County General Plan Update,
SCH Number: 2010062054
Document: Draft EIR

BOARD OF SUPERVISORS MEETINGS & WORKSHOPS	MEETING DATE
BOS Meeting Staff Report	October 13, 2009
BOS Meeting Staff Report GPU Vision, Goals & Strategies Sustainable Yuba County Map	August 25, 2009
BOS Meeting Housing Element Staff Report Housing Element IS/MND	June 23, 2009
BOS Meeting Housing Element Staff Report Housing Element IS/MND	June 9, 2009
BOS Study Session Staff Report BOS Study Session Power Point Presentation	May 12, 2009
BOS Study Session Staff Report BOS Study Session Power Point Presentation Alternative "A" Map Alternative "B" Map (Modified)	January 20, 2009
BOS Study Session Staff Report BOS Study Session Power Point Presentation Alternative "A" Map Alternative "B" Map	November 18, 2008
BOS Study Session Staff Report BOS Study Session Power Point Presentation	November 6, 2008
BOS Study Session Staff Report BOS Study Session Power Point Presentation Conceptual Alternatives Outreach & Input Land Use Alternative Comments	October 21, 2008
BOS Study Session Staff Report BOS Study Session Power Point Presentation	October 14, 2008
BOS Workshop Staff Report BOS Workshop Power Point Presentation	April 24, 2008
BOS Workshop Staff Report BOS Workshop Power Point Presentation Draft Beale JLUS Power Point Presentation	March 6, 2008
BOS Workshop Staff Report BOS Workshop Power Point Presentation	February 7, 2008
BOS Workshop Staff Report BOS Workshop Power Point Presentation	January 10, 2008
BOS Workshop Staff Report BOS Workshop Power Point Presentation	December 6, 2007
BOS/PC Joint Workshop	April/May 2007

1

RECEIVED
FEB 09 2011
Community Development &
Services Agency

GENERAL PLAN UPDATE ADVISORY COMMITTEE	DATE
GPUAC Agenda GPUAC Meeting Summary	June 15, 2009
GPUAC Agenda GPUAC Meeting Summary GPUAC Meeting Power Point Presentation EPS Analysis of General Plan Alternatives Fehr & Peers Memo Initial Finding Traffic Evaluation	June 2, 2009
GPUAC Memo	May 28, 2009
GPUAC Agenda GPUAC Meeting Power Point Presentation	August 20, 2008
GPUAC Agenda GPUAC Meeting Summary	March 17, 2008
GPUAC Agenda GPUAC Meeting Summary	February 11, 2008
GPUAC Agenda GPUAC Meeting Summary	December 3, 2007
GPUAC Agenda GPUAC Meeting Summary	November 5, 2007
GPUAC Agenda GPUAC Meeting Summary	September 25, 2007

Yuba County Draft General Plan 2030 Processing Timeline	
General Plan 2030 EIR - Notice of Preparation	June 18, 2010
Draft General Plan 2030 Release	August 10, 2010
Town Hall Meeting #1	August 25, 2010
Town Hall Meeting #2	September 8, 2010
Draft General Plan 2030 EIR Release	Early-Mid September 2010
Comments Due on Draft General Plan 2030 for Planning Commission	September 13, 2010
Planning Commission Hearing	September 22, 2010
Board of Supervisors Hearings	October - December 2010

1 cont'd

As the above images show, there were regular Board of Supervisor meetings on the General Plan and General Plan Advisory Committee meetings from April 2007 until October 2009. Then, nothing seems to happen until the EIR Notice of Preparation letter was published on June 18, 2010 (coincidently just 12 days after the June 6 primary elections).

Why did all presentations to the Board of Supervisors stop after October and not resume until the Notice of Preparation on June 18, 2010?

Was there nothing of significance to report to during this eight month interim?

Is there any supporting evidence, memos, emails, etc., to show that anything was happening with the GPU other than it was just on "hold"?

Curiously, the above timeline does not make any mention of an EIR as required by CEQA. The current timeline, shown below, does show the release of the draft EIR.

2

YUBA COUNTY DRAFT GENERAL PLAN 2030 PROCESSING TIMELINE

RECENT ACTIVITIES

General Plan 2030 EIR – Notice of Preparation	**June 18, 2010**
Draft General Plan Release	**August 10, 2010**
Town Hall Meeting #1	**August 25, 2010**
Town Hall Meeting #2	**September 8, 2010**
Planning Commission Hearing: Commission continued item to November meeting to give the public more time to review and provide comments	**September 22, 2010**

NEXT STEPS

Release Draft EIR	**December 2010**
2ND Planning Commission Hearing	**December 15, 2010**
Public Review period on the Draft EIR (DEIR)	**Per State regulations 45-60 days from release of DEIR**
Board of Supervisors Draft EIR Presentation	**January 2011 (No Action)**
Board of Supervisor hearing on Draft General Plan and DEIR	**February 2011**
Prepare Final EIR & GP (Based on BOS direction)	**Early 2011**
Board of Supervisors Hearing to Certify EIR and Final General Plan	**Spring 2011**
Update Ordinances and Codes	**2011-2012**

In the case of

LAUREL HEIGHTS IMPROVEMENT ASSOCIATION OF SAN FRANCISCO, INC.,

v.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, Defendant and Respondent

No. S001922

Supreme Court of California

47 Cal. 3d 376;

December 1, 1988

The statement is made:

The more important and difficult question is what circumstances require consideration in an EIR of future action related to the proposed project. A basic tenet of CEQA is that an environmental analysis "should be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide meaningful information for environmental assessment." (Guidelines, § 15004, subd. (b); No Oil, supra, 13 Cal.3d 68, 77, fn. 5.) The Regents correctly note that "where future development is unspecified and uncertain, no purpose can be served by requiring an EIR to engage in sheer speculation as to future environmental consequences." (Lake County Energy Council v. County of Lake (1977) 70 Cal.App.3d 851, 854-855 [139 Cal.Rptr. 176].) We agree that environmental resources and the public fisc may be ill served if the environmental review is too early. On the other hand, the later the environmental review process begins, the more bureaucratic and financial momentum there is behind a proposed project, thus providing a strong incentive to ignore environmental concerns that could be dealt with more easily at an early stage of the project. This problem may be exacerbated where, as here, the public agency prepares and approves the EIR for its own project. For that reason, "'EIRs should be prepared as early in the planning process as possible to enable environmental considerations to influence project, program or design.'" (Bozung, supra, 13 Cal.3d at p. 282; Guidelines, § 15004, subd.).[1]

4

The Draft EIR was released on December 10, 2010, a full four months after the Draft General Plan. The delayed release of the EIR has rendered the EIR inadequate to perform its function of informing the public "as early as possible" of the environmental considerations. It has actually been introduced "as late as possible", exactly contradicting the intent of CEQA.

Rather than setting guidelines for the preparation of the project document, the DIER has become, for all intents and purposes, a follow up document written to support the project.

Conclusion:

The Yuba County 2030 General Plan Update process has not followed the intent of the Legislature in enacting the CEQA legislation.

Regards,

Charles Sharp

Charles Sharp
PO Box 107
Dobbins, CA 95935

1 The comment includes screenshots of information from Yuba County's website. This comment does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, no response is required.

2 The comment questions the lack of presentations or new information about the General Plan Update between October 2009 and June 2010. Development of a general plan and its EIR is an iterative process, with the general plan goals, policies, and actions informing the EIR analysis and vice versa. The comment does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

The comment also indicates that CEQA was not included in a specific timeline presented on the County's website. The comment is incorrect as the table referenced by the comment includes two CEQA milestones: General Plan 2030 EIR-Notice of Preparation (June 18, 2010) and Draft General Plan 2030 EIR Release (Early-Mid September 2010).

3 The comment includes screenshots of information from Yuba County's website. This comment does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, no response is required.

4 The comment argues that the release of the DEIR following release of the Draft General Plan violates CEQA case law requiring that an EIR be prepared as early as possible in the planning process.

The purpose of a general plan EIR is to evaluate the proposed goals, policies and actions in the proposed general plan and analyze the potential environmental impacts resulting from implementation of those goals, policies and implementation programs. Development of a general plan and its EIR is an iterative process, with the general plan goals, policies, and actions informing the EIR analysis and vice versa.

The 2030 General Plan and EIR were drafted in tandem as a part of a single cohesive and mutually supportive process. The existing conditions analysis and alternatives analysis that supported selection of a "Preferred Alternative" for the General Plan also provided a platform for discussing how the design and narrative content of the plan could be structured to minimize or avoid significant impacts. As a part of the policy development of the 2030 General Plan, the County explicitly considered narrative policy, actions, and diagrammatic policies that could reduce environmental impacts associated with General Plan buildout.

The County circulated a NOP of the General Plan EIR to public agencies and interested members of the public. The NOP was delivered to the Governor's Office of Planning and Research State Clearinghouse on June 17, 2010, anticipating a NOP review period starting June 18, 2010. The NOP is a brief notice sent by the lead agency to inform responsible agencies, trustee agencies, and potentially affected federal, state, and local agencies that the lead agency plans to prepare an EIR. The NOP also seeks comments regarding the scope and content of the EIR. The County held a scoping meeting on July 7, 2010, to receive comments on the NOP. The County has also conducted public

outreach in various formats and settings to support the 2030 General Plan and has received substantial email and website input from citizens and agencies. Although social and economic issues were raised during this outreach, many environmental issues were also raised.

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Yuba County Dept. of Planning

Sharp 3

February 9, 2011

Mr. Dan Cucchi
Yuba County Planning Dept.
915 Eight Street, Suite 123
Marysville, CA 95901

Dear Mr. Cucchi:

Subject: 2030 Yuba County General Plan Update,
SCH Number: 2010062054
Document: Draft EIR

The draft EIR states on page 4.8-28:

In addition to the operation of the Yuba County Office of Emergency Services (OES) and implementation of the Multi-Hazard Mitigation Plan, implementation of the 2030 General Plan policies and action listed above would ensure that future development would not interfere with emergency response or evacuation plans, thereby protecting County residents from adverse effects in the event of a disaster. This impact is considered ***less than significant****.*

4.8-6 Exposure of People and Structures to Urban and Wildland Fires.

Development of the 2030 General Plan could potentially increase risk to fire for both people and property. However, implementation of 2030 General Plan policies and actions, along with existing regulations would ensure that people and structures would not be exposed to a significant risk of loss of injury involving fires. This impact is considered ***less than significant****.*

These statements are inadequate, misleading and do not accurately reflect the true situation. There are significant impacts due to the risk of wildfire that have not been addressed by the General Plan nor disclosed by the EIR.

By what criteria was this "less than significant" impact reached? 1

The next paragraph acknowledges the risk of extreme wildfires in the foothill communities:

Areas at risk for extreme wildfires are designated by CAL FIRE as those lands where dense vegetation with severe burning potential prevails, as well as areas with limited access due to topography or lack of roads. As mentioned above under "Wildfire Risk Areas," the majority of lands in the foothills and mountainous portions of the County are within higher risk fire zones, as mapped by CAL FIRE. Fire hazard is greatest in the foothill and mountain areas of the County. Many of Yuba County's residential communities —Smartsville, Dobbins, Browns Valley, Loma Rica, Brownsville, and Challenge, for example—are located in areas of high or very high fire hazard.

The General Plan does not discuss possible mitigations, such as placing high risk areas on a high priority alert, positively notifying people by a phone tree, email, sheriff patrol, etc.

The County should undertake to systematical identify such high risk areas, and set up robust notification mechanisms to alert the residents in case of an emergency.

The County has a primary responsibility for ensuring the health and safety of its residents.

Why do the General Plan and EIR not adequately address this responsibility?

The fire evacuation map on page 4.8-19, identifies Willow Glen Rd and Marysville Rd as the major evacuation routes. In order to use these roads during an evacuation, people would have to reach the road. Many areas of the foothills could be cut off during during a major wildfire event.

For example, the Ure Mountain area of Oregon House. There is one road in and one road out. A wildfire could easily trap all the residents of this area and preclude their escape. Neither the General Plan nor the EIR make any mention of this situation. 1 cont'd

This is just one example, there are numerous others throughout the foothills.

During the EIR scoping comment period, a letter was filed concerning foothill wildfire issues by the volunteer members of the Fire Safety Subcommittee. On page 1-5 of the DIER, there is a list of all the NOP comment letters that were filed. This letter is not listed. However it is included in Appendix A under the title "Notice of Preparation as D-OH Planning Committee".

This letter should be listed in the EIR. 2

The draft EIR makes no reference to any part of this EIR scoping letter.

Page 34 of the Mulit-Hazard Mitigation Plan draws these conclusions about Local Mitigation Activities:

1.10 Summary of Local Mitigation Activities

DOHFPD has taken a lead role in the development of solutions to the fire problems in the Yuba County foothills since the late–1980s.
The District participates in:

- *Public education and awareness regarding emergency preparedness, safety and preparedness, public information regarding all hazards.*
- *a Chipping Program funded by Proposition 40 to reduce fuel load next to residences and commercial properties;*
- *the Fuel Reduction Program which is an ongoing program to reduce the fuel loads along heavily traveled District roads to a minimum 10 feet fuel buffer on both sides of the road;*
- *the FireSafe Council which developed the Community Wildfire Protection Plan;*
- *the Quincy Library Group Defensible Fire Protection Zone to reduce fuel loads within the District, and*
- *participated in and helped bring to fruition the Oregon Ridge fuel break, the Soper Wheeler treatment area, and the CHY treatment area.*

3

The Multi-Hazard Mitigation plan itself makes does not address mitigation measures that might be undertaken for fire egress and evacuation roads.

In a letter from CALFIRE Unit Chief Brad Harris and Battalion Chief Sean Griffis, received by the County on June 16, 2009, it says:

What we have learned is the fuel breaks are more efficient and successful when they are constructed on a few large parcels rather than several smaller ones. In those areas where the ownership is broken up into parcels less than five acres, it becomes nearly impossible to get complete participation by multiple landowners. Each landowner that does not participate, results in an area where a wildfire can get through the fuelbreak and threaten the entire community. To reduce the likelihood of this happening CALFIRE supports expanding the community boundary of Oregon House to include the large landholdings that surround it.

3 cont'd

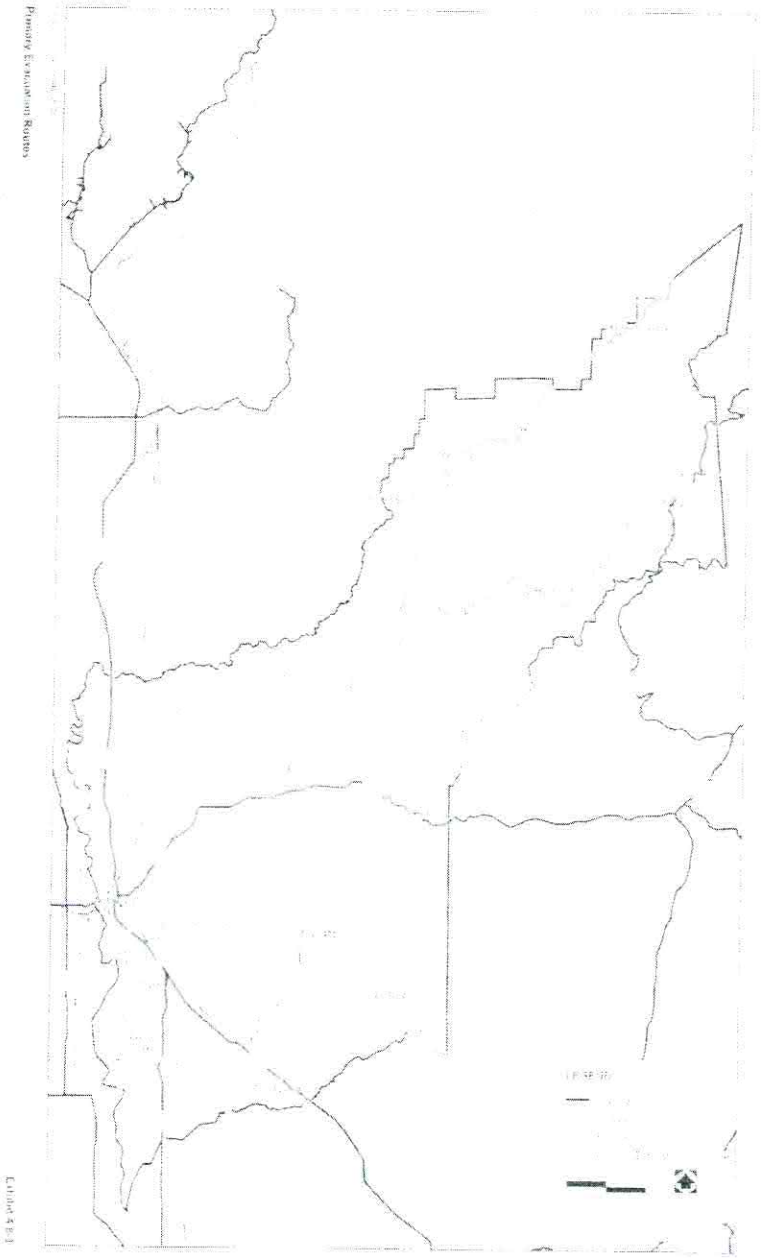
The DEIR seems to be relying on the Yuba County Multi-Jurisdictional Mulit-Hazard Mitigation Plan to address wildfire safety issues. This is inadequate.

Why does the DIER not make any reference to the "Notice of Preparation as D-OH Planning Committee" letter submitted during the EIR scoping comment period?

4

By not considering this letter, the EIR scoping process is flawed and inadequate. It raises the issue of what other comments or concerns about the public's Safety and Welfare during an emergency the DIER has also failed to adequately address.

Exhibit 4.8-3 - Fire evacuation routes



Included below: Full text of the July 19, 2010 "EIR Notice of Preparation letter D-OH Planning Committee letter submitted by volunteer members of the Fire Safety Subcommittee.

July 18, 2010

Mr. Kevin Mallen, Director
Yuba County Community Development and Services Agency
938th 8th Street Suite 123
Marysville, CA 95901

Re: General Plan EIR Scoping

The first priority of the General Plan is Public Health and Safety. The Yuba County General Plan must adequately address the health and safety issues of wild land fire for the foothill communities.

The impact of wild land fire has been devastating and can be again, including disrupting watersheds, erosion, habitat destruction, poor air quality (during a fire), destruction of forests, the use of land for agriculture, wide-spread destruction of homes, businesses, and natural resources with the resultant economic disruption.

The General Plan needs to address the construction and maintenance of fuel breaks.

In a 5/19/2010 letter addressed to the COHD Community Plan (now superseded by the D/OH Community Planning Committee, being monitored by DOACT) Glenn Nader, Facilitator of the Yuba County Fire Safe Council, says:

> "We know that the more fuel breaks that we can construct and properly maintain in a community, the better chance that we can stop fires from impacting people and the environment."

The General Plan needs to address the fire egress issues for the Ure Mountain residents.

Mr. Nader goes on to say:

> "We also have a potential evacuation problem in Oregon House area that continues to need to be addressed. The one way out condition of the Ure Mountain area that could be blocked by a north wind driven fire is of great concern."

5

Mr. Nader continues by saying:

> "I have worked with the International Fire Chiefs Association on the development of the Fire-Resilient Communities concept. It uses fire science to design communities that can have a fire occur with little impact on homes or people. This allows the firefighter to focus on managing the fire and not protecting homes. It includes proper construction or retrofit of homes to withstand ember attack, fuel reduction around homes to eliminate flame impingement on the home and a change in the fire behavior as it goes through the community."

In a letter from CALFIRE Unit Chief Brad Harris and Battalion Chief Sean Griffis, received by the County on June 16, 2009, it says:

> What we have learned is the fuel breaks are more efficient and successful when they are constructed on a few large parcels rather than several smaller ones. In those areas where the ownership is broken up into parcels less than five acres, it becomes nearly impossible to get complete participation by multiple landowners. Each landowner that does not participate, results in an area where a wildfire can get through the fuelbreak and threaten the entire community. To reduce the likelihood of this happening CALFIRE supports expanding the community boundary of Oregon House to include the large landholdings that surround it.

In the "Yuba County General Plan 2030 Policy Recommendations - Fire Hazards Yuba Watershed Protection and Fire Safe Council General Plan Committee Draft from April 8, 2008 meeting" it say:

1. The County should support the construction and maintenance of Shaded Fuel Breaks in all communities at risk to wildfire.

The 2010 Strategic Fire Plan for California, prepared by the California Board of Forestry and Fire Protection, http://stratospherically, is a comprehensive report on fire mitigation measures with regard to the impact of wild land fire.

The General Plan needs to incorporate relevant elements from this document that may reduce the impact of wild land fire in the foothills.

The 2007 "Dobbins-Oregon House Fire Protection District Multi-Hazard Mitigation Plan" specifically addresses emergency response measures to wild land fires for the Dobbins/Oregon House communities. This Plan also describes the deleterious impact of fire on the environment. For example, on page 24, the Plan states:

"Excess runoff from the Williams and Pendola fires continue to have an impact on water quality of the Yuba River watershed. Soil rill and sheet erosion from these two and other burn sites in the steep foothill ecosystems create increase turbidity and ammonia levels post fire."

The General Plan needs to review this document and incorporate relevant elements pertaining to fire mitigation and fire-resiliency measures that may reduce the impact of wild land fire in the foothills.

The above issues are of great concern to the residents of the Dobbins/Oregon House Community, and we hope the scoping process for the EIR will address our request that such issues be thoroughly reviewed, and that fire resiliency in our community should be fully included in the scope of the EIR. 5 cont'd

Sincerely,

Janet Marchant, Acting Secretary, D/OH Community Planning Committee
Erik Johnson, volunteer member of the Fire Safety Subcommittee
Tom Richards, volunteer member of the Fire Safety Subcommittee
Laurie Pringle, volunteer member of the Fire Safety Subcommittee

cc: Greg Crompton, Chairman, Dobbins/Oregon House Action Committee

Documents Included:

Letter from Glenn Nader, Facilitator Yuba County Fire Safe Council

Letter from Brad Harris, Unit Chief, Sean Griffis, Battalion Chief, CALFIRE (California Department of Forestry and Fire Protection)

"Yuba Watershed Protection and Fire Safe Council General Plan Committee Draft from April 8, 2009 meeting"

"Yuba County Strategic Plan" brochure, July 14, 2009

Conclusion:

The draft EIR and draft General Plan fail to adequately address the hazard of wildfire in the foothill communities.

Regards,

Charles Sharp

Charles Sharp
PO Box 107
Dobbins, CA 95935

1 The comment expresses concern about the lack of information regarding fire safety in the General Plan and EIR.

The County has made revisions to the Public Health & Safety Element to clarify policies and actions related to reducing the potential for risk related to wildfire. The County's policies in the draft and revised General Plan are designed to protect people and property from wildland and urban fire risk and create more fire-resilient communities. Existing state regulations related to wildfire risk will be required as a part of new developments that could be accommodated under the General Plan higher fire risk areas. Projects will be conditioned, as appropriate, to ensure defensible space, fire-wise landscaping, fuel breaks, emergency access, fire flow, hydrants, sprinkler systems, fire stations and other improvements and conditions. New developments are required to pay on a fair-share basis for fire stations, equipment, and other fire suppression improvements necessary to provide adequate fire protection services. All community water systems serving new development projects are required to meet or exceed County minimum standards for provision of water for fire flows.

Emergency access and evacuation routes are comprehensively addressed both in County policy and through follow on actions described in the Public Health & Safety Element, including access needs as informed by modeling of wildfire behavior.

Following General Plan adoption, the County will maintain a planning and entitlement review process that documents compliance with state and local standards for fire safety. The County will update zoning, development, improvement standards, and building standards, as necessary, to maintain compliance with relevant fire codes, including those maintained by Cal Fire. County codes would be anticipated to address such topics as landscaping standards and fire-resistant plant materials, fire resistant building materials for exterior walls and other exterior features of structures, defensible space standards for different topographic conditions, sprinklers, emergency access, water supply and pressure for firefighting, building and road construction in areas prone to fire risk and greater slopes, and other relevant topics.

In addition, as included in the revised General Plan, the County will prepare, adopt, and implement a comprehensive wildfire safety plan for foothills portions of the County with high and very high wildfire risk. This plan will be designed to reduce fuel loads, ensure emergency access and evacuation routes, and provide incentives for property owners to improve properties in order to reduce wildfire risk and improve fire resiliency for existing developed areas. As a part of this planning effort, the County will collaborate with other public agencies and nonprofits to implement fire breaks and fuel reduction projects in areas of high and very high fire risk, including removal of invasive species that increase understory fuel loads. Areas of particular focus could include County roads, ridges surrounding rural communities, and defensible space around existing structures. The County will seek funding from sources, such as the Bureau of Land Management, for fire fuel reduction projects. The County will collaborate with land owners in fire prone areas without adequate secondary access to improve access, add water tanks, or otherwise improve fire safety conditions. The County will seek funding to provide incentives for property owners to retrofit existing structures in high and very high fire risk areas to

reduce combustibility. Planning for emergency access and evacuation routes will take into account records of historic fire activities affecting foothills portions of the County. Emergency access and evacuation will also take into account fire behavior modeling, including consideration of wildfire driven by winds that could limit the use of existing evacuation routes. The County will analyze and consider planning and fair-share funding of improvements needed to provide for emergency access and evacuation routes generally leading away from the head of a wildfire that has the characteristics of the worst-case predicted wildfire and secondary access allowing egress oriented in a direction of approximately 180 degrees from the previously described route.

2 The comment states that a letter from the Dobbins/Oregon House Planning Committee that was included in Appendix A of the EIR was not listed on page 1-5 of the EIR which lists all letters received in response to the notice of preparation. The D/OH Planning Committee letter has been added to the list on page 1-5 of the EIR.

3 The comment states that the County's Multi-Hazard Mitigation Plan does not address mitigation measures for fire egress and evacuation. The comment includes an excerpt from a letter about fuel breaks. See the response to Comment 1. The comment suggests that the EIR inadequately relies on the Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan to address wildfire safety issues. See the response to Comment 1.

4 The comment states that the DEIR is inadequate for failing to consider the D/OH Planning Committee letter. As noted in the response to comment Shape 3-2 above, the letter, which was included in Appendix A of the DEIR, has been added to the list on page 1-5. While the letter was not on the list on page 1-5 of the DEIR, the letter was in fact considered during preparation of the DEIR.

5 The comment includes the text of the D/OH letter described in comments Sharp 3-2 and Sharp 3-4. As stated in the responses to comments Sharp 3-2 and Sharp 3-4, this letter was considered during the preparation of the DEIR. See the response to Comment 1.

Wheatland Fire

Wheatland Fire Authority

P.O. Box 119 4514 Dairy Road Wheatland, California 95692
Telephone (530) 633-0861 Fax (530) 633-8215 www.wheatlandfireauthority.com

February 8, 2011

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Yuba County Dept. of Planning

Mr. Dan Cucchi, Project Planner
Yuba County Planning Department
915 8th St, Suite 123
Marysville, CA 95901

RE: Comments on Yuba County General Plan 2030 Draft Environmental Impact Report.

Mr. Cucci,

On behalf of the Wheatland Fire Authority, thank you for the opportunity for us to comment on the Yuba County General Plan 2030 Draft EIR. Based on review of the report I offer the following.

- In clarification of Section 4.12.2, the Wheatland Fire Authority is a public entity created by a Joint Powers Agreement between Plumas Brophy Fire Protection District and the City of Wheatland. Plumas Brophy is party to the agreement, as versus contracting for service. 1

- While the Draft EIR states that new developments will be required to mitigate their impact on public services, we feel that there should be more specific language regarding revenue sources required to serve such development. These revenue sources will be required not only to fund capital improvements but to ensure adequate funding is available for the operation and maintenance of the Fire Authority. The Plumas Brophy FPD is primarily funded by property tax revenue, which is reasonably unlikely to provide adequate funding for fire protection and emergency services as growth occurs. Revenue sources that could be identified in the Draft EIR could include, but not be limited to, impact fees, community facilities districts or assessment districts. 2

Again, thank you for the opportunity to make these comments, which are in shared interest with Yuba County in providing for the safety of our residents.

Sincerely,

Joe Waggershauser
Fire Chief
Wheatland Fire Authority

1 The comment clarifies the origin of the Wheatland Fire Authority. Changes have been made to the text of Section 4.12.2 regarding the Wheatland Fire Authority.

2 The comment suggests that the DEIR should have more specific language on revenue sources for public services. Funding for fire services is addressed by various policies in the County's Draft General Plan, including:

Policy CD12.5 *New developments shall demonstrate the availability of adequate fire flow pressure, storage, system gridding, hydrant spacing, and sprinkler systems prior to approval.*

Policy CD12.6 *The County will condition new developments and collaborate with local fire districts to locate stations so that first fire response can be provided within 6 minutes in 95% or more of cases within the Valley Growth Boundary.*

Policy CD12.7 *The County's target for fire protection is an ISO (Insurance Service Organization) rating of no greater than 5 within the Valley Growth Boundary and no greater than 8 for Rural Communities.*

Policy CD12.8 *New developments shall contribute fees, construct and dedicate facilities, and/or use other mechanisms acceptable to local service providers to provide for law enforcement and fire protection facilities and services needed to serve new growth.*

While State CEQA Guidelines Section 15124(c) states that the project description shall contain, among other items, a general description of the economic characteristics of the project, economic impacts are not a topic of environmental impact analysis under State CEQA Guidelines.

The comment suggests specific language be added regarding mitigation required for new development. The commenter is directed to Policy CD12.8 within the Community Development Element which requires new development to contribute funds, construct, or otherwise provide for law enforcement and fire protection facilities needed to serve new growth.

YCWA

Flood Control • Water Supply • Fishery Enhancement • Recreation • Hydro Electric Generation

February 9, 2011

Yuba County Community Development and Services Agency
Planning Department
915 8th Street, Suite 123
Marysville, California 95901

RE: Notice of Availability of a Draft Environmental Impact Report for the Yuba County General Plan 2030 (SCH # 2010062054)

Thank you for the opportunity to review the subject document. Yuba County Water Agency (YWCA) believes that it is in everyone's best interest to foster a strong linkage between water resources management and land use planning, areas that have traditionally been administered by separate agencies and professional disciplines. The following comments are intended to help bridge the gap between these disciplines in order to develop a more robust 2030 General Plan for Yuba County. We offer them in a concise and direct format that is intended to be constructive and supportive of the general plan process.

Our review, comments, and concerns focus on Section 4.14, Utilities and Service Systems. For example, we have found that the draft Environmental Impact Report for the Yuba County General Plan 2030 (DEIR) improperly characterizes the quantity and reliability of surface water supplies to YCWA, incorrectly quantifies irrigation demands, and incorrectly characterizes the abundance of both surface water and groundwater supplies to meet demands. The DEIR incorrectly concludes from this misinformation that the increased demand from the general plan build-out would be a less than significant impact. 1

In Chapter 4.14 on pages 4.14-4 and 4.1-5 the DEIR incorrectly states the amount of YCWA demand, the amount of surface water supply, and incorrectly summarizes a surplus water supply. In the last paragraph of page 4.14-4, the statement that "*the average daily demand indicates a typical annual demand for 416,100 acre-feet annually*" is incorrect. The current annual YCWA demand as stated in the YCWA Lower Yuba River Accord EIR as of 2007 was 305,000 acre-feet and the future expected demand is 345,000 acre-feet. The difference in these two amounts is the addition of the Yuba Wheatland Canal Project, which is mostly complete, therefore the correct demand for YCWA would be 345,000 acre-ft. Also, because the daily demand for irrigation diversions for YCWA ranges from zero to over 2000 acre-ft per day, depending upon irrigation needs, quoting an average daily value is misleading and inappropriate. 2

1220 F Street • Marysville, CA 95901-4740 • 530.741.6278 • Fax: 530.741.6541
www.ycwa.com

With respect to YCWA and its Member Units, Table 4.14-1 on page 4.15-5 improperly characterizes supply and demand. The water supplies available to YCWA and its Member Units are dependent upon Yuba River hydrology. Yuba River hydrology is extremely variable and, as the DEIR states, ranges from over 4,000,000 acre-feet in the wettest years to less than 400,000 acre-feet in the driest year. Therefore, quoting an average annual water supply as the annual water supply is a serious mischaracterization of the variability and reliability of water supplies to YCWA and its Member Units. Secondly, the table quotes unimpaired flow as a water supply amount. However, since there are multiple out-of basin diversions in the upper watershed it is inappropriate to suggest that unimpaired flow represents the water supply available to YCWA. Table 4.14-1 also states a water surplus that is misleading and incorrect. Under average hydrologic conditions YCWA has sufficient water supplies to meet all irrigation demands. However in the driest year shortages in surface water supply will occur, as documented in the Accord EIR, and this fact should be acknowledged in the DEIR. We recommend that Table 4.14-1 be deleted from the DEIR and instead a discussion of the factors relevant to water supply and demand in Yuba County be used with citations as needed to correct data. 3

Table 4.14-2 on page 4.14-7 lists surface water and groundwater amounts for agricultural and urban uses by basin. This table should be labeled "Current Water Use" not "Current Groundwater Use". On page 4.14 – 20 in the first paragraph the current groundwater extraction for both urban and agricultural uses is incorrectly stated as 563,200 acre-feet per year, while Table 4.14-2 shows the total groundwater use of 167,900 acre-feet per year shown in the 2008 Yuba County IRWM Plan. This paragraph goes on to state that there are surplus water supplies totaling approximately 2,159,304 acre-feet per year and the increased demand for water associated with the full build-out of the 2030 General Plan is estimated at 51,478 acre-feet per year and therefore this would be a less than significant impact. This is an incorrect conclusion based on incorrect facts and incorrect logic. 4

We recommend that the incorrect information in Chapter 4.14 of the DEIR be corrected and that the incorrect characterization of surplus water and the quantification of surplus supplies for YCWA and its Member Units be deleted. Instead, a discussion should be included about the variability of surface water supplies and the fact that in the driest years shortages would occur. The conclusion regarding the impacts of the estimated increased demand associated with full build-out of the General Plan should be rewritten to state that in drier years, due to shortages in surface water supplies, agricultural water users will turn to groundwater and that the uncertainty of future drought conditions puts into question the availability and quantity of groundwater that can be used to meet build-out demand. 5

Because of the uncertainty of surface water supplies, and the resulting impacts to groundwater, and because the increased demand from build-out would most likely come from groundwater, this impact should be characterized as potentially significant. The DEIR should include mitigation 6

measures for policies that call for continued groundwater management as currently done under the YCWA Groundwater Management Plan. The DEIR also should discuss the need for future projects to analyze the potential impacts on groundwater and availabilities of water supplies based on current conditions and future cumulative effects. Such analysis will need to comply both with County policies and the requirements of SB 610 and related state-mandated water supply analysis requirements.

6 cont'd

Thank you again for the opportunity to review and comment on the Draft Environmental Impact Report for the Yuba County General Plan 2030. Please contact me at 741-6278 x 117 or smatyac@ycwa.com if you have any questions, need further information, or if you would like to meet to discuss this further.

Sincerely,

Scott Matyac
Water Resources Manger

cc: Curt Aikens
John Nicoletti

1 This comment objects to the significance conclusion of Impact 4.14-4 in the DEIR. The description of existing water use in unincorporated Yuba County has been revised. The level and description of impact, as described in the EIR, has not been changed. Please refer to Section 4.14 of the EIR and the response to Comments 4 and 5.

2 This comment objects to the characterization of water supply within Yuba County provided in Table 4.14-1 of the DEIR. The comment further notes that the hydrology of the Yuba River, the largest single source of surface water in the County, is variable, ranging from over 4 million acre feet to less than 400,000 acre feet per year in dry years. The comment suggests that this table be deleted and the factors relevant to water supply and demand be provided in the EIR.

The text of Section 4.14 has been revised in response to this comment. The revised text examines existing deliveries, as described in the YCWA IRWMP and acknowledges the variability of water supply. Refer to Section 4.14 for more details.

3 This comment suggests that the EIR improperly characterizes water supply and demand with respect to Yuba County Water Agency (YCWA) member units and that identification of average Yuba River flows is inappropriate. The comment discusses the need to acknowledge variability in water supply. The text of revised Section 4.14 acknowledges the variability of water supply and the potential for shortages.

The policies of the General Plan and existing state law require that individual projects that would occur under buildout demonstrate adequate and reliable water supplies. In addition the policies of the General Plan require consideration of the cumulative effect of groundwater extraction (most urban uses in the County rely on groundwater) in Policy NR12.1. The increase in demand under General Plan buildout is relatively small in relation to existing water deliveries. Future water demand will be further reduced by the requirements of the Green Building Code. Future projects tiered from this EIR will be required to demonstrate adequate and reliable water supplies, as well as water conservation and groundwater infiltration policies of the 2030 General Plan.

4 This comment requests changes to the labeling of Table 4.14-7 and states that the identification of surplus water is incorrect. Revisions have been made to this section of the EIR in response to the commenter. This comment requests that changes discussed in earlier comments be made to the EIR. As noted previously, the County has made revisions to the EIR in response to the previous comments. The comment also suggests that the conclusion of Impact 4.14-4 be changed. This change has not been made since the County has presented substantial evidence that increase in water demand resulting from implementation of the General Plan would have a less-than-significant impact relative to sufficiency of water supplies and since no new or expanded entitlements would be necessary. The estimated water demand associated with the 2030 General Plan buildout has been revised downward, as well, using more reasonable, although still conservative, estimates. The actual water demand will be substantially less compared to the conservative estimates shown in the revised EIR with incorporation of existing state law requirements (as explained in more detail in Section 4.14). The California Department of Water Resources (DWR) provides estimates of per–capita, per-day

(GPCD) water demand for the subregions of California. Yuba County is within DWR Hydrologic Region 5 (Sacramento River), where the average rate of water consumption is 253 GPCD. Per capita water use is defined as the total applied water of a service area divided by the permanent population of that area. This metric provides a means of estimating how much an increase in population in a particular area will increase water demand, assuming that development conforms roughly to existing patterns of land use. Based upon this figure, an increase in population of 100,000 individuals within unincorporated portions of the County could result in an increase in water demand of approximately 28,340 acre feet (af) per year. The estimated total storage capacity of the North Yuba Subbasin / South Yuba Subbasins is about 7.5 million af. Of this amount approximately 2.8 million af occur within 200 feet of the land surface, but not all of these supplies are available for withdrawal because well capacity and recharge rates limit the amount that can be safely withdrawn. The YCWA and other water providers are coordinating to avoid ground water overdraft and land subsidence associated with ground water extraction, however the yearly safe-yield (amount of water that can be withdrawn without adverse effects) is not currently known. The policies of the General Plan and existing state law require that individual projects that would occur under buildout demonstrate adequate and reliable water supplies. In addition the policies of the General Plan require consideration of the cumulative effect of groundwater extraction (most urban uses in the County rely on groundwater) in Policy NR12.1. The increase in demand under General Plan buildout is relatively small in relation to existing water deliveries. Future water demand will be further reduced by the requirements of the Green Building Code. Future projects tiered from this EIR will be required to demonstrate adequate and reliable water supplies, as well as water conservation and groundwater infiltration policies of the 2030 General Plan.

5 This comment suggests that different information be presented in Section 4.14 of the EIR, including deleting references to data on surplus water supplies and references to variability in surface water supplies. This comment also suggests that the conclusion on water supply be changed.

The text of Section 4.14 has been revised in response to this comment. The revised text examines existing deliveries, as described in the YCWA IRWMP and acknowledges the variability of water supply. Refer to Section 4.14 for more details. A change in the significance characterization would not be appropriate. The County has presented substantial evidence that increase in water demand resulting from implementation of the General Plan would have a less-than-significant impact relative to sufficiency of water supplies and that no new or expanded entitlements would be necessary. See also the response to Comment 4.

6 This comment reiterates the opinion that significance conclusion for Impact 4.14-4 should be changed. Refer to the response to Comments 1 through 5.

Yuba
FGC

The County of Yuba

Fish and Game Commission

February 9, 2011

Mr. Dan Cucchi
Yuba County Planning Department
915 8th St., Suite 123
Marysville, CA 95901

Re: Yuba County 2030 General Plan Update
Draft EIR (DIER) (SCH No. 2010062054)
Deer Range Map

Dear Mr. Cucchi,

The Yuba County Fish and Game Commission appreciates the opportunity to provide comments on the Draft Environmental Impact Report for the above-referenced project.

On page 4.4-48, the draft EIR recognizes the potential impact of development on deer habitat and deer migratory paths. It says:

Multiple deer herds are also known to move throughout public and private land in the County. The 2030 General Plan could affect up to 56,690 acres of potentially suitable deer habitat, including grasslands and woodlands. Rural community development would occur in much of this habitat which is located in the foothills of the County between Smartsville and Loma Rica.

On page 4.7-11 of the draft EIR it says:

Climate change has the potential to affect environmental conditions in California through a variety of mechanisms. Resource areas other than air quality and atmospheric temperature could be indirectly affected by the accumulation of GHG emissions. 1

It goes on to say that:

As the existing climate throughout California changes over time, the ranges of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the state if suitable conditions are no longer available.

Even though the draft EIR recognizes that "the ranges of various plant and wildlife species could shift or be reduced", and that there is a potential impact of development on deer habitat, it does not address the potential impact of climate change on the deer habitat and migratory paths. This impact could be **potentially significant.**

Yuba County Fish and Game Commission
Deborah Byrne, Chair
Yuba County Agriculture Department
915 8th Street, Suite 127
Marysville, CA 95901

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Community Development & Services Agency

The Deer Herds Map (last updated in 1983) also assumes that deer habitat will not be affected by global climate change, even as the draft EIR recognizes that the wildlife ranges might well be affected.

Therefore, the Deer Herds Map is insufficient and does not address the potential impact that global climate change may have on the Map.

The General Plan policies NR5.13 and NR5.14 specifically address development in deer habitat areas.
Policy NR5.13: *New developments shall be located and designed to avoid any adverse impact to critical habitat and foraging areas, migratory routes, and wildlife travel corridors for migratory deer herds, as identified by the California Department of Fish & Game.*

Policy NR5.14: *Within the designated winter and critical winter range of the Mooretown and Downieville deer herds, the County will strongly discourage any development that could substantially adversely affect these species. Where Rural Community Boundary Areas occur within the winter and critical range for these species, new developments shall dedicate permanent open space and provide minimum lot sizes designed to avoid substantial adverse impacts to these species.* ***The County will communicate with the California Department of Fish & Game regarding open space dedication and lot sizes needed to avoid impacts to deer herds"*** (emphasis added).

Yuba County Resolution No. 2010-1 authorizes the Yuba County Fish and Game Commission (Commission) to participate in the Yuba County Water Agency FERC relicensing process. The Commission has been participating in this process for over a year now. The Commission is concerned about what that the "communication" mentioned above is to contain and cannot find its contents detailed anywhere. The Commission requests that such communication be presented to the Commission before being sent to the California Department of Fish and Game so as to ensure that such communication does not conflict nor interfere with the efforts of the Commission on behalf of Yuba County in this FERC relicensing process. 2

Furthermore, since these policies do not address the potential for deer habitat alteration due to climate change, these policies are potentially based on the flawed assumption the deer habitat areas with not be affected by climate change, even while the EIR recognizes that "the ranges of various plant and wildlife species could shift or be reduced".

How is the draft EIR going to correct the flawed science (that there will be no significant climate change affecting habitat even though the best science says there will be climate change) that Policies R5.13 and NR5.14 are based on?

The draft EIR does not adequately address the fact that "adverse impact to critical habitat" may not materialize because climate change may alter the deer habitat areas in such a way that these areas are no longer suitable deer habitat.

Conclusions:

1.The draft EIR does not sufficiently address the impact that global climate change may have on deer herd habitat, and has not sufficiently detailed any changes in deer herd habitat since the last study on the subject in 1983.

2. The General Plan update as written with respect to environmental impacts could adversely affect the Yuba County Water Agency FERC relicensing.

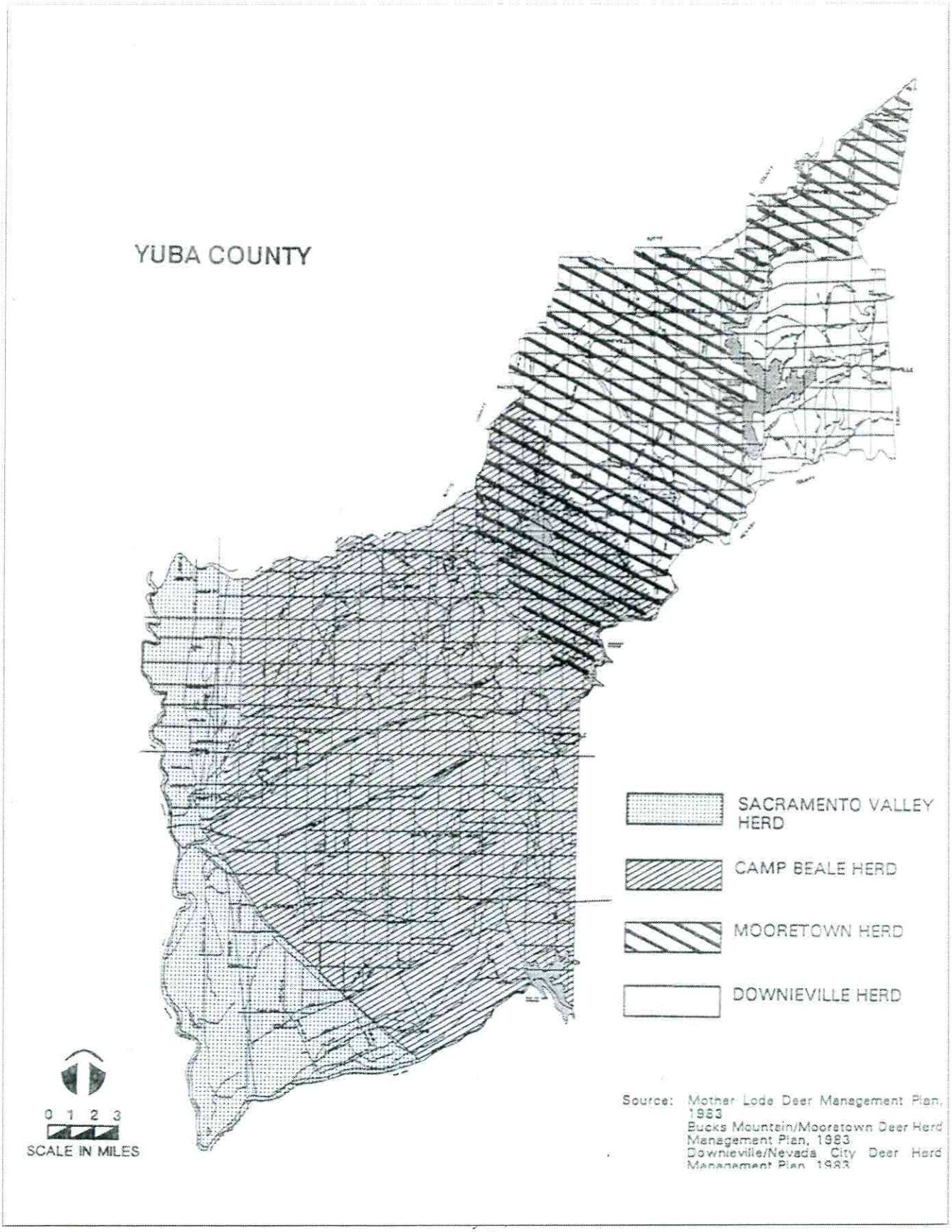
Yuba County Fish and Game Commission
Deborah Byrne, Chair
Yuba County Agriculture Department
915 8th Street, Suite 127
Marysville, CA 95901

The Yuba County Fish and Game Commission looks forward to receiving further information to ensure that the Yuba County Water Agency FERC relicensing process is not interfered with and to assist in the development of any communication the the California Department of Fish and Game, including development of studies to delineate current deer herd habitat. 3

Sincerely,

Deborah Byrne
Chair, Yuba County Fish and Game Commission

Yuba County Fish and Game Commission
Deborah Byrne, Chair
Yuba County Agriculture Department
915 8th Street, Suite 127
Marysville, CA 95901



Yuba County Agriculture Department
915 8th Street, Suite 127
Marysville, CA 95901

1 The comment discusses the potential for climate change to impact deer habitat. The comment identifies that the EIR recognizes the potential impact of implementation of the 2030 General Plan on deer habitat and movement. The comment suggests that the EIR should include more information regarding the impact of climate change on deer habitat and migratory paths.

Any attempt to predict how global climate change will affect deer herds in Yuba County and how those effects might interact with potential general plan impacts on deer herds would be too speculative for meaningful consideration at this time. The appropriate baseline for CEQA analysis is the physical condition at the time notice of preparation is published and it is not appropriate to use some possible future condition as the CEQA baseline. In addition, refer to Section 6 of the EIR, under the heading "Biological Resources," which presents information related to the possible effects of climate change on biological resources. It is not possible at this time to model the effects of climate change at the local level, with the level of detail necessary to predict effects on habitat for specific species. As acknowledged in Section 6 of the EIR, the degree to which the 2030 General Plan could contribute to a significant cumulative climate-change related biological resources impacts is unknown at this time. See also the response to Comment 2 from this letter.

2 The comment states that the 1983 Deer Herds Map is insufficient and does not address global climate change.

The 1983 map is the most recent map of resident and migratory deer ranges available. DFG was contacted for more up to date deer herd information, but updated mapping and analysis has not been completed. Therefore, this is the best available information on which to base the analysis of impacts on deer herds in this programmatic document. The comment does not propose alternative information sources that would provide a better baseline for analysis.

The comment also states that the Commission is concerned about the content of communication with DFG and would like to review such communication before it is sent to DFG so the Commission can ensure such communication does not interfere with their efforts on behalf of the Yuba County Water Agency Federal Energy Regulatory Commission (FERC) relicensing process.

Please refer to the revised policies NR5.13 and NR5.14, which have been simplified and clarified, including removing the specific reference to communications with the DFG.

The comment contends that the General Plan Policies NR5.13 and NR5.14 are based on flawed science because they assume that deer habitat will not be affected by climate change.

The comment is incorrect that the General Plan policies assume climate change would not affect deer habitat. The policies provide guidance for development projects under the jurisdictional control of Yuba County to avoid adverse impacts on the Mooretown and Downieville deer herds. It would be speculative to try and predict how deer herds in

Yuba County would respond to climate change and to design site-specific mitigation based on the potential future physical conditions resulting from climate change. Please refer to the revised policies NR5.13 and NR5.14. See also Section 6.1.4 of the EIR, under the heading "Biological Resources," where the County discusses potential biological impacts of climate change.

Finally, the commenter contends that the 2030 General Plan would adversely affect the Yuba County Water Agency Federal Energy Regulatory Commission relicensing. The commenter indicates that the County's overall policy framework, and in particular the County's strategy for avoiding adverse impacts to deer habitat, would conflict with or interfere with the ongoing relicensing efforts.

As noted in the General Plan Implementation chapter of the 2030 General Plan, the policies in the General Plan will be used as the County evaluates development proposals; coordinates with other public agencies on infrastructure and public facilities to support land use change consistent with the General Plan; and updates its codes and standards. The General Plan would not directly relate to, nor conflict with ongoing relicensing efforts. See Policy NR12.12 of the Natural Resources Element:

Policy NR12.12 *The County will support the Federal Energy Regulatory Commission relicensing of the Yuba River Development Project.*

3 The comment states that the commenter looks forward to receiving more information in the future about areas of interest. This comment does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, no additional response is required.

FRAQMD

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Yuba City, CA 95991
(530) **634-7659**
FAX (530) **634-7660**
www.fraqmd.org

David A. Valler, Jr.
Air Pollution Control Officer

Serving Sutter and Yuba Counties

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FEB 11 2011
Community Development & Services Agency

February 9, 2011

County of Yuba Planning Division
915 8th Street, Suite 123
Marysville, CA 95901
Fax: 530-749-5434

Re: Draft Environment Impact Report (DEIR) 2030 Yuba County General Plan

Dear Mr. Cucchi,

The Feather River Air Quality Management District (District) appreciates the opportunity to review and comment on the draft Environmental Impact Report for the 2030 Yuba County General Plan. The District's comments concern the analysis of air quality impacts and climate change impacts.

Air Quality Analysis

The Air Quality analysis evaluates multiple development alternatives for air quality significance in the areas of operational and construction emissions of criteria air pollutants, mobile source emissions of carbon monoxide (CO), emissions of toxic air contaminants, and odor impacts. With the exception of CO emissions, all alternatives were found to have a significant and unavoidable impact, which is inevitable given the scope of the project. 1

Regional and Local Plans, Policies, Regulations, and Ordinances

The District adopted amendments to Rule 3.17 Wood Burning Devices in October, 2009, which apply to the construction and operation of projects developed under the Plan. This Rule requires any newly installed residential wood burning devices meet emission standards. The District recommends adding Rule 3.17 to the list of District regulations beginning on page 4.3-6. 2

Air Quality Plans
The most recent Air Quality Attainment Plan (AQAP) for the Northern Sacramento Valley Planning Area was adopted by the District's Board of Directors June 7, 2010. The District recommends that the DEIR reference the most recent AQAP on pages 3-16 and 4.3-7. 3

Toxic Air Contaminants
The District recommends that the DEIR include an analysis on Naturally Occurring Asbestos as this toxic air contaminant is present in the foothill and mountain regions of Yuba County. 4

Comments on Air Quality Impact Analysis

Impact 4.3-1 Generation of Long-term Operational, Regional Emissions of Criteria Air Pollutants and Precursors and Consistency with Air Quality Planning Efforts-

The DEIR provides emissions data for the 2030 buildout conditions and provides a summary in Table 4.3-3. The modeling results are also provided in Appendix B. The modeling results provided are for wintertime emissions only. The District recommends that the DEIR explain why only wintertime emissions have been reported and not annual or summertime emissions. Also the modeling assumed that no wood-burning appliances would be installed throughout the Plan area. The District does not believe this is an accurate portrayal due to the lack of any regulatory prohibition against wood burning devices and the availability of wood as a source of fuel, especially in the foothill and mountain areas. The only current regulation that impacts residential wood heating is District Rule 3.17, which requires that any newly installed wood burning device meet emission standards. 5

On Action CD17.1 Travel Demand Management Ordinance, the District recommends the ordinance include an option for employers to join the Yuba-Sutter Transportation Management Association in lieu of or in addition to requiring large employers to provide incentives for commute alternatives.

Impact 4.3-2 Generation of Short-term Construction-Related Emissions of Criteria Air Pollutants and Precursors-

Under Mitigation Measures, the District recommends amending the first paragraph. The District does not regulate construction equipment exhaust emissions, fuels, or idling time. The ARB and the U.S. Environmental Protection Agency regulate mobile sources and fuels. The District also recommends amending the last sentence that reads "Implementation of FRAQMD would reduce short-term, construction-related emissions," to "implementation of FRAQMD recommended mitigation measures would reduce short-term construction-related emissions." 6

Impact 4.3-4 Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants-

The DEIR analyzes the impacts of TACs from mobile sources and uses the ARB's Air Quality and Land Use Handbook: A Community Health Perspective's recommendations for evaluating risks to sensitive receptors near busy roadways. The DEIR concludes that "Sensitive receptors would not be sited within 500 feet of a 'major freeway,' using this definition and risk associated with the implementation of the 2030 General Plan would be compatible with ARB's recommendations." The District does not believe that the Plan is compatible with ARB's recommendations simply due to the fact that there is no "major freeway" in the Plan area. 7

The ARB's recommendation in the Land Use Handbook is to avoid siting new sensitive land uses within 500 feet from a freeway, urban roads with 100,000 vehicles/day, or rural roadways with 50,000 vehicles/day. The definition of a rural area as defined in Health and Safety Code 50101 is any open country or any place, town, village, or city by itself and taken together with any other places, towns, villages, or cities that it is part of or associated: (a) has a population not exceeding 10,000; or (b) has a population not exceeding 20,000 and is contained within a nonmetropolitan area. The ARB Land Use Handbook also notes that studies have identified additional non-cancer risk attributable to locations up to 1,000 feet.

Climate Change Analysis

The District recognizes that local governments have an enormously important role to play in reaching the goals of AB 32 and in reducing greenhouse gas emissions. The Climate Change analysis in the DEIR evaluates existing conditions, the emission sources of GHG in Yuba County and California, and describes the impacts of the Plan related to climate change.

Impact 4.7-1 Increase in Greenhouse Gas Emissions-
The DEIR concludes that the impact of the Plan is significant and unavoidable based on that the GHG emissions will exceed the amount of emissions per capita and per service population required to meet the goals of AB 32 and the Governor's Executive Order S-3-05. The DEIR lists the policies and actions from the Plan that are mitigation measures and which are expected to reduce emissions of GHG, however they are not quantified. The District recommends that Action HS5.1 Greenhouse Gas Reduction Plan include a specific target for reduction of GHG emissions, for example a 30% reduction below business as usual or to reduce emissions in 2020 to 1990 GHG levels. 8

The District also recommends the following edits:

1. Table 2-1 on page 2-11 Policy CD9.12 is listed as a mitigation measure however District staff were not able to locate this measure in the Plan.
2. On Table 4.3-1 Note K should be placed under California Annual Arithmetic Mean PM2.5 Standard. The Standard should also be changed from "U" (Unclassified) to "A" Attainment
3. In Table 4.3-2 Fine Particulate Matter (PM2.5) and Respirable Particulate Matter are noted as "There is insufficient (or no) data available to determine value." It is unclear how there is insufficient data when the DEIR Appendix B Air Quality Modeling Data provides tables on PM2.5 and PM10. The DEIR should include the data from Appendix B in Table 4.3-2. 9
4. Explain the reason landfill emissions have been omitted from Table 4.7-1.

Thank you for the opportunity to provide comments on the 2030 General Plan. If you need further information or assistance, please contact me at (530) 634-7659 x210. Air District staff will be available to assist the project proponent or Lead Agency as needed.

Sincerely,

Sondra Spaethe

Sondra Spaethe
Air Quality Planner

Enclosures: None

File: Chron

1 This comment notes that the General Plan EIR evaluates multiple development alternatives for air quality significance in the areas of operational and construction emissions of criteria air pollutants, mobile source emissions of carbon monoxide (CO), emissions of toxic air contaminants, and odor impacts, and that, with the exception of CO emissions, all alternatives were found to have a significant and unavoidable impact, which is inevitable given the scope of the project.

The commenter is correct to note that a range of alternatives were analyzed in the DEIR and that significant and unavoidable impacts occur in the referenced air quality impact areas.

2 This comment requests that the County add reference to Rule 3.17, which regulates wood burning devices.

This reference has been added to the Regulatory Setting subsection of Section 4.3 of the EIR, which addresses Air Quality. This rule is presented under the heading, “Feather River Air Quality Management District.”

3 This comment references the most recent Air Quality Attainment Plan for the Northern Sacramento Valley Planning Area.

The requested updates in Sections 3 and 4.3 have been made.

4 This comment requests additional analysis related to naturally occurring asbestos.

Please refer to Section 4.6 of the EIR, “Geology, Soils, Mineral Resources, and Paleontological Resources. In addition, environmental setting, regulatory setting, and analytical information has been added to Section 4.3 of the EIR, “Air Quality.”The County has added reference to Occupational Safety and Health Administration requirements in the regulatory setting subsection. The County has added reference to California Geological Survey Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California and an asbestos-related Airborne Toxic Control Measure adopted by the California Air Resources Board. Information regarding the potential for naturally occurring asbestos was added to the environmental setting subsection. A subsection under Impact 4.3-4 has been added. The conclusion for Impact 4.3-4 has not changed.

5 This comment points out that operational criteria air pollutant emissions are presented for wintertime conditions and that the analysis in the DEIR did not assume wood burning devices would be installed with new development accommodated under the General Plan.

The operational emissions are based on wintertime conditions since winter calculations are typically higher than those estimated for summer. The main factor is the increased use of heating devices, such as furnaces, wood stoves and fireplaces. The commenter is correct to point out that the emissions reported in the DEIR did not include modeled emissions from woodstoves and fireplaces. Any newly installed wood burning device must meet the requirements of FRAQMD Rule 3-17. The emissions for wood burning devices that meet the new criteria are estimated to be 450 lbs/day of ROGs, 147 lbs/day

NO_X, 666 lbs/day PM_{10} and 641 lbs/day $PM_{2.5}$. This information has been added to Section 4.3. Please refer to the information under Impact 4.3-1.

This comment recommends that the County revise Action CD17.1 to allow employers the option of joining the Transportation Demand Management Association

The requested revision has been made to Action CD17.1.

6 This comment indicates that the Air District does not regulate construction equipment exhaust emissions, fuels, or idling. This comment also suggests a revision to the mitigation discussion under Impact 4.3-2.

Both requested changes have been made. Please refer to Section 4.3 under Impact 4.3-2.

7 This comment discusses the definitions of high-volume roadways from the California Air Resources Board's Air Quality and Land Use Handbook: A Community Health Perspective.

In response to the comment, additional information has been added under Impact 4.3-4 under the heading "Mobile Sources." As noted in this analysis section, the County has proposed Action CD3.1: Compatibility Review and Conditioning of Projects and Plans, which requires review and conditioning of projects for, among other topics, adequacy of buffering between residential land uses, highways, railroads, airports, industries, mining operations, agricultural operations, and other potentially incompatible uses.

8 This comment notes the importance of local government action to address greenhouse gas (GHG) emissions. The comment notes that the County's analysis of GHG emissions impacts includes an evaluation of existing conditions, emissions sources, and the impacts of the 2030 General Plan. This comment also notes that the conclusion with respect to GHG emissions impacts is significant and unavoidable. The commenter notes that the County has not quantified the benefits of General Plan policies. The comment also recommends that the County identify a specific emissions reduction target for Action HS5.1, Greenhouse Gas Reduction Plan.

Policies included in other Elements of the 2030 General Plan have GHG-reducing effects. However, it is not feasible at the General Plan level to predict the quantified effectiveness of the wide range of mitigating policies presented. These estimates would depend on the specific characteristics of the projects accommodated under the General Plan, the degree to which the mitigating policies are incorporated into each project, the location and nature of each project relative to the surrounding land use mix and development patterns, and many other factors, some of which are auto correlated. The mitigating policies and action described in this impact analysis is scaled for use in a program EIR, with additional details to be addressed in the County's Greenhouse Gas Reduction Program (Action HS5.1). The GHG efficiency discussion in the 2030 General Plan and in the EIR provides helpful context for measuring performance of the Greenhouse Gas Reduction Program.

The commenter is correct about the breadth of analysis presented in Section 4.7 of the EIR and the conclusion in this impact analysis. The Public Health & Safety Element includes a discussion of the appropriate approach for developing a GHG emissions reduction target. As suggested by the commenter, land use entitlement authority, which largely rests at the local government level in California, has a great influence on development patterns, community design, transportation facilities planning, and other factors that influence vehicle miles traveled (VMT). Assessing GHG emissions impacts

should, therefore, focus on land-use related emissions sectors over which the County has some control.

In developing an emissions or emissions reduction target, the simplest approach is some type of percentage reduction for community-wide emissions or government operations. California's GHG mandate requires that statewide GHG emissions be reduced to 1990 levels by 2020, which would represent a roughly 10% reduction from 2006 levels and a roughly 30% reduction from forecast "business as usual" 2020 emissions. However, AB 32 addresses a statewide emissions target that is not necessarily appropriate for application at the city or county level. Also, the "business as usual" scenario developed by the California Air Resources Board (ARB) is based on many complex, long-range assumptions regarding statewide growth in VMT, energy prices and demand, modeling of change in different industrial sectors, and many other factors and assumptions, many of which are themselves correlated. The "business as usual" scenario is useful in illustrating the ambitious nature of California's GHG goals, but is only indirectly related to the actual AB 32 target (1990 emissions by 2020). A percentage reduction from the "business as usual" scenario also is difficult to objectively apply at the project level.

The intent of AB 32 is to accommodate population and economic growth in California, but do so in a way that achieves a lower rate of GHG emissions. Neither state legislation nor executive order suggests that California intends to limit population or employment growth as a way to reduce the state's GHG emission levels. In achieving the state's targets, some communities will experience an increase in mass emissions, while others may experience a decrease. The key point, however, is that to achieve AB 32 targets, communities will need to achieve a lower *rate* of emissions per capita and/or per employee. With a reduced rate of emissions per capita and per employee, California can accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target. Focusing on per-unit rather than mass emissions levels is sometimes called "GHG efficiency." For land development projects, the use of an efficiency approach that considers emissions per capita or per employee correlates well with the activities accommodated by development.

Using an efficiency-based approach based on achieving 1990 GHG emission levels is tied to the science of climate change. Avoiding dangerous climate change would require ambient global CO_2 concentrations to stabilize at a level between approximately 350 and 400 ppm. Ambient global CO_2 concentrations in 1990 were approximately 353 ppm and 1990 is the year to which the AB 32 legislative mandate is tied. One may calculate the GHG efficiency required to meet AB 32 goals by taking 1990 emissions and dividing by the projected population and employment.

As noted in the Public Health & Safety Element, the "fair share" of land use-related GHG emissions per person, using this approach, would be currently estimated to be approximately between 6.4 and 6.6 metric tons of CO2 equivalent emissions. "Service population" is a term used to express the total population plus employment. The "fair share" of GHG emissions per service population needed to achieve AB 32 mandates is between approximately 4.4 and 4.6 metric tons CO2 equivalent. For residents and employees accommodated in new development, emissions should not be more than 4.6 metric tons CO_2 equivalent per service population. New development that generates GHG emissions at levels equal to or less than these levels could be considered part of the solution to the problems related to cumulative GHG emissions and would not hinder the state's ability to meet its goals of reduced statewide GHG emissions. Although the precise calculations for the appropriate "fair share" of land use-related GHG emissions

per service population may be revised as new information becomes available, this concept is substantiated for assessing the degree to which plans and projects would have cumulatively considerable impacts under CEQA. The EIR evaluates GHG emissions according to this substantiated significance threshold and proposes a wide range of feasible mitigation, which is summarized in Table 4.7-4 of the DEIR.

Under the broad policy framework provided by the General Plan, the County will consider at the project level the effectiveness of General Plan policy for reducing GHG emissions and pursue more specific measures through development of a Greenhouse Gas Reduction Program (as indicated by Action HS5.1).

9 This comment contains specific recommendations for revisions to Sections 4.3 and 4.7.

The commenter identified Policy CD19.12 in the Executive Summary as a mitigating policy that was listed for addressing Impact 4.3-1. This mitigating policy is now Policy CD19.9 and includes the following text: "Secure bicycle parking shall be located at or near public buildings, business districts, parks, playgrounds, shopping centers, schools, transit terminals, bus stops, and other bicycle traffic generators." This policy will help to address long-term operational air pollutant emissions.

The commenter's suggested change related to note "k" of Table 4.3-1 and the change to the attainment status (from "U" to "A") have been made. Please refer to Section 4.3.

With regard to the comment on Table 4.3-2, the table was not formatted properly. The asterisks indicating insufficient data were an error, which has been addressed in revisions to this table.

With regard to landfill emissions, the County estimates baseline GHG emissions of approximately 32,284 MT CO2e/yr. The County estimates that with full buildout of the 2030 General Plan, landfill related emissions would be approximately 52,327 MT CO2e/yr.[1] For details, please refer to Appendix C of the FEIR.

[1] SCS Engineers. 2007 (July). Current MSW Industry Position and State-of-the-Practice on Methane Destruction Efficiency in Flares, Turbines, and Engines for Solid Waste Industry for Climate Solutions. Yuba County Waste Categorization Pers. Comm. Bryan Clarkson, Environmental Compliance Manager, Recology Environmental Solutions.

The County of Yuba

BOARD OF SUPERVISORS

FEBRUARY 8, 2011 - MINUTES

The Honorable Board of Supervisors of the County of Yuba met in regular session on the above date, commencing at 9:51 a.m., within the Government Center, Marysville, California, with a quorum being present as follows: Supervisors Andy Vasquez, John Nicoletti, Mary Jane Griego, Roger Abe, and Hal Stocker. Also present were County Administrator Robert Bendorf, County Counsel Angil Morris-Jones, and Deputy Clerk of the Board of Supervisors Rachel Ferris. Chair Abe presided.

I. PLEDGE OF ALLEGIANCE - Led by Supervisor Abe

Chairman Abe announced in the matter of the one case of Threatened litigation the mane of the claimant is Billy Wilden Sr.

II. ROLL CALL - Supervisors Vasquez, Nicoletti, Griego, Abe, Stocker – All Present

III. CONSENT AGENDA: All matters listed under the Consent Agenda are considered to be routine and can be enacted in one motion.

MOTION: Move to approve MOVED: Andy Vasquez SECOND: John Nicoletti
AYES: Andy Vasquez, John Nicoletti, Mary Jane Griego, Roger Abe, Hal Stocker NOES: None ABSENT: None ABSTAIN: None

A. Community Development and Services

1. Approve lease agreement with North Yuba Little League for joint use and associated improvements at the North Yuba Little League complex known as Sperbeck Field in Browns Valley and authorize the Chairman to execute same. (Land Use and Public Works Committee recommends approval) (056-11) Approved.

2. Adopt resolution summarily vacating bike easement over lot "H" of Tract Map No. 98-578, Rio Del Oro, Large Lot Final Map. (Land Use and Public Works committee recommends approval.) (057-11) Adopted Resolution No. 2011-11, which is on file in Yuba County Resolution Book No. 42 entitled: "RESOLUTION SUMMARILY VACATING BIKE EASEMENT OVER LOT "H" OF TRACT MAP NO. 98-578, RIO DEL ORO."

3. Approve Memorandum of Understanding with City of Yuba City regarding routine maintenance responsibilities for the Fifth Street Bridge and authorize Chairman to execute same. (058-11) Approved.

B. County Administrator

1. Approve authorization of a Regional Waste Management Authority grant application on the County's behalf for the Local Government Waste Tire Cleanup and Amnesty Event Grant Program by authorizing the County Administrative Officer to execute submittal letter. (059-11) Approved.

IV. SPECIAL PRESENTATION

1. Present proclamation to Virgil Zimmerman honoring his years of service on the Planning Commission. (Five minute estimate) (060-11) Supervisor Vasquez presented the proclamation to Mr. Zimmerman.

V. PUBLIC COMMUNICATIONS:

Mr. Glen Green, West Linda, voiced concerns regarding Pacific Gas and Electric underground utilities and lack of Board representation at a meeting held February 4, 2011.

Mr. Charlie Foster, West Linda, expressed concerns regarding the age of the gas lines and advised his property is situated between two lines.

VI. ORDINANCES AND PUBLIC HEARINGS: The Deputy Clerk read the disclaimer.

A. Public Hearing - Hold public hearing and approve amended Conflict of Interest Codes for the Marysville Levee Commission, Wheatland Cemetery District, Yuba Local Agency Formation Commission, Yuba County, and Yuba County Water Agency. (061-11) Deputy County Counsel Pat Garamone provided a brief recap and responded to Board inquiries.

Chairman Abe opened the public hearing. No one came forward.

MOTION: Move to approve amended Conflict of Interest Codes
MOVED: John Nicoletti SECOND: Hal Stocker
AYES: Andy Vasquez, Mary Jane Griego, Roger Abe, John Nicoletti, Hal Stocker NOES: None ABSENT: None ABSTAIN: None

VII. COUNTY DEPARTMENTS

A. Board of Supervisors

1. Consider letter from Bridget Barnes regarding Ostrom Road Landfill Conditional Use Permit and take action as appropriate. (Fifteen minute estimate) (065-11) Community Development and Services Director Kevin Mallen advised staff has reviewed the letter provided and are in the process of gathering information and preparing a report to present to the Board at the February 22, 2011 meeting and responded to Board inquiries.

Counsel Angil Morris-Jones responded to specific questions regarding procedures for complaints to the Planning Commission.

The following individuals spoke:

- Ms. Sandra Gilbert, Wheatland, raised concerns regarding the possibility of hazardous waste, and sewer sludge leaking into best slough.

- Mr. Mike Comant, Rio Oso, urged the Board to review the Farm Bureau Policy Handbook sections regarding property rights, air quality, waste disposal, hazardous materials, inspections and regulations and sewage disposal.
- Ms. DD Levine, U C Davis student, expressed concerns regarding landfill liner longevity and shared an article from the American Medical Association.
- Ms. Brigit Barnes, voiced concerns regarding changes in the design and operations of the Ostrom Road Landfill facility through a series modifications to their use permit which had not been presented to the Board of Supervisors for review and requested the Board establish a procedure to review changes made to the existing use permit.
- Dr. Richard Paskowitz, Yuba Group Against Garbage (YUGAG), urged transparency in decisions regarding the landfill and adequate information be readily available
- Mr. Roy Crabtree, Wheatland, urged the Board to consider impacts to public health from airborne contaminants and fungus.
- Mr. Dave Vaughn, Recology Vice President, stated Recology looks forward to working with the County, Ms. Barnes, and the Yuba Group Against Garbage to try to resolve these matters.

Following Board discussion staff was directed to prepare reports and return to the Board on February 22, 2011.

Chairman Abe formed an ad hoc committee appointing Supervisors Vasquez and Stocker to review host tipping fees to remain active until December 31, 2011.

VIII. CORRESPONDENCE - (062-11)

MOTION: Move to accept and file MOVED: Hal Stocker SECOND: Andy Vasquez
AYES: Hal Stocker, Andy Vasquez, John Nicoletti, Mary Jane Griego, Roger Abe NOES: None ABSENT: None ABSTAIN: None

A. Letter from Federal Emergency Management Agency revalidating determinations for properties in letters of map changes previously issued.

B. Brochure from National Association of Counties regarding April 2011 as National County Government Month.

C. Letter from Reclamation District (RD) 784 requesting abandonment of Murphy Road west of Feather River Boulevard. Referred to Community Development.

D. Memo from RD 784 enclosing a copy of Escrow documents from Leslye Rossiter of North State Title Company concerning conveyance of portions of Ella Basin to RD 784 and payment of pro-rata taxes. Referred to Auditor.

E. Memo from Amador County Board of Supervisors regarding Tax Neutrality Guidelines for Pacific Gas and Electric donated lands.

F. Letter from Area 4 Agency on Aging Advisory Council advising of three vacancies.

IX. BOARD AND STAFF MEMBERS' REPORTS: Reports were received on the following:

Supervisor Griego:
- Local Area Formation Commission meeting held February 2, 2011
- Sacramento Area Council of Governments meeting held February 3, 2011
- Tri-County Education Awards held in Colusa
- Feather River Air Quality Management District meeting held February 4, 2011

Supervisor Nicoletti:
- Peach Tree Health Care working retreat and Marysville City/County liaison meetings held February 4, 2011
- Reduction in Community Services Commission funding will effect senior meals and other outreach efforts
- Three Rivers Levee Improvement Authority is tracking FEMA de-accreditation letter
- Request input from Community Development staff regarding aging Pacific Gas and Electric gas mains

Supervisor Abe:
- Attended Local Area Formation Commission meeting held February 2, 2011
- Feather River Air Quality Management District meeting held February 4, 2011

X. CLOSED SESSION: The Board retired into closed session at 11:28 a.m.

A. Threatened litigation pursuant to Government Code §54956.9(b) - One claim/Billy Wilden Sr.

The Board returned from closed session at 11:33 a.m. with all members present as indicated above.

Counsel advised the Board voted unanimously to deny the claim of Billy Wilden Sr., and authorized referral to Porter Scott.

XI. RECESS: The Board recessed at 11:34 a.m. and reconvened at 2:00 p.m. with all Board members present as indicated above.

XII. 2:00 P.M. SPECIAL PRESENTATION

A. Receive information on Draft General Plan 2030 and Draft Environmental Impact Report contents. (No additional background) (90 minute estimate) (063-11)

Community Development and Services Director Kevin Mallen provided a Power Point presentation recapping the following and responded to Board inquiries:
- Definition of a General Plan
- Balancing local priorities with State mandates
- Mitigating burdens on future growth
- 4 year process developing plan
- Adoption of plan with updates of zoning, building standards, and fees to follow

Planner Dan Cucchi continued with the Power Point presentation recapping the following:
- General Plan Over-Arching Regulatory Structure and Policy
- Process to date, public participation, and community outreach and input
- Implement Strategic Plan and Vision to:
    - Accommodate jobs and housing

    - Improve quality of life
    - Provide economic independence
    - Create a sustainable vibrant valley community
    - Preserve rural lifestyle
    - Resource protection
- General Plan Themes:
    - Economic, environmental, and social sustainability
    - Managed growth and development
    - Use and conservation of resources
    - Protect public health, safety, and welfare
    - Regional coordination; rural lifestyle
    - Local quality of life
- Contents of Plan
- Community Development:
    - Economic Development
    - Valley Growth Boundary and review every eight years
    - Focal points of built environment
    - Rural Communities/Community Plans
    - Infrastructure, facilities, services and circulation
- Public Health and Safety:
    - Flood protection, fire risk, emergency preparedness
    - Airports, air quality, climate changes
    - Hazards
    - Noise and vibration
- Natural Resource:
    - Open and Recreational Space
    - Cultural, farmland biological, mineral resources
    - Water supply
    - Renewable energy technologies
- Draft Environmental Impact Report released December 10, 2010

Mr. Cucchi and Planning Director Wendy Hartman responded to specific Board inquiries regarding preparation of zoning ordinance and adoption; growth plan assumptions; agricultural resources; inclusion of Magnolia Ranch and Woodbury projects; and growth plan assumptions.

Planning Director Wendy Hartman continued the Power Point presentation recapping the following:

- Public comments received
- Analysis of comments and categorized them as Recommended Changes; Policy Direction Needed; and No Change Recommended
- Recommended changes on comments
- Policy direction needed on comments
- No changes recommended on comments

Ms. Hartman responded to specific Board inquiries regarding climate changes policies and compliance; and job housing balance.

Supervisor Griego left the meeting at 3:22 p.m. and did not return.

Mr. Mallen commented on recommended changes for Board consideration, policy direction needed, and the process for the public hearing scheduled February 9, 2011.

County Administrator Robert Bendorf commented on navigating through the process of the General Plan and laying a foundation for moving forward, encouraged the Board to provide direction and any recommended changes, and commended the community for their participation and staff efforts.

XIII. RECESS: 3:40 p.m. to February 9, 2011 at 3:00 p.m. by Chairman Abe.

The Board reconvened on February 9, 2011 at 3:02 p.m. with all Board members present.

XIV. ORDINANCES AND PUBLIC HEARINGS: The Clerk read the disclaimer

A. Public Hearing - Hold public hearing to receive public comments on the Draft General Plan 2030 and Draft Environmental Impact Report; provide direction regarding comments received; and direct staff to prepare Final Environmental Impact Report and response to comments. (064-11)

Planner Dan Cucchi provided a Power Point presentation recapping the following:

- Over-arching Policy and Framework for Zoning and Development Standards
- General Plan Themes
- Draft Environmental Impact Report
    - Released December 10, 2010
    - Based on Build out of the General Plan
    - Includes Significant and Unavoidable Impacts
    - Build out of General Plan Description
- Two Types of Significant and Unavoidable Impacts
    - Loss of Important Farmland and Conversion of Ag Land to Non Ag Uses
    - Need for New/Expanded Parks and Recreation Facilities and Potential for Accelerated Deteriorating of Existing Parks and ensuring adequate provisions of parkland as County grows

Chairman Abe opened public hearing. The following individuals spoke:

- Ms. Alyssa Lindman, Planning Commissioner, commented on the sense of distrust in community, and the lack of Planning Commission involvement which is allowed by California Environmental Quality Act
- Mr. Rod Hisken, Oregon House, commented on larger parcel size, jobs, and slowing down the process
- Mr. Frank Cecil, Browns Valley, on behalf Emily Gordon requesting postponing the update
- Mr. Tom Eres, Hofman Ranch, expressed concerns about the process, inadequate EIR, and to pause the process
- Mr. Randy Collins, Woodbury Specific Plan, discussed plan, designation as a natural resources and requested a valley neighborhood designation
- Ms. Tiffany Wright, Woodbury Specific Plan, commented on the designation requested assisting in reducing the significant impacts in the EIR stating changing of designation would not trigger recirculation of the EIR
- Mr. Erik Johnson, Marysville Road, submitted letters of request for certain parcels to be included in the Oregon House/Dobbins Community or in the Collins Lake Community Boundary if formed
- Mr. Nick Spaulding felt dialog was needed on performing on minimum side of climate change regulations and commented on LAFCO and Fish and Game letters submitted
- Mr. Greg Crompton, Dobbins, felt the EIR does not adequately consider fire disaster within the county

- Mr. Al Montna, Magnolia Ranch Project, urged project site location removed from planning reserve to employment village
- Mr. Charles Sharp, Oregon House, felt the process was out of sequence and not within the intent of the law
- Ms. Janet Marchant, Dobbins, felt the public needed their questions answered and the Board needed to listen to constituents
- Mr. Paul Myers, provided comments from Yuba County Republican Party and Yuba Sutter Tea Party Patriots opposing the plan without changes and not approving the plan until concerns of citizens have been addressed
- Mr. John Taylor, Plumas Lake, Citizen Advisory Committee for General Plan Update, felt there was not going to be a consensus and it was time to allow process to move to the next stage
- Mr. Dan Lucero, Dobbins, felt consultants outside of county prepared plan which was not representative of the people of the county, was not feasible, and does not fit with county characteristics
- Mr. Clarence Weckman, Brownsville, felt references to environmental issues engineer a way of life and consequences, housing element defined control areas, and the plan should be scraped or entirely revised
- Mr. Henry Davis, Dobbins, felt the area on cultural resources was inadequate, mitigation measures not feasible, and set a bad precedent for managing cultural resources
- Ms. Cathy LeBlanc, Camptonville, felt many people participated in process which ideas were included in the plan
- Ms. Debbie Byrne, Loma Rica, questioned acceptance of written comments from the Fish and Game Commission and felt there had not be substantive discussion with the public and closing the hearing was not conducive to the process (Community Services Director Kevin Mallen advised all correspondence was received and included.)
- Mr. Greg Forest, representing Magnolia Ranch Project, commented on climate change and compliance, specific policies being out of character for the county, and concurred with submitted comments from the Building Industry Association

The Board recessed at 4:54 p.m. and reconvened at 5:06 p.m. with all Board members present as indicated

Mr. David Soares, Dobbins-Oregon House Community Plan Chair, commented on the community plan being included within the GPU.

MOTION: To close the public hearing
MOVED: Hal Stocker SECOND: Mary Jane Griego
AYES: Hal Stocker, Mary Jane Griego, Andy Vasquez, John Nicoletti, Roger Abe
NOES: None ABSENT: None ABSTAIN: None

Mr. Mallen provided comments on making changes within the plan.

Planner Dan Cucchi recapped repercussions of scaling back on climate change policies and responded to Board inquiries regarding same.

Supervisor Stocker left meeting at 5:28 p.m. and did not return.

Following board discussion, Mr. Mallen recapped the vision and policies were to provide a layer of protection for future development at same time not inhibiting the county's vision and plan for growth thresholds.

Ms. Hartman outlined revising the jobs per housing unit and jobs per labor force to .8 jobs per labor force, updated the Board on the status of the Woodbury and Magnolia Ranch projects.

Chairman Abe continued the matter to Wednesday, February 16, 2011 at 1:00 p.m.

XV. RECESSED: 6:02 p.m. by Chairman Abe.

Chair

ATTEST: DONNA STOTTLEMEYER
CLERK OF THE BOARD OF SUPERVISORS

Rachel Ferris, Deputy Clerk
BY: Rachel Ferris, Deputy Clerk

Approved: February 22, 2011

The foregoing instrument Is a Correct Copy of the original on file in this office ATTEST: DONNA STOTTLEMEYER Clerk of the Board of Supervisors of the County of Yuba, State of California

By Rachel Ferris Deputy
Date: March 2, 2011

1 Alyssa Lindman. The commenter is discussing changes to the level at which the Planning Commission and Board of Supervisors considers planning and environmental documents and changes to ordinances addressing this issue. The commenter is discussing distrust in the community regarding the County's processes.

These comments are related to Yuba County policy and procedures and there is no aspect of these comments that bring up any substantive issues related to the contents or adequacy of the DEIR for addressing adverse physical environmental impacts attributable to implementing the 2030 General Plan. Therefore, these comments are forwarded to the Board of Supervisors for consideration and no additional response is required.

2 Rod Hisken. Commenter indicates that he would prefer a larger area for Community Plan (presumably referring to the Dobbins-Oregon House area). The commenter believes that a larger plan area would be better to deal with larger parcels in order to provide better exits in the case of wildfire. The commenter believes that fees are too high, for example, a security operation with little building ($14,000) windmill ($10,000). The commenter discussed job creation.

The General Plan and EIR address mitigating policies and actions related to wildfire risk. Please refer to the revised Public Health & Safety Element and Section 4.8 of the EIR, which compressively address wildfire risk related to implementation of the 2030 General Plan. Other comments are related to Yuba County policy and there is no aspect of these comments that bring up any substantive issues related to the contents or adequacy of the DEIR for addressing adverse physical environmental impacts attributable to implementing the 2030 General Plan. Therefore, these comments are forwarded to the Board of Supervisors for consideration and no additional response is required.

3 Frank Cecil. Commenter is reading statement for one neighbor, Emily Gordon, recommending that the County postpone approval of the 2030 General Plan.

This comment does not relate to the content or adequacy of the DEIR. This comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

4 Tom Eres. The commenter is representing Hoffman Ranch. The commenter is concerned about flood, drainage, new FEMA maps. The commenter claims that the General Plan and EIR do not adequately address flood issues and drainage. The commenter is describing connections between flood hazard and land use, transportation, and housing. The commenter believes that land use and housing planning work should consider flood hazard. The commenter claims that this is a programmatic document with project level implications. The commenter is concerned that the County did not conduct full analysis of reasonable alternatives. The commenter believes that the LAFCo MSR and SOI documents are not incorporated enough into the 2030 General Plan EIR. The commenter believes that this is time for a pause in the General Plan Update process.

Please refer to Section 4.9 of the EIR, which comprehensively addresses flood risk associated with implementation of the 2030 General Plan, as well as the Public Health & Safety Element, which provides the County's policy related to flood risk. The commenter does not suggest any substantive issue with respect to the adequacy of the DEIR related to flooding and therefore it is not possible to speculate to what the commenter is referring and it is not possible to provide additional clarification for the benefit of the commenter. The General Plan recognizes the relationship between hazard issues and land use, as well as the other inherently related topics. As just one example, the Valley Growth Boundary is drawn, in part, to avoid certain areas with flooding issues that are not developed today. As noted in the Public Health & Safety Element, the County has been making substantial investments in both drainage and flood control facilities to benefit portions of Linda and Olivehurst that are planned for development under the General Plan and applicable Specific Plans. The General Plan establishes policy to protect people and property from flood damage, as well as providing guidance (in Action HS1.1) for how the General Plan and Zoning Ordinance may need to be revised over time as new information related to flooding becomes available.

As noted elsewhere, the County has included numerous alternatives for analysis both in the General Plan process itself (10 different conceptual alternatives), as well as within the EIR. The DEIR considers a reasonable range of potentially feasible alternatives, as required by CEQA Guidelines Section 15126.6(a):

"[a]n 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."

The rationale for selecting the alternatives for analysis in the EIR is presented in Section 5.0 of the EIR. CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. Each case must be evaluated on its own facts, which in turn must be reviewed in light of the statutory purpose" (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 566). For a General Plan, there could be thousands of different iterations of land use that could be considered as a part of an alternative. Thus, as both the California and federal courts have recognized the statutory requirement for consideration of alternatives must be judged against a rule of reason.

The range of the alternatives selected for analysis and the alternatives themselves are reasonable in light of the project objectives and the facts and circumstances affecting the 2030 General Plan.

See Section 5.0 for a comparative analysis of alternatives vis-à-vis the 2030 General Plan including a point-by-point discussion of impacts, including quantitative analysis for such issues as agricultural resources, vehicle miles traveled (and associated air pollutant emissions), greenhouse gas emissions, and transportation impacts. The level of analysis in the alternatives section is appropriate to foster informed decision making and public

participation, and to allow meaningful evaluation, analysis, and comparison with the proposed project. The CEQA Guidelines (Section 15126.6 (d)) suggest that a matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. The County has provided substantive analysis at a level of detail beyond that recommended in the CEQA Guidelines.

The Yuba Local Agency Formation Commission Municipal Service Review and Sphere of Influence Options report were used, along with a large body of other information to guide the development of goals, policies, and actions in the General Plan, and by extension, the land use change analyzed in the EIR.

5 Randy Collins. Commenter is talking about top priority to create jobs in Yuba County; stating that an application known as the "Woodbury Specific Plan" could bring more than 8,000 jobs to the County; requesting that the County change the land use designation in this area to Valley Neighborhood.

These comments are related to Yuba County policy and do not raise any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

6 Tiffany Wright. The commenter is representing the application known as the "Woodbury Specific Plan." The commenter is discussing alternatives showing that County can accommodate high growth rate that is more efficient in areas near existing services/infrastructure and that this would reduce impacts. The commenter is stating that impacts from lower development alternatives would reduce impacts on a per capita basis, due to more efficient arrangement; noting that CEQA requires feasible mitigation and adoption of feasible alternatives that reduce potentially significant impacts. The commenter is stating that she does not believe that showing Woodbury in the General Plan would trigger recirculation; indicating that the County has drafted a very thorough EIR. The commenter is stating that it is her understanding that growth assumptions used for Linda area would include development of Woodbury.

The commenter is correct to note that alternatives analyzed in Section 5.0 of the EIR describe how potentially significant impacts of the 2030 General Plan could be reduced. The commenter is correct to note that alternatives were drafted, in part, to analyze the comparative impacts of a more compact overall development footprint. The commenter is correct to note that CEQA requires incorporation of feasible mitigation, which the County has accomplished through both the incorporation of environmentally mitigating policies and actions in the General Plan, as well as stand-alone mitigation in the EIR.

Section 5.0 of the EIR discusses not only the comparative impacts and rationale for selection of alternatives, but also the feasibility of each alternative and consistency with the County's project objectives. The commenter is correct to note that land use change assumptions analyzed in the General Plan EIR include future growth in all areas with the Planning Reserve overlay, in addition to all areas with land use designations where land use change during the General Plan time horizon is reasonably foreseeable.

The County's General Plan alternatives are designed with consideration of estimates of future population and economic growth. However, the General Plan and General Plan EIR alternatives were not prepared to have land use designations that would necessarily

match the amount of development that is predicted for Yuba County through 2030. The County does not wish to artificially bid up the cost of land by restricting planned growth to the amount needed to accommodate forecast growth. The County wishes to provide enough flexibility in its land use policies to accommodate development consistent with the General Plan goals, policies, and actions. General Plan EIR alternatives are based on the County's Project Objectives, which are listed in Section 5.0 of the DEIR.

The County considered a range of land use and circulation alternatives for the 2030 General Plan. This process touched on many environmental issues, although social and economic issues were also involved. Like the General Plan alternatives, the EIR alternatives involve different amounts of land subject to development. Both sets of alternatives include different levels of growth (in terms of population and employment added). Neither the 2030 General Plan, nor the alternatives are attempting to predict future growth. The County is intentionally providing some surplus in the 2030 General Plan in order to avoid artificially bidding up land costs to accommodate growth needs during this time horizon. The alternatives are meant to accommodate growth needs in the unincorporated County without trying to predict exactly where and how much growth may be realized. To develop the parameters for EIR alternatives, the County created different sets of land use change assumptions that can accommodate future development needs.

The No Project Alternative would not proactively direct long-term development in the unincorporated County according to the General Plan Update Vision, Goals, and Strategies. The No Project Alternative would not place the same emphasis as does the 2030 General Plan on revitalization of existing communities, neighborhoods, and primary transportation corridors. The No Project Alternative would not place the same emphasis as does the 2030 General Plan on encouraging new commercial and industrial development to balance recent residential development or efficiency in infrastructure planning and financing.

Alternative 2 would not guide long-term development in the unincorporated County to the extent that the 2030 General Plan would. Alternative 2 would conflict with the diagram that accompanied the County's approved General Plan Update Vision, Goals, and Strategies document, which represented the "Preferred Alternative" for the purposes of development of the 2030 General Plan and indicates the Board of Supervisors' policy preferences for development of the 2030 General Plan.

Alternative 3 anticipates population and job growth substantially lower than envisioned under the 2030 General Plan. By including provisions for a greater number of jobs and new residents, the 2030 General Plan is able to best meet the project objectives of economic independence, improving jobs/housing balance, and creating sustainable and vibrant communities. Alternative 3 would not guide long-term development in the unincorporated County to the extent that the 2030 General Plan would. Alternative 3 would conflict with the diagram that accompanied the County's approved General Plan Update Vision, Goals, and Strategies document, which represented the "Preferred Alternative" for the purposes of development of the 2030 General Plan and indicates the Board of Supervisors' policy preferences for development of the 2030 General Plan.

Alternative 4 would not guide long-term development in the unincorporated County to the extent that the 2030 General Plan would. Alternative 4 would not place the same emphasis as does the 2030 General Plan on encouraging new commercial and industrial development to balance recent residential development.

7 Eric Johnson. The commenter is submitting letters of request that share a corridor on west side of Collins Lake. The commenter explains that, starting in 1996, General Plan changed zoning from 5 acre to 20 and 40 acre minimums and nobody knows why except perhaps in view of concerns about migratory deer herds. The commenter would like to have property included in the Community Boundary Area; indicating that 25 of the 33 property owners contacted responded to the letter. The commenter is hoping that new General Plan would be expanded to include this area for development. The commenter indicates that there was a corridor on the west side of Collins Lake that was a part of Oregon House/Dobbins Community Boundary Area; indicating that nobody knows the history of this decision.

The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

8 Nick Spaulding. The commenter is discussing Supervisor Griego comment from yesterday asking about repercussions of the County performing in the minimum side of the law. The commenter is stating that it does not appear the Municipal Service Review prepared by LAFCo was considered in the development of the General Plan. The commenter is contending that the policies in the General Plan do not appear to relate to the conclusions in the MSR. The commenter is discussing the Department of Fish and Game letter talking about confusion on determination of whether maps are clear. The commenter is talking about visual polices. The commenter is talking about AB 32 – no federal policies are applicable in relation to global climate change impacts.

These comments are related to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

9 Greg Crompton. Discussing concerns relative to fire safety; believes the General Plan and EIR do not consider worst-case fire behavior; talking about findings regarding wildfire; believes wildfire is not adequately addressed.

The County has made revisions to the Public Health & Safety Element to clarify policies and actions related to reducing the potential for risk related to wildfire. The County's policies in the draft and revised General Plan are designed to protect people and property from wildland and urban fire risk and create more fire-resilient communities. Existing state regulations related to wildfire risk will be required as a part of new developments that could be accommodated under the General Plan higher fire risk areas. Projects will be conditioned, as appropriate, to ensure defensible space, fire-wise landscaping, fuel breaks, emergency access, fire flow, hydrants, sprinkler systems, fire stations and other improvements and conditions.

New developments are required to pay on a fair-share basis for fire stations, equipment, and other fire suppression improvements necessary to provide adequate fire protection services. All community water systems serving new development projects are required to meet or exceed County minimum standards for provision of water for fire flows.

Emergency access and evacuation routes are comprehensively addressed both in County policy and through follow on actions described in the Public Health & Safety Element, including access needs as informed by modeling of wildfire behavior.

Following General Plan adoption, the County will maintain a planning and entitlement review process that documents compliance with state and local standards for fire safety. The County will update zoning, development, improvement standards, and building standards, as necessary, to maintain compliance with relevant fire codes, including those maintained by Cal Fire. County codes would be anticipated to address such topics as landscaping standards and fire-resistant plant materials, fire resistant building materials for exterior walls and other exterior features of structures, defensible space standards for different topographic conditions, sprinklers, emergency access, water supply and pressure for firefighting, building and road construction in areas prone to fire risk and greater slopes, and other relevant topics.

In addition, as included in the revised General Plan, the County will prepare, adopt, and implement a comprehensive wildfire safety plan for foothills portions of the County with high and very high wildfire risk. This plan will be designed to reduce fuel loads, ensure emergency access and evacuation routes, and provide incentives for property owners to improve properties in order to reduce wildfire risk and improve fire resiliency for existing developed areas. As a part of this planning effort, the County will collaborate with other public agencies and nonprofits to implement fire breaks and fuel reduction projects in areas of high and very high fire risk, including removal of invasive species that increase understory fuel loads. Areas of particular focus could include County roads, ridges surrounding rural communities, and defensible space around existing structures. The County will seek funding from sources, such as the Bureau of Land Management, for fire fuel reduction projects. The County will collaborate with land owners in fire prone areas without adequate secondary access to improve access, add water tanks, or otherwise improve fire safety conditions. The County will seek funding to provide incentives for property owners to retrofit existing structures in high and very high fire risk areas to reduce combustibility. Planning for emergency access and evacuation routes will take into account records of historic fire activities affecting foothills portions of the County. Emergency access and evacuation will also take into account fire behavior modeling, including consideration of wildfire driven by winds that could limit the use of existing evacuation routes. The County will analyze and consider planning and fair-share funding of improvements needed to provide for emergency access and evacuation routes generally leading away from the head of a wildfire that has the characteristics of the worst-case predicted wildfire and secondary access allowing egress oriented in a direction of approximately 180 degrees from the previously described route.

10 Al Montna. The commenter is representing Magnolia Ranch. Talking about moving Magnolia to Employment Village. Talking about jobs generation, quality of life, support for Beale AFB.

These comments are related to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

11 Charles Sharp. Talking about EIR supporting rather than guiding the General Plan.

The purpose of a general plan EIR is to evaluate the proposed goals, policies and implementation programs in the proposed general plan and analyze the potential environmental impacts resulting from implementation of those goals, policies and implementation programs. Development of a general plan and its EIR is an iterative process, with the general plan goals, policies, and implementation programs informing the EIR analysis and vice versa. These comments are related to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

12 Janet Marchant. Dobbins. The commenter is talking about County being competitive for grants. The commenter encourages a discussion about whether it would be good for the County and whether could afford grant funding from outside resources to support County projects.

These comments are related to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

13 Paul Myers. The commenter is reading from resolutions approved by local interest groups. The commenter requests that the County eliminate connections to UN Commission on Global Warning. The commenter suggests that the County should protect rights for water storage and power. Commenter notes due process for property rights. The commenter suggests County should protect right to build nuclear plant in Yuba County.

These comments are related to Yuba County policy and do not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for their consideration and no additional response is required.

14 John Taylor. Plumas Lake. Citizen Advisory Committee for Yuba Co GPU. Commenter believes four years is enough time for work on the General Plan. Commenter believes that the time for a decision is now. Commenter believes that the General Plan Update process has had a disproportionate amount of foothills comments from a place where land use change will not happen anyway. Commenter believes that there is a need to move with developments now. Commenter notes that it takes time to plan for infrastructure and EIRs, etc. development not going to happen in Linda/Olivehurst. Major developers will not go there – will look at new growth areas. Believe should act on the General Plan now.

The comment is related to Yuba County policy and process and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no response is required.

15 Dan Lucero. Dobbins. Last General Plan that County worked on, was a member of the committee that spent a year working on their part of the General Plan. Hope that this General Plan Update does not end up the same as the last GP when 90% of the committee recommendations were not accepted because somebody on staff determined that suggestions were not appropriate.

The comment is related to Yuba County policy and process and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this

comment is forwarded to the Board of Supervisors for consideration. The development of the proposed Yuba County General Plan has taken several years and has gone through several iterations, partially in response to the community's and the Board of Supervisor's recommendations.

16 Clarence Weckman. Brownsville. Commenter admittedly wishes that he would have done more research about what is in the General Plan. Find the General Plan overwhelmingly environmental. Commenter states that it seems that there is outside agenda. Commenter is concerned about putting people in confined area.

The purpose of a general plan is to provide goals, policies, and implementation measures to guide development in a jurisdiction. Part of a general plan is to establish a land use diagram which describes where and how development should occur. Policies and implementation measures further describe how development should occur and focus on land use, transportation and circulation, housing, conservation, open space, noise, and safety. Some of the policies in the proposed General Plan are intended to reduce environmental impacts. The comment is related to Yuba County policy and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

17 Henry Davis. Dobbins. Archaeologist. Address cultural resources section of GP EIR. Believes that if cultural resources is an indication of the quality, it is inadequate. Not a serious study of cultural resources, cultural sensitivity, mitigation measures are not feasible. Believes sets a bad precedent. Cultural resources are an asset not a cost. Have submitted an in-depth response. States that the document is "cookie cutter."

The General Plan EIR is a program-level analysis of the potential for impacts on cultural resources, and which, by itself, does not approve or allow any physical construction project. CEQA specifically provides for the review of programs and policies, such as a general plan at a broad level of detail (14 Cal. Code of Regulations Section 15152). Section 4.5 of the EIR addresses Cultural Resources including historic and archaeological resources and human remains. The section describes the proposed general plan policies which would be implemented to identify, protect, and preserve Yuba County's important prehistoric and historic resources. Additional mitigation measures beyond implementation of the proposed policies are not proposed because there is no other feasible mitigation available to reduce impacts on cultural resources. The general plan analysis identifies known prehistoric, mining-related, historic, and combined prehistoric and historic sites in Yuba County. However, since the general plan does not propose specific development projects on specific sites, additional ground surveying was not performed as a part of this analysis. However, as stated in Policy NR6.1, "The County will require environmental assessment and mitigation to reduce or avoid impacts to significant cultural resources, as feasible, per state and federal legislation and regulations." Action NR6.1, Environmental Review and Mitigation, specifically describes the actions that shall be taken to implement that policy including submitting formal information requests, conducting additional surveys and preparing technical reports, construction monitoring, and handling and documentation of discovered resources.

Please also see Response to Comments Davis-1 through Davis-7.

18 Kathy LeBlanc. Camptonville. Wants Board of Supervisors to remember the majority of people that attended 17 workshops and voices that spoke up front on the policy

document. In good faith, believe that their input will stand. Green jobs are the future. Want to remember here that cannot see, voices heard for last four years. Please honor that.

The development of the proposed Yuba County General Plan has taken several years and has gone through several iterations. Input was received during community workshops, public meetings, public hearings, staff meetings, and through public comment. The comment does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

19 Debbie Byrne. Submitted 3 sets of written comments. 2 under her name. 1 under Fish & Game Commission letterhead. General comments, Woodbury & Magnolia comments, as well as deer herd comments. EIR comment letterhead on Fish & Game Commission letterhead - Believes that will not be included. Representing Fish and Game Commission for Yuba County. In charge of deer herd for Federal Energy Regulatory Commission process. Unpaid volunteer in her position.

The County has confirmed that all comment letters submitted by Ms. Byrne, as an individual and as a representative of the Yuba County Fish and Game Commission, were received by the County and entered into the public record. The CEQA process allows for, and encourages, public comment on environmental documentation. Several public meetings, including public hearings before the Board of Supervisors, have been conducted to solicit public input. The comment is related to the CEQA process and does not include any substantive issues related to the contents or adequacy of the DEIR. Therefore, this comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

20 Greg Forrest. Representing Magnolia. Commending staff for being under fire and have done an admirable job. Did large-scale comprehensive GPU under relatively short amount of time. Have submitted comments. One related to GHG emissions. Not much specific regulation at the state level, up to local agencies to find their own means to comply with the law with regard to their own circumstances. May be policies that are out of step with Yuba County. Do think that this General Plan Update is clearly adequate under California law. Clearly it is adequate, in some case, policies go beyond what is required by state law. Do not postpone process. Look at Building Industry Association letter.

Section 4.7, Climate Change, in the DEIR describes current federal and state regulations regarding climate change and greenhouse gas (GHG) emissions. The climate change policies proposed in the General Plan reflect the global nature of the effects of GHG emissions. This comment is forwarded to the Board of Supervisors for consideration and no additional response is required.

21 David Soares. Chairman of DOH planning commission. Commenter believes that it is possible to prepare a comprehensive Community Plan that would be incorporated into the General Plan.

The 2030 General Plan Update was developed through an extensive public and decision maker outreach program over the last few years. One important basis of the updated Plan is the previous 1996 General Plan. This previous Plan was designed to allow development in most of the County's unincorporated urban and rural communities. The

Land Use Element of the 1996 General Plan included land use designations allowing substantial growth throughout a series of Community Boundary Areas (CBA), Community Plan Areas, Specific Plan areas, and other development areas, including the Oregon House-Dobbins Community Boundary Area. The 2030 General Plan Land Use Framework is based on the 1996 GP, amendments to that Plan, approved projects, as well as the community's consensus for future land use and community design. The County has engaged extensively with the public and decision makers to develop a consensus on land use and community design, based on public preferences, recent development trends, local economic and environmental conditions, and analysis and reporting on many different land use/transportation alternatives. The 2030 General Plan provides flexibility with respect to housing types and density, subject to follow-on community plans, specific plans, and zoning. The General Plan indicates that County's support for community planning efforts, specific plans, and other strategies to implement the General Plan. Action CD9.1, among other language in the 2030 General Plan describes the County's intent to accommodate landowner and community initiated Rural Community Plan updates, new Rural Community Plans, and planning for Rural Centers after adoption of the General Plan.

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REFERENCES

Meyer, Jack and Rosenthal, Jeffrey S. 2008 (April). A Geoarchaeological Overview and Assessment of Caltrans District 3. Cultural Resources Inventory of Caltrans District 3. Rural Conventional Highways.

SACOG 2010

State Water Resources Control Board. 2006. Water Quality Order 2003 – 0005 – DWQ.

SWRCB 2003

SWRCB. *See* State Water Resources Control Board.

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9 COMMENTS AND RESPONSES TO ENVIRONMENTAL ISSUES 9-1

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