

Appendix D Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
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*Flex your power!
Be energy efficient!*

January 14, 2005

TITLE VI POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Will Kempton".

WILL KEMPTON
Director



Appendix E Glossary of Technical Terms

This appendix briefly explains the technical terms and names used in this EIR/EA. A list of acronyms appears directly before Chapter 1.

Best Management Practice (BMP)	Any program, technology, process, operating method, measure or device that controls, prevents, removes or reduces pollution.
Basin Plan	A specific plan for control of water quality within one of the nine hydrologic basins of the state under the regulation of a Water Quality Control Board.
Bypass	An arterial highway that permits traffic to avoid all or part of a certain area such as an urban area or park.
Conventional highway	A highway with no control of access roads onto the highway, which may or may not be divided or have grade separations at interchanges.
Cooperating Agency	An agency, other than the lead agency, that has jurisdiction by law or other expertise, that is formally involved in a proposed project.
Corridor	A strip of land between two termini within which traffic, topography, environment, and other characteristics are evaluated for transportation purposes.
Cumulative effects	Project effects that are related to other actions with individually insignificant but cumulatively significant impacts.
DBH	Diameter (of a tree) measured at breast height.
Decibel	A numerical expression of the relative loudness of a sound.
Encroachment (floodplain)	An action within the limits of the 100-year floodplain.
Endangered	Plant or animal species that are in danger of extinction throughout all or a significant portion of its range.
Erosion	The wearing away of the land surface by running water, wind, ice, or other geological agents.
Expressway	An arterial highway with at least partial control of access, where limits are placed on number and type of intersecting streets, roads and driveways. An expressway may or may not be divided or have separations at intersections.
Federal Register	A federal publication that provides official notice of federal administrative hearings and issuance of proposed and final

	federal administrative rules and regulations.
Floodplain (100-year)	The area subject to flooding by a flood or tide that has a 1 percent chance of being exceeded in any given year.
Freeway	A divided arterial highway with full control of access and with grade separations at intersections.
Habitat	The place or type of site where a plant or animal naturally or normally lives and grows.
Initial Site Assessment (ISA)	A Caltrans term for an initial study to determine hazardous waste issues on a project.
LEDPA	Least Environmentally Damaging Practicable Alternative. The Clean Water Act Section 404(b)(1) (Alternatives Analysis) is a specific evaluation to determine the LEDPA to waters of the U.S. (including wetlands) while meeting the project purpose. A Section 404 Permit can only be issued for the LEDPA.
L_{eq}	A unit used for evaluation of sound impacts, L_{eq} is the measurement of the fluctuating sound level received by a receptor averaged over a time interval (usually 1 hour).
Level of Service (LOS)	A measurement of capacity of a roadway.
Median	The area of a divided highway that separates the traveled way for traffic in opposite directions.
Mitigation	Compensation for an impact by replacement or provision of substitute resources or environments. Mitigation can include avoiding an impact by not taking a certain action, minimizing impacts by limiting the degree of an action, or rectifying an impact by repairing or restoring the affected environment.
NEPA/Section 404 MOU process	Integration of NEPA and Section 404 of the Clean Water Act by FHWA, Caltrans, USEPA, USFWS, and USACE for transportation projects that also require regulatory approval under Section 404 of the Federal Clean Water Act.
NOD	Notice of Determination. A decision statement that indicates that a project has been approved subject to the requirements of CEQA.
NOP	Notice of Preparation, part of the CEQA process. Notice sent to responsible agencies and others stating that an environmental impact report will be prepared for a project.
NPDES	National Pollutant Discharge Elimination System. A permit

	regulated by the Regional Water Quality Control Board that is required if more than 0.4 ha (1 acre) of original ground is graded. One condition of this permit is that the Contractor submit a Storm water Pollution Prevention Plan (SWPPP), which is similar to the Water Pollution Control Plan required by Caltrans Standard Specification 7-1.01G.
Practicable	An action that is capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes.
Receptors	Term used in air quality and noise studies that refers to houses or businesses that could be affected by a project.
Regulatory agency	An agency that has jurisdiction by law.
Responsible agency	A public agency other than the Lead Agency that has responsibility for carrying out or approving a project under CEQA.
Right of way	A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.
Riparian	Pertaining to the banks and other adjacent terrestrial (as opposed to aquatic) environs of freshwater bodies, watercourses, estuaries, and surface-emergent aquifers, whose transported freshwater provides soil moisture sufficient in excess of that available through local precipitation to potentially support the growth of vegetation.
ROD	Record of Decision, part of the NEPA process. This statement explains and concludes why an alternative has been selected and summarizes mitigation and efforts made to minimize environmental impacts.
RTP	Regional Transportation Plan, prepared by the regional agency responsible for transportation planning and funding.
SHPO	State Historic Preservation Officer is responsible, among other duties, for administrating the requirements of the National Historic Preservation Act at the state level.
Special-status species	Plant or animal species that are either (1) federally listed, proposed for or a candidate for listing as threatened or endangered; (2) bird species protected under the federal Migratory Bird Treaty Act; (3) protected under state endangered species laws and regulations, plant protection laws and regulations, Fish and Game codes, or species of special concern listings and policies; (4) recognized by national, state, or local environmental organizations (e.g., California Native Plant Society).

STIP	The State Transportation Improvement Program, updated every 2 years, is the California Transportation Commission's priorities for improvements on and off the state highway system.
SWPPP	A Storm Water Pollution Prevention Plan is prepared to evaluate sources of discharges and activities that may affect storm water runoff, and implement measures or practices to reduce or prevent such discharges.
Threatened	A species that is likely to become endangered in the foreseeable future in the absence of special protection.
Underground Storage Tanks (USTs)	Tanks that typically store fuel or liquid chemicals underground.
Waters of the United States	As defined by the USACE in 33 Code of Federal Regulations 328.3(a): <ol style="list-style-type: none">1. All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;2. All interstate waters including interstate wetlands;3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce, including any such waters:<ol style="list-style-type: none">(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;4. All impoundment of waters otherwise defined as waters of the United States under this definition;5. Tributaries of waters identified in paragraphs 1-4;6. The territorial seas;7. Wetlands adjacent to waters (waters that are not wetlands themselves) identified in paragraphs 1-6.
Wetlands	When used in a formal context, such as in this EIR/EA, wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to

support, and that under normal circumstances will support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas [33 CFR 328.3(b)].



Appendix F Mobile Source Air Toxics— Information That Is Unavailable or Incomplete

Information That Is Unavailable or Incomplete

Evaluating the environmental and health impacts from mobile source air toxics (MSATs) on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

Emissions

The United States Environmental Protection Agency (USEPA) tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of highway projects. While MOBILE 6.2 is used to predict emissions at a regional level, it has limited applicability at the project level. MOBILE 6.2 is a trip-based model—emission factors are projected based on a typical trip of 7.5 miles, and on average speeds for this typical trip. This means that MOBILE 6.2 does not have the ability to predict emission factors for a specific vehicle operating condition at a specific location at a specific time. Because of this limitation, MOBILE 6.2 can only approximate the operating speeds and levels of congestion likely to be present on the largest-scale projects, and cannot adequately capture emissions effects of smaller projects. For particulate matter, the model results are not sensitive to average trip speed, although the other MSAT emission rates do change with changes in trip speed. Also, the emissions rates used in MOBILE 6.2 for both particulate matter and MSATs are based on a limited number of tests of mostly older-technology vehicles. Lastly, in its discussions of PM under the conformity rule, EPA has identified problems with MOBILE 6.2 as an obstacle to quantitative analysis.

These deficiencies compromise the capability of MOBILE 6.2 to estimate MSAT emissions. MOBILE 6.2 is an adequate tool for projecting emissions trends, and performing relative analyses between alternatives for very large projects, but it is not sensitive enough to capture the effects of travel changes tied to smaller projects or to predict emissions near specific roadside locations.

Dispersion

The tools to predict how MSATs disperse are also limited. The USEPA's current regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade ago for the purpose of predicting episodic concentrations of carbon monoxide to determine compliance with the National Ambient Air Quality Standards (NAAQS). The performance of dispersion models is more accurate for predicting maximum concentrations that can occur at some time at some location within a geographic area. This limitation makes it difficult to predict accurate exposure patterns at specific times at specific highway project locations across an urban area to assess potential health risk. The National Cooperative Highway Research Program (NCHRP) is conducting research on best practices in applying models and other technical methods in the analysis of MSATs. This work also will focus on identifying appropriate methods of documenting and communicating MSAT impacts in the National Environmental Policy Act (NEPA) process and to the general public. Along with these general limitations of dispersion models, the Federal Highway Administration (FHWA) is also faced with a lack of monitoring data in most areas for use in establishing project-specific MSAT background concentrations.

Exposure Levels and Health Effects

Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude us from reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways, and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period. There are also considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population. Because of these shortcomings, any calculated difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with calculating the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against other project impacts that are better suited for quantitative analysis.

Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of MSATs

Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of USEPA efforts. Most notably, the agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The USEPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The USEPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at <http://www.epa.gov/iris>. The following toxicity information for the six prioritized MSATs was taken from the IRIS database Weight of Evidence Characterization summaries. This information is taken verbatim from USEPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

- Benzene is characterized as a known human carcinogen.
- The potential carcinogenicity of acrolein cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.
- Formaldehyde is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.
- 1,3-butadiene is characterized as carcinogenic to humans by inhalation.
- Acetaldehyde is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.
- Diesel exhaust is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.

- Diesel exhaust also represents chronic respiratory effects, possibly the primary noncancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a nonprofit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes—particularly respiratory problems.³² Much of this research is not specific to MSATs, instead surveying the full spectrum of both criteria and other pollutants. The FHWA cannot evaluate the validity of these studies, but more importantly, they do not provide information that would be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

Relevance of Unavailable or Incomplete Information to Evaluating Reasonably Foreseeable Significant Adverse Impacts on the Environment, and Evaluation of Impacts Based upon Theoretical Approaches or Research Methods Generally Accepted in the Scientific Community

Because of the uncertainties outlined above, a quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not

³² South Coast Air Quality Management District, Multiple Air Toxic Exposure Study-II (2000); Highway Health Hazards, The Sierra Club (2004) summarizing 24 Studies on the relationship between health and air quality); NEPA's Uncertainty in the Federal Legal Scheme Controlling Air Pollution from Motor Vehicles, Environmental Law Institute, 35 ELR 10273 (2005) with health studies cited therein.

possible to make a determination of whether any of the alternatives would have “significant adverse impacts on the human environment.”

In this document, FHWA has provided a qualitative analysis of MSAT emissions relative to the various alternatives, and has acknowledged that (some, all, or identify by alternative) the project alternatives may result in increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.



Appendix G USACE Concurrence with Wetland Delineation



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

March 28, 2005

Regulatory Branch (200300156)

Chris Collison
California Department of Transportation
2389 Gateway Oaks Drive, 1st Floor
Sacramento, California 95833

Dear Mr. Collison:

We are responding to your request for an approved jurisdictional determination for the State Route 29 improvement project site. This approximately 894.7-acre site is located in Sections, 1, 2, 6, 7, 29, 30, 33, 34 and 35 Townships 12 and 13 North, Ranges 7 and 8 West, MDB&M, in Lake County, California.

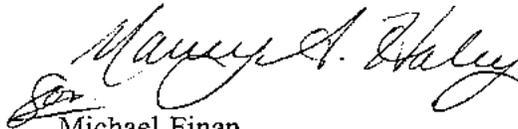
Based on available information, we concur with the estimate of waters of the United States, as depicted on the March 22, 2005, revision of Table E of Caltrans' August 2004 Delineation of Jurisdictional Wetlands and Waters-Supplemental Information and Revised Mapping State Route 29 Realignment/Expressway Widening Lake County, California document. Approximately 30.23-acre of waters of the United States, including wetlands, are present within the survey area. These waters are regulated under Section 404 of the Clean Water Act since they are tributary to Clear and Thurston Lakes.

The waters identified as Area 7 and Wetlands 8a-8g in the above table are intrastate isolated waters with no apparent interstate or foreign commerce connection. As such, these waters are not currently regulated by the Corps of Engineers. This disclaimer of jurisdiction is only for Section 404 of the Federal Clean Water Act. Other Federal, State, and local laws may apply to your activities. In particular, you may need authorization from the California State Water Resources Control Board and/or the U.S. Fish and Wildlife Service.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. A *Notification of Administrative Appeal Options and Process and Request for Appeal* form is enclosed. If you wish to appeal this approved jurisdictional determination, please follow the procedures on the form. You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

Please refer to identification number 200300156 in any correspondence concerning this project. If you have any questions, please contact William Guthrie at our Delta Office, 1325 J Street, Room 1480, Sacramento, California 95814-2922, email William.H.Guthrie@usace.army.mil, or telephone 916-557-5269. You may also use our website: www.spk.usace.army.mil/regulatory.html.

Sincerely,


Michael Finan
Chief, Delta Office

Enclosure(s)

Copy furnished without enclosure(s):

George Day, Storm Water and Water Quality Certification Unit, Central Valley Regional
Water Quality Control Board, 11020 Sun Center Drive #200, Rancho Cordova,
California 95670-6114

Oscar Balaguer, Chief, Water Quality Certification Unit, California State Water Resources
Control Board, 1001 I Street, Sacramento, California 95814

Table E: Potential Corps of Engineers Jurisdictional Waters

Location	Acre Meeting Corps Wetland Criteria	Acre of Other Waters	Acre Isolated with No Apparent Interstate Commerce Connection
Area 1 – East End of ESL		1.27	No
Area 2 – Manning Flat	6.02	0.11	No
Area 3 – Thurston Creek at Konocti Conservation Camp Road	5.33		No
Area 4 – Thurston Creek at Hesse Flat	9.07	0.02	No
Area 5 – Thurston Creek at Red Hills/Soda Bay Road	1.41	0.17	No
Area 6 – South Side of SR 29, West of Red/Hills Soda Bay Road ³	7.02	0.06	No
Area 7 – Orchards East of Shaul Valley			0.77
Area 8 – Shaul Valley	1.38		15.05
Total	30.23	1.63	15.82

³ Includes Irrigated pasture that meets Corps wetland criteria but is likely exempt from jurisdiction.

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS
AND REQUEST FOR APPEAL**

Applicant:	File Number: 200300156	Date: March 28, 2005
Attached is:	See Section below	
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (STANDARD PERMIT OR LETTER OF PERMISSION)	A
<input type="checkbox"/>	PROFFERED PERMIT (STANDARD PERMIT OR LETTER OF PERMISSION)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I: The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg-op/Corps_regulations_33_CFR_Part_331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the **District Engineer** for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the **District Engineer**. The **District Engineer** must receive your objections within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the **District Engineer** will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the **District Engineer** will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the **District Engineer** for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the **Division (not District) Engineer** (address on reverse). The **Division Engineer** must receive this form within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the **Division (not District) Engineer (address on reverse). The **Division Engineer** must receive this form within 60 days of the date of this notice.**

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the **Division (not District) Engineer**. The **Division Engineer** must receive this form within 60 days of the date of this notice. Exception: JD appeals based on new information must be submitted to the **District Engineer** within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further information. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL OR OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: (The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.)

POINT OF CONTACT FOR QUESTIONS OR INFORMATION

If you have questions regarding this decision and/or the appeal process you may contact:

District Engineer
US Army Corps of Engineers, Sacramento District, CESP-K-CO-R
ATTN: Regulatory Branch, William Guthrie
1325 J Street, Sacramento, CA 95814-2922 (916-557-5250)
(Use this address for submittals to the District Engineer)

If you only have questions regarding the appeal process you may also contact:

Division Engineer
US Army Corps of Engineers, South Pacific Division, CESP-D-CM-O
ATTN: Doug Pomeroy, Administrative Appeal Review Officer
333 Market Street, San Francisco, CA 94105 (415-977-8035)
(Use this address for submittals to the Division Engineer.)

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of Appellant or Agent	Date	Telephone Number
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Appendix H Regional Species and Habitats of Concern

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
Mammals						
<i>Antrozous pallidus</i>	Pallid bat	CSC	Day roost in caves, crevices, mines and occasionally hollow trees and buildings. Night roosts may be open sites such as porches and open buildings. Hibernation sites are probably rock crevices. Grasslands, shrublands, woodlands and forest.	Yes	Yes	Species caught in mist net during bat surveys and detected at several echolocation survey stations within ESL.
<i>Corynorhinus townsendii townsendii</i>	Townsend's western big-eared bat	FSC; CSC	Roosts in lava tubes, caves, buildings, mines, etc.	Yes	Yes	Townsend's big-eared bat (<i>Corynorhinus townsendii</i>) was identified roosting in three structures within ESL and was detected foraging within ESL.
<i>Eumops perotis californicus</i>	Greater western mastiff bat	FSC; CSC	Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Yes	No	Species not observed during bat surveys, but potential habitat occurs in ESL.
<i>Martes pennanti pacifica</i>	Pacific fisher	FSC; CSC	Intermediate to large-tree stages of coniferous forest and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs, and rocky areas for cover and denning. Needs large areas of mature dense forest.	No	No	No suitable habitat in ESL; species has not been observed in this region of California for several decades.
<i>Myotis evotis</i>	Long-eared myotis bat	FSC	Found in all brush, woodland, and forest habitats from sea level to about 9,000 feet. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves primarily used for night roosts.	Yes	Unknown	Species may have been detected at one of the survey stations, but a positive identification could not be reached. Potential habitat occurs in ESL, and species could be present.
<i>Myotis thysanodes</i>	Fringed myotis bat	FSC	Found in a wide variety of habitats. Optimal habitats include pinyon-juniper, valley foothill hardwood, and hardwood-conifer. Uses caves, mines, buildings, or crevices for maternity colonies and roosts.	Yes	Unknown	Species may have been detected at one of the survey stations, but a positive identification could not be reached. Potential habitat occurs in ESL, and species could be present.
<i>Myotis volans</i>	Long-legged myotis bat	FSC	Most common in woodland and forest habitats above 4,000 feet. Trees are important day roosts, and caves and mines are night roosts. Nursery colonies usually found under bark or in hollow trees but occasionally in crevices or buildings.	Yes	No	Species not observed during bat surveys, but potential habitat occurs in ESL.
<i>Myotis yumanensi</i>	Yuma myotis bat	FSC	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings, or crevices.	Yes	Yes	Species caught in mist net during bat surveys and detected at several echolocation survey stations within ESL. A pregnant female was observed roosting in a building within ESL.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Perognathus inornatus</i>	San Joaquin pocket mouse	FSC	Typically found in dry open grasslands and scrub areas on fine-textured, friable soils in the Central and Salinas valleys.	Yes	No	ESL is out of known range for this species.
Birds						
<i>Accipiter cooperii</i>	Cooper's hawk	CSC	Nests in chiefly open woodlands, interrupted or marginal type. Nest sites are mainly in riparian growths of deciduous trees, as in canyon bottoms or river floodplains; also live oaks.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests were observed.
<i>Accipiter gentilis</i>	Northern goshawk	FSC; CSC	Nests within and in the vicinity of coniferous forests in red fir and Jeffrey and lodgepole pines, usually on north slopes near water. Uses old nests and maintains alternate sites. Preferred trees include red fir, lodgepole pine, Jeffrey pine, and aspens.	No	No	No suitable habitat in ESL. Species requires dense, mature, undisturbed forests.
<i>Accipiter striatus</i>	Sharp-shinned hawk	CSC	Nests mainly in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats, but prefers riparian areas. Prefers north-facing slopes with plucking perches. Nests close to water.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Agelaius tricolor</i>	Tricolored blackbird	FSC; CSC	Nests near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds, cattail or tule marshes; also human-made structures. Their nests consist of a scrape on a depression or ledge in an open site.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Ammodramus savannamus</i>	Grasshopper sparrow	FSC	Nests in dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower montane slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Uses scattered shrubs for singing perches. Loosely colonial while nesting.	Yes	No	Species not observed during bird surveys. Extremely rare in Lake County, but suitable habitat is available.
<i>Amphispiza belli belli</i>	Bell's sage sparrow	FSC; CSC	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in the south of the range. Nests are generally located on the ground beneath or within the lower branches of shrubby plants.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Aquila chysaetos</i>	Golden eagle	CSC	Nests and winters in rolling foothills and mountain areas, sage-juniper flats, and deserts. Cliff-walled canyons provide nesting habitat in most parts of the range. Large trees in open areas also used for nesting.	Yes	No	Species not observed in ESL, but potential habitat present.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Ardea herodias</i>	Great blue heron	Migratory	Colonial nester in large trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Yes	No	Special status only applies to rookery sites. No potential rookery sites occur in the project area.
<i>Asio flammeus</i>	Short-eared owl	FSC; CSC	Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. Nesting found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields	Yes	No	Species not observed in ESL. Nearest records of this species are from the San Francisco Bay Area.
<i>Athene cunicularia</i>	Burrowing owl	FSC; CSC	Open, dry annual grasslands; deserts and scrublands.	Yes	No	Species not observed in ESL and not recorded from Lake County. No suitable burrows observed in ESL.
<i>Baeolophus inornatus</i>	Oak titmouse	FSC	Montane hardwood-conifer, montane hardwood, oak woodland, arborescent chaparral, and montane and valley foothill riparian habitats. Primarily associated with oaks. Nest constructed in natural tree cavity, in old woodpecker hole, or bird box; 3–36 feet above ground.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests observed.
<i>Botaurus lentiginosus</i>	American bittern	FSC	Freshwater and saltwater marshes.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Brachyramphus marmoratus</i>	Marbled murrelet	FT, SE	Nests inland (up to 6 miles) along the coast, in old-growth redwood-dominated forests, often in Douglas firs; feeds near shore (ocean).	No	No	No suitable habitat in ESL.
<i>Buteo regalis</i>	Ferruginous hawk	FSC, CSC	Winters in open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats. Mostly eats lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Carduelis lawrencei</i>	Lawrence's goldfinch	FSC	Nests in open oak woodland, chaparral, riparian woodland, pinyon-juniper association, and weedy areas in arid regions but usually near water. Often nests in dense foliage in conifers, 3–40 feet above ground.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests observed.
<i>Chaetura vauxi</i>	Vaux's swift	FSC; CSC	Nests in redwood, douglas fir, and other coniferous forests. Nests in large hollows of tree snags, often in flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes. Fairly common in spring and fall.	Yes	No	Species not observed in ESL, but potential habitat present.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Chlidonias niger</i>	Black tern	FSC; CSC	Nesting colony in freshwater lakes, ponds, marshes, and flooded agricultural fields. At coastal lagoons and estuaries during migration. Breeding primarily in Modoc Plateau region, with some breeding in Sacramento and San Joaquin valleys.	No	No	Nesting restricted to Modoc Plateau with some activity in Central Valley; migrates along the coast; no records from Lake County.
<i>Chondestes grammacus</i>	Lark sparrow	FSC	Valley foothill hardwood, valley foothill hardwood-conifer, open mixed chaparral and similar brushy habitats, and grasslands with scattered trees or shrubs.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Circus cyaneus</i>	Northern harrier	CSC	Meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	FC; SE	Nests in riparian systems along the broad lower flood-bottoms of larger river systems; requires dense riparian vegetation.	No	No	No suitable habitat present in ESL.
<i>Contopus cooperi</i>	Olive-sided flycatcher	FSC	Open montane and boreal conifer forests; nests in mixed-conifer forests.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests were observed.
<i>Cypseloides niger</i>	Black swift	FSC; CSC	Aerial; forages over forests and in open areas. Nests behind or next to waterfalls and wet cliffs. Nests in dark inaccessible sites with unobstructed flight path. Nest is a cup-like structure of mud, mosses, and algae.	No	No	Species not observed in ESL and is not known to occur in the area. No nesting habitat present in ESL.
<i>Dendroica occidentalis</i>	Hermit warbler	FSC	Mixed deciduous and coniferous forests; requires cool, dark forest for breeding.	Yes	No	Species not observed in ESL, but potential habitat present
<i>Dendroica petechia brewsteri</i>	Yellow warbler	CSC	Nests in riparian habitats and prefers willows, cottonwoods, aspens, sycamores, and alders for both nesting and foraging. Also nests in montane shrubbery in open conifer forests.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests observed.
<i>Egretta thula</i>	Snowy egret	None	Locally common in the Central Valley all year. Feeds in shallow water or along shores of wetlands or aquatic habitats. Nests in protected beds of dense tules.	Yes	No	Potential habitat in Thurston Marsh, but species not observed during surveys.
<i>Elanus leucurus</i>	White-tailed kite	FSC	Nests on rolling foothills/valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands. Found in open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests observed.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Empidonax difficilis</i>	Pacific slope flycatcher	FSC	Widespread, fairly common summer resident in warm moist woodlands, including valley foothill and montane riparian, coastal and blue oak woodlands, and montane hardwood-conifer habitats. Also uses closed-cone pine-cypress, ponderosa pine, Douglas fir, Sierra mixed conifer, and redwood habitats.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests observed.
<i>Empidonax traillii brewsteri</i>	Little willow flycatcher	FSC; SE	Extensive thickets of low, dense willows on the edge of wet meadows, at elevations between 2,000 and 8,000 feet.	No	No	Species not observed in ESL. May migrate through the area, but no nesting habitat present in ESL.
<i>Eremophila alpestris actia</i>	California horned lark	CSC	Coastal regions and in the main part of the San Joaquin Valley and east to the foothills. Found in short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	Yes	No	Species not observed in ESL, but potential habitat present
<i>Falco mexicanus</i>	Prairie falcon	CSC	Dry, open terrain, either level or hilly; breeding sites located on cliffs. Forages far afield, in marshlands and on ocean shores.	Yes	No	Species not observed in ESL. Potential foraging habitat present in ESL, but no nesting habitat present.
<i>Falco peregrinus anatum</i>	American peregrine falcon	FD; FSC; SE	Nests near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds, also human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Yes	No	Species not observed in ESL. Potential foraging habitat present in ESL, but no nesting habitat present.
<i>Haliaeetus leucocephalus</i>	Bald eagle	FT (proposed for delisting); SE	Nests in large, old growth, or dominant live trees with open branches near ocean shores, lake margins, and rivers. Usually nests within 1 mile of water.	No	No	No suitable habitat in ESL.
<i>Icteria virens</i>	Yellow-breasted chat	CSC	California summer nesting resident. Inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low dense riparian areas consisting of willows, blackberry, and wild grape, and forages within 10 feet of the ground.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Lanius ludovicianus</i>	Loggerhead shrike	FSC; CSC	Nests in broken woodlands, savannah, pinyon-juniper, joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning and fairly dense shrubs and brush for nesting.	Yes	No	Potential habitat present within ESL, but species not observed during surveys.
<i>Melanerpes lewis</i>	Lewis' woodpecker	FSC	Open deciduous and coniferous forests with brushy understory, and scattered snags, logged forests, river groves, or foothills.	Yes	No	Potential habitat present within ESL, but species not observed during surveys.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Numenius americanus</i>	Long-billed curlew	FSC; CSC	Breeds in prairies and grassy meadows, generally near water. Nests in dry prairies and moist meadows. Nests on ground usually in flat area with short grass, sometimes on more irregular terrain, often near rock or other conspicuous object. Occurs on mudflats during migration and wintering.	Yes	No	Potential habitat present within ESL, but species not observed during surveys. Extremely rare in Lake County.
<i>Otus flammeolus</i>	Flammulated owl	FSC	Montane forests, especially ponderosa pine; favors small openings, and edges and clearings with snags for nesting and roosting.	No	No	No suitable habitat in ESL.
<i>Pandion haliaetus</i>	Osprey	CSC	Nests in ocean shores, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Yes	No	Potential habitat present within ESL, but species not observed during surveys.
<i>Phalacrocorax auritus</i>	Double-crested cormorant	CSC	Resident along the entire coast of California and on inland lakes, in fresh, salt and estuarine waters. Also occurs in lacustrine and riverine habitats of the Central Valley and coastal slope lowlands.	No	No	No suitable habitat in ESL.
<i>Plegadis chihi</i>	White-faced ibis	FSC; CSC	Marshes, swamps, ponds and rivers, mostly in freshwater habitats. Nests in marshes and dense tule thickets; in low trees, on the ground in bulrushes or reeds, or on a floating mat. In the Central Valley of California, ibises preferentially selected foraging sites close to emergent vegetation.	No	No	No suitable habitat in ESL, and no records of this species from Lake County.
<i>Progne subis</i>	Purple martin	CSC	Uncommon to rare local summer resident. Occurs in valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, conifer forests and riparian habitats.	Yes	Yes	Five purple martin nests were identified within or adjacent to ESL.
<i>Riparia riparia</i>	Bank swallow	FSC; ST	Open and partly open situations, frequently near flowing water. Nests in steep sand, dirt, or gravel banks, in a burrow dug near the top of the bank, along the edge of inland water or along the coast, or in gravel pits, road embankments, etc.	No	No	No suitable habitat in ESL.
<i>Selasphorus rufus</i>	Rufous hummingbird	FSC	Coniferous forest, second growth, thickets and brushy hillsides, foraging in adjacent scrubby areas and meadows. During migration in winter, prefers open situations where rich in nectar-producing flowers are present.	Yes	No	Species could occur during migration but was not observed during bird surveys.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Selasphorus sasin</i>	Allen's hummingbird	FSC	Chaparral, wooded canyons, gardens, mountain meadows, brushlands, and redwood forest edges.	Yes	No	Species could occur during migration, but was not observed during bird surveys.
<i>Sphyrapicus ruber</i>	Red-breasted sapsucker	FSC	Nests in montane riparian, aspen, montane hardwood-conifer, mixed conifer, and red fir habitats, especially near meadows, clearings, lakes, and slow-moving streams. A fairly common winter resident throughout much of lowland, cismontane California, though uncommon in coastal lowlands from Los Angeles County south, and in the Central Valley.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Strix occidentalis caurina</i>	Northern spotted owl	FT	Old-growth forests or mixed stands of old-growth and mature trees, occasionally in younger forests with patches of big trees. Nest in cavities or broken tops of big trees among high, multistory canopies.	Yes	No	Habitat is suboptimal. Nearest record is located 3 miles south of study area, near Mt. Hannah. Species not observed during USFWS protocol surveys and is not expected to occur in ESL.
<i>Toxostoma redivivum</i>	California thrasher	FSC	Occupies moderate to dense lowland and coastal chaparral, and riparian thickets. Usually on or near ground. During breeding, nests in bushes or small trees. Nest constructed by both adults.	Yes	Yes	Species detected within ESL. Suitable nesting habitat present in ESL, but no nests observed.
Reptiles						
<i>Clemmys marmorata marmorata</i>	Northwestern pond turtle	FSC; CSC	Associated with permanent or nearly permanent water sources with basking sites, in a wide variety of habitats. Nest sites may be found up to 0.3 mile from water.	Yes	Unknown	Suitable habitat present in Thurston Creek, and species could potentially occur in ESL. Several occurrences recorded within close proximity to ESL, but species was not observed during focused surveys within ESL.
Amphibians						
<i>Ambystoma californiense</i>	California tiger salamander	FSC (2 locally endangered populations); CSC	Most commonly found in annual grassland habitat, but also occurs in grassy understory of valley-foothill hardwood habitats. Sometimes found along stream courses in valley-foothill riparian habitats. Seasonal ponds or vernal pools are crucial to breeding. Permanent ponds or reservoirs are sometimes used as well.	No	No	ESL is out of known range for this species.
<i>Rana aurora aurora</i>	Northern red-legged frog	FSC; CSC	Breeding habitat typically consists of permanent or temporary water bordered by dense grassy or shrubby vegetation. Ranges from northern Humboldt County, California northward to Sullivan Bay, British Columbia. May extend southward along the coast to Marin County.	No	No	ESL is out of known range for this species.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Rana aurora draytonii</i>	California red-legged frog	FT; CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Yes	No	Marginal habitat present. Species not observed in any potentially suitable habitat areas located within 1 mile of ESL during USFWS protocol surveys. Due to the lack of records in Lake County, the marginally suitable habitat in ESL, and the presence of many introduced species, California red-legged frog is unlikely to occur in ESL.
<i>Rana boylei</i>	Foothill yellow-legged frog	FSC	Partially shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying, with at least 15 weeks of running water to attain metamorphosis.	No	No	No potential habitat in ESL.
<i>Spea hammondi</i>	Western spadefoot toad	FSC; CSC	Occurs primarily in grassland habitats but also found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Yes	No	Potential habitat present, but ESL is out of the known range for this species. Not expected to occur.
Fish						
<i>Archoplites interruptus</i>	Sacramento perch	FSC; CSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefers warm water.	No	No	No suitable habitat in ESL.
<i>Hypomesus transpacificus</i>	Delta smelt	FT; ST	Sacramento–San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay. Seldom found at salinities greater than 10 parts per thousand (ppt). Most often in salinities less than 2 ppt.	No	No	No suitable habitat present in ESL.
<i>Hysterocarpus traski poma</i>	Russian River tule perch	FSC; CSC	Requires clear, flowing water and abundant cover; limited to low elevation streams of the Russian River system.	No	No	ESL is out of known range for this species.
<i>Lavinia exilicauda chi</i>	Clear Lake hitch	CSC	Confined to Clear Lake and to associated lakes and ponds such as Thurston Lake and Lampson Pond. It spawns in intermittent tributary streams to Clear Lake, mainly Kelsey, Seigler Canyon, Adobe, Middle, Scotts, Cole and Manning creeks, and occasionally in other, unnamed tributaries.	No	No	No suitable habitat present in ESL.
<i>Oncorhynchus kisutch</i>	Southern Oregon/Northern California Coast coho salmon	FT	Accessible river reaches between Cape Blanco and Punta Gorda, which lie within watersheds of Del Norte Glen, Humboldt, Lake, Mendocino, Siskiyou, and Trinity counties.	No	No	Project area within an isolated watershed; no access for anadromous fish.
<i>Oncorhynchus mykiss</i>	Northern California steelhead	FT	California coastal river basins from Redwood Creek south to the Gualala River.	No	No	Project area within an isolated watershed; no access for anadromous fish.

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<i>Oncorhynchus mykiss</i>	Central Valley steelhead	FT	Populations occur and spawn in the Sacramento and San Joaquin rivers and their tributaries.	No	No	Project area within an isolated watershed; no access for anadromous fish.
<i>Oncorhynchus mykiss irideus</i>	Central California Coast steelhead	FT	In California streams from the Russia River to Aptos Creek, and the drainages of San Francisco and San Pablo Bays eastward to the Napa river (inclusive), excluding the Sacramento-San Joaquin River Basin.	No	No	Project area within an isolated watershed; no access for anadromous fish.
<i>Oncorhynchus mykiss irideus</i>	South/Central California Coast steelhead	FT	In California streams from the Pajaro River (inclusive), to, but not including, the Santa Maria River.	No	No	Project area within an isolated watershed; no access for anadromous fish.
<i>Oncorhynchus mykiss irideus</i>	Summer-run steelhead trout	FC; CSC	Northern California coastal streams south to Middle Fork Eel River.	No	No	Project area within an isolated watershed; no access for anadromous fish.
<i>Oncorhynchus tshawytscha</i>	California coastal chinook salmon	FT	Redwood Creek in Humboldt County south through the Russian River.	No	No	Project area within an isolated watershed; no access for anadromous fish.
<i>Pogonichthys macrolepidotus</i>	Sacramento splittail	FT; CSC	Slow-moving waters and dead-end sloughs of main rivers and Delta; shallow areas of bays. Unusually tolerant of brackish water. Spawns over flooded vegetation in tidal freshwater and euryhaline habitats of estuarine marshes and sloughs and slow-moving river sections.	No	No	No suitable habitat present in ESL.
Invertebrates						
<i>Desmocerus californicus dimorphus</i>	Valley elderberry longhorn beetle	FT	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers branches greater than 1 inch in diameter.	Yes	Unknown	Elderberry plants present in project area. No records from project area or elsewhere in Lake County. The USFWS currently considers Lake County to be within the range of the beetle.
<i>Dubiraphia brunnescens</i>	Brownish dubiraphian riffle beetle	FSC	Known only from northeast shore of Clear Lake; occurs on exposed, wave-washed willow roots.	No	No	ESL out of known range for this species; not expected to occur.
<i>Syncaris pacifica</i>	California freshwater shrimp	FE; SE	Found in pool areas of low-elevation and low-gradient (generally less than 1 percent) streams. Currently known from streams in Napa, Marin, and Sonoma counties.	No	No	ESL out of known range for this species; not expected to occur.
Plants						
<i>Amsinckia lunaris</i>	Bent-flowered fiddleneck	CNPS 1B	Found in coastal bluff scrub, cismontane woodland, and valley and foothill grasslands (10–1,640 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Arctostaphylos canescens</i> ssp. <i>sonomensis</i>	Sonoma manzanita	FSLC; CNPS 1B	Chaparral, lower montane coniferous forest; blooms January–April. Sometimes found on serpentine soil (590–5,580 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	Konocti manzanita	CNPS 1B	Chaparral, cismontane woodland, and lower montane coniferous forest, often on volcanic soils from 1,295 to 5,300 feet.	Yes	Yes	Species observed in several locations throughout ESL.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	Raiche's manzanita	FSC; CNPS 1B	Serpentine and rocky soils in chaparral and openings in lower montane coniferous forest (1,475–3,280 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	Jepson's milk-vetch	FSLC; CNPS 1B	Commonly on serpentine in grassland or opening in chaparral, cismontane woodland, and valley and foothill grassland (1,050–2,300 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	Big-scale balsamroot	FSC; CNPS 1B	Found in valley and foothill grasslands and cismontane woodlands. Sometimes seen on serpentine (295–4,595 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Brodiaea californica</i> var. <i>leptandra</i>	Narrow-anthered California brodiaea	FSLC	Broadleaved upland forest, chaparral, and lower montane coniferous forest (360–3,000 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Brodiaea coronaria</i> ssp. <i>rosea</i>	Indian Valley brodiaea	SE; CNPS 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland, and meadows, in serpentine gravelly creek bottoms, and in meadows and swales (1,100–4,760 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Calyptridium quadripetalum</i>	Four-petaled pussypaws	CNPS 4	Chaparral, lower montane coniferous forest, usually on sandy or gravelly serpentine soils (1,035–6,695 feet).	Yes	Yes	Two populations of this species identified in ESL.
<i>Calystegia collina</i> ssp. <i>oxyphyla</i>	Mt. Saint Helena morning-glory	FSLC; CNPS 4	Serpentine soils in chaparral, lower montane coniferous forest, and valley and foothill grassland (1,000–3,315 feet).	No	No	No suitable habitat present in ESL.
<i>Calystegia purpurata</i> ssp. <i>saxicola</i>	Coastal bluff morning-glory	FSC; CNPS 1B	Coastal dunes, coastal scrub (50–345 feet).	No	No	No suitable habitat present in ESL.
<i>Cardamine pachystigma</i> var. <i>dissectifolia</i>	Dissected-leaved toothwort	CNPS 3	Lower montane coniferous forest and chaparral, usually on serpentine or rocky soils (840–6,890 feet).	Yes	No	No suitable habitat present in ESL.
<i>Castilleja rubicundula</i> ssp. <i>rubicundula</i>	Pink creamsacs	FSLC; CNPS 1B	Serpentine soils in chaparral, cismontane woodland, meadows and seeps, and valley and foothill grassland (65–2,955 feet).	No	No	No suitable habitat present in ESL.
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	FSC; CNPS 1B	Chaparral, cismontane coniferous forest, and closed-cone forest on volcanic or serpentine soils from 245 to 3,495 feet.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Ceanothus divergens</i>	Calistoga ceanothus	FSC; CNPS 1B	Chaparral on rocky or volcanic soils from 560 to 3,120 feet.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	Dwarf soaproot	FSC; CNPS 1B	Serpentine soils in chaparral and valley and foothill grassland (790–3,180 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Cryptantha clevelandii</i> var. <i>dissita</i>	Serpentine cryptantha	FSC; CNPS 1B	Serpentine soils in chaparral (1,295–1,905 feet).	No	No	No suitable habitat present in ESL.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Didymodon norrisii</i>	Norris's beard-moss	CNPS 2	Cismontane woodland, lower montane coniferous forest (1,970–5,580 feet).	Yes	Unknown	Suitable habitat present; species could potentially occur in ESL. Focused surveys were not conducted for mosses.
<i>Epilobium nivium</i>	Snow Mountain willowherb	FSC; CNPS 1B	Chaparral and upper montane coniferous forest (2,610–8,205 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Eriastrum brandegeae</i>	Brandegee's wooly-star	FSC; CNPS 1B	Chaparral and cismontane woodland, on barren volcanic soil; often in open areas (1,135–3,280 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Erigeron angustatus</i>	Narrow-leaved daisy	FSC; CNPS 1B	Serpentine soils in chaparral (265–495 feet).	No	No	No suitable habitat present in ESL.
<i>Eriogonum luteolum</i> var. <i>caninum</i>	Tiburon buckwheat	FSLC; CNPS 3	Restricted to serpentine in coastal prairie, chaparral, and valley and foothill grassland from 35 to 1,640 feet.	No	No	No suitable habitat present in ESL.
<i>Eriogonum nervulosum</i>	Snow Mountain buckwheat	FSC; CNPS 1B	Serpentine soils in chaparral (985–6,910 feet).	No	No	No suitable habitat present in ESL.
<i>Eryngium constancei</i>	Loch lomond button-celery	FE; SE; CNPS 1B	Vernal pools from 1,510 to 2,805 feet.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Erythronium helenae</i>	St. Helena fawn lily	FSLC; CNPS 4	Volcanic or serpentine soils in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland (1,150–4,005 feet).	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Fritillaria pluriflora</i>	Adobe-lily	FSC; CNPS 1B	Chaparral, cismontane woodland, and valley and foothill grassland. Often on adobe soils (200–2,315 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Gratiola heterosepala</i>	Bogg's Lake hedge-hyssop	FSC; SE; CNPS 1B	Freshwater marshes and swamps, vernal pools. Usually found in clay soils of vernal pools and lake margins (35–7,795 feet).	Yes	No	Suitable habitat present in ESL. <i>Gratiola</i> sp. identified in ESL, but not <i>Gratiola heterosepala</i> . Species not observed during focused plant surveys.
<i>Hesperolinon adenophyllum</i>	Glandular western flax	FSC; CNPS 1B	Restricted to serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland from 495 to 4,315 feet.	No	No	No suitable habitat present in ESL.
<i>Hesperolinon bicarpellatum</i>	Two-carpellate western flax	FSC; CNPS 1B	Restricted to serpentine in chaparral from 200 to 3,300 feet.	No	No	No suitable habitat present in ESL.
<i>Hesperolinon didymocarpum</i>	Lake County western flax	FSC; SE; CNPS 1B	Restricted to serpentine areas in chaparral, cismontane woodland, and valley and foothill grassland (1,085–1,200 feet).	No	No	No suitable habitat present in ESL.
<i>Hesperolinon drymarioides</i>	Drymaria dwarf-flax	FSC; CNPS 1B	Serpentine areas in closed-cone coniferous forest, chaparral, cismontane woodland, and valley and foothill grassland (330–3,710 feet).	No	No	No suitable habitat present in ESL.
<i>Hesperolinon serpentinum</i>	Napa western flax	FSC; CNPS 1B	Restricted to serpentine in chaparral from 165 to 2,625 feet.	No	No	No suitable habitat present in ESL.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Horkelia bolanderi</i>	Bolander's horkelia	FSC; CNPS 1B	Meadows and edges of vernal wet places in lower montane coniferous forest, chaparral, and valley and foothill grasslands (1,480–3,610 feet).	Yes	Yes	One population of this species identified within ESL.
<i>Lasthenia burkei</i>	Burke's goldfields	FE; SE; CNPS 1B	Vernal pools and meadows from 50 to 1,970 feet.	Yes	Yes	Several populations of this species identified in ESL.
<i>Layia septentrionalis</i>	Colusa layia	FSLC; CNPS 1B	Chaparral, cismontane woodland, valley and foothill grassland; scattered colonies in fields and grassy slopes in sandy or serpentine soil (480–3,595 feet). Blooms April–May.	Yes	No	One population of this species identified just outside of ESL. Potential habitat occurs in ESL, but species was not identified in ESL during focused surveys.
<i>Legenere limosa</i>	Legenere	FSC; CNPS 1B	In wet areas and beds of vernal pools (3–2,890 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Linanthus jepsonii</i>	Jepson's linanthus	FSC; CNPS 1B	Chaparral and cismontane woodland on volcanic soils, from 330 to 1,640 feet.	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Lupinus antoninus</i>	Anthony Peak lupine	FSC; CNPS 1B	Upper and lower montane coniferous forest in open areas with surrounding forest; rocky sites (3,970–7,500 feet).	No	No	No suitable habitat present in ESL.
<i>Lupinus sericatus</i>	Cobb Mountain lupine	FSLC; CNPS 1B	Chaparral, cismontane woodland, broadleafed upland forest, and lower montane coniferous forest from 905 to 5,005 feet.	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Madia hallii</i>	Hall's madia	FSC; CNPS 1B	Restricted to serpentine soils in chaparral from 1,640 to 2,955 feet.	No	No	No suitable habitat present in ESL.
<i>Micropus amphibolous</i>	Mt. Diablo cottonweed	CNPS 3	Rocky soils in broadleafed upland forest, chaparral, cismontane woodland, and valley and foothill grassland.	Yes	Yes	One population of this species was identified in ESL.
<i>Mielichhoferia elongata</i>	Elongate copper-moss	CNPS 2	Grows on metamorphic rock in vernal moist areas (1,640–4,265 feet).	Yes	Unknown	Suitable habitat present; species could potentially occur in ESL. Focused surveys were not conducted for mosses.
<i>Monardella villosa</i> ssp. <i>globosa</i>	Robust monardella	FSLC; CNPS 1B	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland (330–1,970 feet).	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia	FSC; CNPS 1B	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grasslands, lower montane coniferous forest; adobe or alkaline soils (20–3,120 feet). Blooms May–July.	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	Few-flowered navarretia	FE; ST; CNPS 1B	Vernal pools within volcanic ash flow from 1,315 to 3,120 feet.	Yes	Yes	Several populations of few-flowered navarretia were identified in ESL.
<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	Many-flowered navarretia	FE; SE; CNPS 1B	Vernal pools within volcanic ash flow from 100 to 3,120 feet.	Yes	No	Species not observed in ESL, but suitable habitat present.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Navarretia myersii</i> ssp. <i>deminuta</i>	Small pincushion navarretia	FSLC; CNPS 1B	Vernal pools on clay soils. Known from only one occurrence in Long Valley.	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Navarretia myersii</i> ssp. <i>myersii</i>	Pincushion navarretia	FSC; CNPS 1B	Vernal pools in valley and foothill grasslands. Clay soils within nonnative grasslands (65–1,085 feet).	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Orcuttia tenuis</i>	Slender orcutt grass	FT; SE; CNPS 1B	Vernal pools, moderate to deep, with few weedy plants (100–5,695 feet).	Yes	No	Species not observed in ESL, but potential habitat present.
<i>Panicum acuminatum</i> var. <i>acuminatum</i> (Jepson) (= <i>Dicanthelium lanuginosum</i> var. <i>thermale</i>)	Geysers dicanthelium	SE; CNPS 1B	Closed-cone coniferous forest, riparian forest, valley and foothill grassland on hydrothermally altered soil. Known only from The Geysers geothermal area.	No	No	No suitable habitat present in ESL.
<i>Parvisedum leiocarpum</i>	Lake County stonecrop	FE; SE; CNPS 1B	Cismontane woodland, valley and foothill grassland, and vernal mesic depressions in volcanic outcrops from 1,200 to 2,595 feet.	Yes	Yes	Several populations of Lake County stonecrop were identified in ESL.
<i>Penstemon newberryi</i> var. <i>sonomensis</i>	Sonoma beardtongue	CNPS 1B	Usually found on rocky soils in chaparral from 2,300 to 4,265 feet.	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Plagiobothrys lithocaryus</i>	Mayacamas popcorn-flower	FSC; CNPS 1A	Chaparral, cismontane woodland, and valley and foothill grassland (1,050–1,480 feet).	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Potamogeton zosteriformis</i>	Eel-grass pondweed	CNPS 2	Marshes and swamps (0–6,100 feet).	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Quercus douglasii</i> , <i>Quercus lobata</i> , <i>Quercus agrifolia</i>	Blue oak, Valley oak, Coast live oak	Protected by Senate Concurrent Resolution No. 17	Oak woodland, riparian and forest habitats.	Yes	Yes	Species observed throughout the project area.
<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	Marsh checkerbloom	FSC; CNPS 1B	Meadows and riparian forest on mesic soils, from 3,285 to 7,550 feet.	No	No	ESL out of documented habitat and elevation range.
<i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i>	Socrates Mine jewel-flower	FSC; CNPS 1B	Occurs in serpentine chaparral and closed-cone forests from 1,575 to 3,185 feet.	No	No	No suitable habitat present in ESL.
<i>Streptanthus brachiatus</i> ssp. <i>hoffmanii</i>	Freed's jewel-flower	FSC; CNPS 1B	Restricted to chaparral and cismontane woodland on serpentine from 1,610 to 4,005 feet.	No	No	No suitable habitat present in ESL.
<i>Streptanthus breweri</i> var. <i>hesperidis</i>	Green jewel-flower	FSC; CNPS 1B	Openings in chaparral and cismontane woodland on rocky and serpentine soils from 430 to 2,495 feet.	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Streptanthus morrisonii</i> ssp. <i>elatus</i>	Three-peaks jewel-flower	FSLC; CNPS 1B	Typically found in chaparral on serpentine from 295 to 2,875 feet.	No	No	No suitable habitat present in ESL.
<i>Streptanthus morrisonii</i> ssp. <i>kruckebergii</i>	Kruckeberg's jewel-flower	FSC; CNPS 1B	Restricted to serpentine areas in cismontane woodland from 705 to 3,400 feet.	No	No	No suitable habitat present in ESL.

Scientific Name	Common Name	Status	Habitat Requirements	Habitat Present	Species Present	Rationale
<i>Tracyina rostrata</i>	Beaked tracyina	FSC; CNPS 1B	Cismontane woodland, and valley and foothill grassland (295–1,710 feet).	Yes	No	Species not observed in ESL, but suitable habitat present.
<i>Zigadenus micranthus</i> var. <i>fontanus</i>	Marsh zigadenus	CNPS 4	Chaparral, cismontane woodland, lower montane coniferous forest, meadows, seeps, marshes and swamps, often on serpentine soils (50–3,285 feet).	Yes	Yes	One population of this species observed in ESL.

Federal Status

FC = Federal Candidate
 FD = Federal Delisted
 FE = Federal Endangered
 FPE = Federal Proposed Endangered
 FPT = Federal Proposed Threatened
 FSC = Federal Species of Concern
 FT = Federal Threatened

State Status

CSC = California Species of Concern
 SE = State Endangered
 SR = State Rare
 ST = State Threatened

California Native Plant Society Status

CNPS 1A = Presumed extinct in California
 CNPS 1B = Rare or Endangered in California and elsewhere
 CNPS 2 = Rare or Endangered in California, more common elsewhere
 CNPS 3 = “Need more information”: unresolved taxonomic and distribution data
 CNPS 4 = CNPS “watch list” of plants with limited distribution, vulnerable to decline.

Appendix I USFWS List of Special-Status Species



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825



April 26, 2007

Document Number: 070426094014

Erik Schwab
Caltrans
2389 Gateway Oaks, Suite 100
Sacramento, CA 95833

Subject: Species List for Lake 29 Expressway Project

Dear: Mr. Schwab

We are sending this official species list in response to your April 26, 2007 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area.* For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 25, 2007.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division



**Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested**

Document Number: 070426094014

Database Last Updated: March 5, 2007

Quad Lists

Listed Species

Invertebrates

- Branchinecta conservatio*
- Conservancy fairy shrimp (E)*
- Syncaris pacifica*
- California freshwater shrimp (E)*

Fish

- Hypomesus transpacificus*
- delta smelt (T)*
- Oncorhynchus (=Salmo) clarki henshawi*
- Lahontan cutthroat trout (T)*
- Oncorhynchus kisutch*
- coho salmon - central CA coast (E) (NMFS)*
- Oncorhynchus mykiss*
- Central Valley steelhead (T) (NMFS)*
- Oncorhynchus tshawytscha*
- California coastal chinook salmon (T) (NMFS)*

Amphibians

- Rana aurora draytonii*
- California red-legged frog (T)*

Birds

- Haliaeetus leucocephalus*
- bald eagle (T)*
- Strix occidentalis caurina*
- northern spotted owl (T)*

Plants

- Eryngium constancei*
- Loch Lomond coyote-thistle (=button-celery) (E)*
- Lasthenia burkei*
- Burke's goldfields (E)*
- Navarretia leucocephala ssp. pauciflora*
- few-flowered navarretia (E)*
- Navarretia leucocephala ssp. plieantha*
- many-flowered navarretia (E)*
- Orcuttia tenuis*
- Critical habitat, slender Orcutt grass (X)*
- slender Orcutt grass (T)*
- Parvisedum leiocarpum*

*Lake County stonecrop (E)***Quads Containing Listed, Proposed or Candidate Species:**

LOWER LAKE (533A)

CLEARLAKE HIGHLANDS (533B)

KELSEYVILLE (534A)

County Lists**Lake County**

Listed Species

Invertebrates

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Syncaris pacifica
California freshwater shrimp (E)

Fish

Oncorhynchus kisutch
coho salmon - central CA coast (E) (NMFS)
coho salmon, So OR/No CA (T) (NMFS)
Critical habitat, coho salmon, So OR/No CA (X) (NMFS)

Oncorhynchus mykiss
Northern California steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Critical habitat, California coastal chinook salmon (X) (NMFS)

Amphibians

Rana aurora draytonii
California red-legged frog (T)

Birds

Brachyramphus marmoratus
marbled murrelet (T)

Haliaeetus leucocephalus
bald eagle (T)

Strix occidentalis caurina
Critical habitat, northern spotted owl (X)
northern spotted owl (T)

Plants

Eryngium constancei

Loch Lomond coyote-thistle (=button-celery) (E)

Lasthenia burkei

Burke's goldfields (E)

Navarretia leucocephala ssp. pauciflora

few-flowered navarretia (E)

Navarretia leucocephala ssp. plieantha

many-flowered navarretia (E)

Orcuttia tenuis

Critical habitat, slender Orcutt grass (X)

slender Orcutt grass (T)

Parvisedum leiocarpum

Lake County stonecrop (E)

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide nec-

space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shell and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our critical habitat page for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 25, 2007.

Appendix J Avoidance, Minimization, and Mitigation Summary

General

The following avoidance and minimization measures are general measures that will reduce potential impacts to multiple environmental resources (e.g., Visual/Aesthetics and Biological Resources). These general measures are repeated, as necessary, under each applicable resource in Chapter 2, but are only listed once in this section.

- Tree and vegetation removal will be limited to only that which is required to construct the project.
- All native oak trees that are to remain within and adjacent to the proposed project will be designated as “environmentally sensitive areas” (ESAs) and will be temporarily fenced with orange plastic construction (exclusion) fencing throughout all grading and construction activities. The exclusion fencing will be installed 6 feet outside of the dripline of each specimen tree, and will be staked a minimum of every 6 feet. The fencing is intended to prevent equipment operations in the proximity of protected trees from compacting soil, crushing roots, or colliding with tree trunks or overhanging branches.
- An investigation for naturally occurring asbestos (NOA) will be completed for the Caltrans preferred alternative. If present, or if discovered during construction, remediation activities in accordance with all applicable local, state, and federal regulations will be implemented.

Visual/Aesthetics

- Where rock slope protection is proposed for cut and/or fill slopes, suitable native rock material from the Clear Lake watershed should be considered. The use of native rock will improve the visual character of the highway infrastructure and help it blend into the natural viewshed.
- In locations where it is practicable to do so, after evaluating safety and maintenance needs, unearthed rock outcroppings will be preserved to restore the diversity seen in the undisturbed and natural landscape. If rock outcroppings are uncovered, the project landscape architect will be contacted as soon as possible to determine the grading plan between and around the rocks.
- Pigments and and/or surface treatments, such as concrete formlining, will be considered for structures to minimize the degree of visual impacts anticipated

from project alternatives. If used, surface treatments would reflect the diversity in the surrounding visual environment.

- Where grading will occur in areas of riparian and wetland habitat, the upper 3 inches of soil (duff layer) should be removed and stockpiled within the project limits. The project biologist should examine this material for invasive species prior to stockpiling. This material will be used during revegetation upon completion of construction activities.
- To the extent possible, where retaining walls (not proposed at this time) and guardrails are needed, they will be designed to preserve motorists' views of the scenic features throughout the project limits.

Cultural Resources

- An ESA Action Plan will be prepared to protect portions of known archaeological sites that are outside of the Area of Direct Impact (ADI) limits.
- If prehistoric and/or historical artifacts are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the find. In the event that human remains are discovered or recognized during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Lake County Coroner has determined that the remains are not subject to provisions of Section 27491 of the Government Code. If the remains are determined to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will appoint a Most Likely Descendent for disposition of the remains (Health and Safety Code Section 7050.5; PRC Section 5097.24).

Water Quality and Storm Water Runoff

Construction-Related Minimization

Erosion control measures will be applied to all exposed areas during construction. Erosion control Best Management Practices (BMPs) are described in the Caltrans Project Planning and Design Guide (Caltrans 2002b). Because the proposed project will involve a soil disturbance of more than 1 acre, Caltrans will adhere to the conditions of the National Pollutant Discharge Elimination System (NPDES) permit for construction activities (Order No. 9-08-DWQ, NPDES No. CAS000002), which is incorporated by reference into the Caltrans NPDES permit for storm water discharges from the State of California (Order No. 99-06-DWQ, NPDES No. CAS000003). Filing of a Notice of Intent is not required, as this has been replaced by a Notification

of Construction under the Caltrans NPDES permit. To comply with the conditions of the Caltrans NPDES permit and to address the temporary water quality impacts resulting from the construction activities associated with this project, Caltrans will require a Storm Water Pollution Prevention Plan (SWPPP) from its Contractor. To avoid contaminating waterways or groundwater, additional water quality, erosion, and hazardous waste provisions, may also be required in the construction contract and/or in Caltrans Standard Specifications and contract Special Provisions. The SWPPP will address the construction-phase impacts and will include the following elements: Project Description; Minimum Construction Control Measures; Erosion and Sediment Control; Non-Storm Water Management; Post-Construction Storm Water Management; Waste Management and Disposal; Maintenance, Inspection, and Repair; Annual Reporting to RWQCB; and Training.

If groundwater is encountered during any excavations, the Caltrans Office of Environmental Engineering will be contacted regarding the handling and disposal of this water. If this water will be discharged into any jurisdictional waters, appropriate dewatering procedures will be required to reduce or eliminate any potential discharge of pollutants to the maximum extent feasible. A project-specific Waste Discharge Permit may be required from the Regional Water Quality Control Board (RWQCB) if substantial dewatering is to be done. In the event that this project would affect groundwater, the groundwater will be tested for potential contamination, and a Special Provision will be prepared, if applicable, to ensure the proper handling and disposal of the groundwater.

Post-Construction Minimization

Permanent control measures to reduce pollutants in storm water runoff from the roadway will be implemented, as required, to reduce suspended particulate loads (and thus pollutants associated with the particulates) entering drainages and will be incorporated into the final engineering design or landscape design of the project.

Geology/Soils/Seismic/Topography

- The design and construction of the project will adhere to state codes and criteria. The engineering design for the proposed project will be carried out in accordance with Caltrans Seismic Design Criteria.
- Roadways and bridges will be designed and constructed to the seismic design requirements for ground shaking specified in the Uniform Building Code for Seismic Zone 3.

- To satisfy the provisions of the California Building Code, the proposed facilities will be designed to withstand ground motions equating to approximately a 500-year return period (10 percent probability of exceedance in 50 years). Bridges will be designed in accordance with the latest Caltrans Seismic Design Criteria.
- If any structures are planned at locations where Alquist-Priolo zoned faults cross the alignment, trenches will be excavated to allow for subsurface evaluation of faulting. Where evidence of recent faulting is identified, site-specific measures will be required, including, but not limited to, bridge and foundation design that can withstand anticipated offset and ground shaking.
- Site-specific exploratory borings and laboratory testing during final design of any bridge structures will be conducted to delineate any potentially liquefiable materials. Potentially liquefiable materials will either be removed or engineered to reduce their liquefaction potential, or the engineering design will incorporate deep foundations that extend beyond soils with the potential for liquefaction.
- Potential surface deformation resulting from subsidence could be minimized by periodic repair to the road surface, curbs, and other engineered facilities. Annual inspection will be carried out to assess ongoing subsidence damage to the roadway.
- Site-specific borings and testing will include identification of soils with high shrink-swell potential that could damage the roadway over time. Expansive soils will be overexcavated and replaced with nonexpansive fill or treated with appropriate soil amendments to reduce the potential for shrinking and swelling.
- The soils in the vicinity of project cut slopes will be analyzed based on laboratory strength data from soil borings collected during final design. The data will facilitate appropriate slope design. Appropriate slope strengthening and stabilizing design measures will be developed if deemed necessary.
- Soil and slope stability measures will prevent or reduce erosion. Erosion of soils during construction will be minimized using temporary hydroseeding to provide a vegetation cover with straw bales, plastic sheeting slope cover, and temporary drainage measures to prevent excessive slope runoff.

Hazardous Waste/Materials

- The routine use of hazardous materials, such as gasoline or diesel fuel for construction equipment, will be required by the project. Equipment to clean up fuel leaks and spills will be available at each project construction location. The Contractor will be required to safely store materials and immediately clean up spills if they occur.

- Alternative D would not require the relocation of the PG&E substation. It is likely that the need for relocation of the substation will be avoided during final design of Alternatives C1, C2, and C3 as well. However, should project plans eventually call for the relocation of the PG&E substation, a site-specific investigation for polychlorinated biphenyls (PCBs) will be conducted. If PCB-contaminated soil is confirmed, cleanup procedures will be implemented after relocation. If right of way is purchased from PG&E but the substation is not relocated, cleanup procedures will not be necessary.
- For alternatives that require the acquisition of structures, Caltrans will complete an asbestos-containing material survey and lead-based paint survey prior to demolition activities. Caltrans will obtain a National Emission Standards for Hazardous Air Pollutants (NESHAP) permit, which is required for demolition, from the Lake County Air Quality Management District. Asbestos inspections for the NESHAP permit will be conducted by California Occupational Safety and Health Administration (Cal/OSHA)–certified inspectors. Regulated asbestos-containing materials will be identified during the survey and noted on the NESHAP permit. Caltrans will have all regulated asbestos-containing materials abated by licensed asbestos contractors prior to demolition.
- If any lead-based paint is discovered, abatement procedures will be enforced during demolition.
- All suspected abandoned underground storage tank sites will require a ground-penetrating radar search prior to construction to determine the presence or absence of underground tanks. Should any underground tanks be discovered, proper removal, cleanup, and disposal will take place prior to or during construction activities.
- Caltrans will prepare a Health and Safety Plan that addresses the potential effects of the various chemical compounds that could be encountered at each property. The Health and Safety Plan will include evaluations of the suspected chemical hazards, including symptoms of exposure and emergency treatment, appropriate use of personal protection equipment, and air monitoring.

Prior to construction, a more detailed site investigation will be performed within the existing and proposed right of way for the preferred alignment, including drilling of test holes and collection and laboratory analysis of soil and/or water samples. Results of the testing will help to determine if there is a need to manage excavated or graded soils potentially contaminated with lead from vehicle exhaust, naturally occurring asbestos, or other organic or inorganic chemicals that might be present due to

commercial or light industrial land uses. Completion of these studies prior to construction will be necessary to ensure that worker health is protected and that construction activities are conducted in compliance with existing hazardous materials laws and regulations. Prior to commencing the study, Caltrans will prepare a Health and Safety Plan that addresses the potential effects of the various chemical compounds that could be encountered at each property. The Health and Safety Plan will include evaluations of the suspected chemical hazards, including symptoms of exposure and emergency treatment, appropriate use of personal protection equipment, and air monitoring.

Air Quality

BMPs will be implemented, as applicable, and the Contractor will be required to comply with Caltrans Standard Specifications, which include Section 7-1.01F, “Air Pollution Control,” and Section 10, “Dust Control.” Section 7-1.01F also requires the Contractor to comply with all existing rules, regulations, ordinances, and statutes of the Lake County Air Quality Management District pertaining to each construction activity.

Biological Environment

Special-Status Plant Species

Special-status plant species that are to remain within and adjacent to the proposed project will be designated as “environmentally sensitive areas” (ESAs), as needed, and will be temporarily fenced with orange plastic construction (exclusion) fencing throughout all grading and construction activities. The fencing is intended to prevent encroachment by construction vehicles and personnel. The location of the ESAs and exact location of the fencing will be determined by a qualified biologist.

Special-Status Animal Species—Bats

- A qualified bat biologist will conduct a habitat assessment of all buildings and large trees (>16 inch diameter at breast height [dbh]) on-site, at least 30 days prior to demolition of the structures, removal of trees, or groundbreaking within 100 feet of structures or trees. If no bats, evidence of bat roosting activity, or openings into the structures suitable for bats are found, demolition can occur at the recommendation of the biologist.
- If the bat biologist observes special-status bat species, evidence of their presence, evidence of past roosting activity by bats, or openings into the buildings or trees suitable for bats, the biologist will provide specific recommendations for the

following: 1) focused surveys to determine presence or absence, location of roost, species and population; 2) eviction, sealing of openings (exclusionary devices) and/or partial dismantling; or 3) timing of demolition. If roosting bats are discovered, work windows may be required during the maternity season or hibernation to avoid mortality of young or torpid bats incapable of flight. These work windows will apply to the demolition of any buildings that are acquired. Work windows will be determined in consultation with CDFG and will be based on the identification of the affected species. Structures identified as potential night roosts only (not day roosts) will be demolished during the day when no bats are occupying the structure.

- Many bat species are very sensitive to human visitation and sound. The use of lights during night work may also be disruptive to roosting bats. Construction buffer zones in which restrictions are placed on night work and the use of lights may also be required if roosting bats are discovered. Buffer zones will be determined in consultation with CDFG and will be based on the identification of the affected species.

Special-Status Animal Species—Raptors and Migratory Songbirds

Tree and vegetation removal will be conducted between September 15 and February 15. If removal cannot be conducted during this time frame, a preconstruction survey will be conducted by a qualified biologist no more than 10 days prior to the start of construction. If raptors, migratory songbirds, or other migratory birds are observed nesting, CDFG will be contacted and a work window may be implemented for portions of the project, depending on the proximity to the nest. Impacts to migratory birds will be avoided through the inclusion of the nonstandard special provision for “Migratory Bird Protection” in the project’s Plans, Specifications, and Estimates package.

Special-Status Animal Species—Reptile Species

Due to the negative results of surveys for the northwestern pond turtle in areas of suitable habitat within the Environmental Study Limits (ESL), it is unlikely that the build alternatives would impact this species. However, a preconstruction survey for the northwestern pond turtle will be completed before the project commences to ensure that there are no impacts to this species.

Threatened and Endangered Species—California Red-Legged Frog

Due to the negative results of surveys for this species in the Clear Lake/Thurston Lake watershed along with the marginal habitat and presence of introduced predators

in Thurston Creek, it is unlikely that the build alternatives would impact the California red-legged frog. However, a preconstruction survey for California red-legged frog in Thurston Creek will be completed before the project commences.

Threatened and Endangered Species—Valley Longhorn Elderberry Beetle

Elderberry bushes that are to remain within and adjacent to the proposed project will be designated as ESAs and will be temporarily fenced with orange plastic construction (exclusion) fencing throughout all grading and construction activities. The exclusion fencing will be a minimum 4-foot-tall temporary, plastic mesh construction fence (Tensor Polygrid or equivalent) and will be installed at least 20 feet from the driplines of elderberry shrubs that are not to be removed. The fencing is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing will be determined by a qualified biologist, with the goal of protecting the valley elderberry longhorn beetle habitat.

Threatened and Endangered Plant Species—Burke’s Goldfields, Few-Flowered Navarretia, and Lake County Stonecrop

Caltrans has made substantial revisions to the design of Alternative D in order to avoid potential direct and indirect effects to Burke’s goldfields, few-flowered navarretia, and Lake County stonecrop. Alternative D, the Caltrans preferred alternative, is not expected to result in direct or indirect effects to these species. Alternatives C1, C2, and C3 will result in direct effects and potential indirect effects to these species. If further surveys reveal additional populations of these species within the project corridor, and it is subsequently determined that Alternative D may result in effects to these species, further revisions to the Alternative D alignment may be considered to avoid effects to these species.

Invasive Species

- All earthmoving equipment to be used during project construction will be thoroughly cleaned before arriving on the project site.
- All seeding equipment (e.g., hydroseed trucks) will be thoroughly rinsed at least three times offsite prior to beginning seeding work.
- To avoid spreading nonnative species to off-site areas, all equipment will be thoroughly cleaned before leaving the site.
- Caltrans will not use any of the species on the California list of noxious weeds for erosion control or landscaping.

- The landscaping and erosion control included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Summary of Mitigation Measures for Significant Impacts under CEQA

Visual/Aesthetics

- A Revegetation and Restoration Plan will be prepared by the project biologist, project landscape architect, and Caltrans revegetation specialist for the project. The revegetation plan will address the following:
 - The revegetation/restoration plan will be designed to minimize soil loss immediately after construction and to revegetate disturbed areas (including areas in which it has been determined that the existing roadway will be obliterated) with native plants for long-term erosion control. The revegetation/restoration plan will be implemented to compensate for the loss and/or disturbance of vegetation on the project site, areas cleared for access, and construction staging areas. The revegetation/restoration plan will also include plans for plantings to soften the appearance of earth embankments constructed within the project area. The restoration plan elements will be graphically depicted on final construction plans, including the location and extent of the driplines for all trees, type and location of any fencing, and equipment storage and staging areas outside of dripline areas.
 - Revegetation and replacement planting will take place within the project right of way to the extent feasible.
 - To the extent feasible, native seeds (acorns), cuttings, or container stock regionally appropriate for the project area will be obtained. The project biologist, landscape architect, and/or revegetation specialist will develop a planting plan and pallet, and ensure the required species are available or propagated prior to planting. Plant material in containers larger than 1 gallon will be avoided, if possible.
 - Planting will take place in the fall and winter following the final construction season.
 - A monitoring program will be implemented. Plant establishment periods will be determined by the project landscape architect and the project biologist.

- Where cut slopes shallower than 1:1 are used, the top of the cut will be contour-graded to blend into existing topography.
- Cut and fill slopes should be no steeper than 1:2 and should be 1:4 where possible. If slopes steeper than 1:2 are required, the use of retaining walls should be considered.

Cultural Resources

In order to mitigate for adverse effects of the project on archaeological sites found eligible for NRHP listing, a Phase III data recovery investigation will be implemented, in accordance with the terms of a Memorandum of Agreement that will be executed between FHWA and SHPO. The Memorandum of Agreement details the measures to be taken to complete the Phase III data recovery investigation.

Natural Communities

Mitigation will be required for impacts to riparian habitat under the jurisdiction of CDFG, including valley oak riparian habitat. The majority of the riparian habitat affected by the project is also under the jurisdiction of USACE. A Habitat Mitigation and Monitoring Plan will be prepared for this project that will include specific mitigation measures for impacts to remaining areas of riparian habitat. The plan will include compensation requirements for unavoidable impacts to riparian habitat, based on the selected alternative. The plan will provide specific mitigation details, including approved mitigation sites, plan implementation design and construction, and a minimum five-year monitoring plan. Mitigation measures will be developed in coordination with the resource agencies and will include all necessary measures to offset project effects. Mitigation for the loss of riparian habitat may include purchase of lands within the project area, or at off-site locations that are approved by the resource agencies and that will provide opportunities to enhance and create riparian habitat.

Wetlands and Other Waters

- Project construction activities within aquatic features will not take place until there is a low-flow condition.
- All waters and wetlands adjacent to the construction zone that will not be filled as a result of the project will be designated as ESAs, and shall be fenced and signed to prevent inadvertent damage to these resources. Best Management Practices will be followed to minimize erosion and reduce sediments from entering channels

and wetlands. All disturbed areas will be replanted upon completion of construction to stabilize soils.

- The proposed project will require a Clean Water Act Section 404 permit from USACE and a Section 401 Water Quality Certification from the California RWQCB. A Streambed Alteration Agreement will also be required from CDFG for work in Thurston Creek. Conditions of these permits will include timing restrictions (work during low-flow periods, typically from June 15 to October 1) to avoid water quality and species related impacts, and the restoration of native riparian vegetation affected by project construction.
- A Habitat Mitigation and Monitoring Plan will be prepared that will include specific mitigation measures for impacts to wetlands and other waters of the U.S. The plan will include compensation requirements for unavoidable impacts to wetlands and other waters of the U.S., based on the selected alternative. The plan will provide specific mitigation details, including approved mitigation sites, plan implementation design and construction, and a minimum five-year monitoring plan. Mitigation measures will be developed in coordination with the resource agencies and will include all necessary measures to offset project effects. The goal of the mitigation plan is to achieve no net loss of wetland habitat functions and values. Compensation wetlands will be designed to equal or exceed the values of wetlands affected by the project. Mitigation for the loss of wetlands and other waters of the U.S. may include purchase of lands within the project area, or at off-site locations that are approved by the resource agencies and that will provide opportunities to enhance and create wetland features and stream channels.

Special-Status Plant Species

Mitigation measures for impacts to special-status plants will be determined in consultation with USFWS and CDFG and will be based on the identification of the affected species. Mitigation measures will be specified in the project's Habitat Mitigation and Monitoring Plan and may include seed and plant tissue collection from special-status plants to include in the revegetation of disturbed or affected areas. Caltrans may also contribute funds to a specialized bank or conservation fund account to mitigate (offset) impacts to special-status plant species.

Threatened and Endangered Species—Valley Longhorn Elderberry Beetle

- All elderberry shrubs with one or more stems measuring 1 inch or more in diameter that cannot be avoided during construction will be transplanted to a conservation area in accordance with Conservation Guidelines for Valley Elderberry Longhorn Beetle (USFWS 1999). If an elderberry shrub is unlikely to survive transplantation because of poor condition or location, the shrub may be exempted from transplantation at the discretion of USFWS.
- Each elderberry stem measuring 1.0 inch or greater in diameter at ground level that is transplanted or removed by this project will be replaced, in the conservation area, with elderberry seedlings or cuttings at a ratio ranging from 1:1 to 8:1 (new plantings to affected stems) in accordance with Conservation Guidelines for Valley Elderberry Longhorn Beetle (USFWS 1999).

Threatened and Endangered Species—Burke’s Goldfields, Few-Flowered Navarretia, and Lake County Stonecrop

- If further surveys reveal additional populations of Burke’s goldfields, few-flowered navarretia, or Lake County stonecrop within the project corridor, and it is subsequently determined that Alternative D may result in effects to these species, further revisions to the Alternative D alignment may be considered to avoid effects to these species. If further avoidance measures cannot be implemented, or if Alternative C1, C2, or C3 is selected, Caltrans will work with USFWS and CDFG to develop appropriate mitigation strategies to minimize/mitigate for effects to these endangered plants and include these mitigation strategies in the Habitat Mitigation and Monitoring Plan that will be prepared for the project.
- Compensatory mitigation is the most likely mitigation strategy for impacts to these species and would most likely be implemented through the establishment of conservation easements. A conservation easement is a legal agreement that a property owner enters into with a land trust or public agency restricting types and amounts of development and other uses. Each conservation easement is different and tailored to the needs of the owner. Once the conservation easement is finalized, a land trust, nonprofit, or public agency monitors the land to ensure that its provisions are followed. The easement remains in perpetuity with the title, even when the land changes ownership by sale, death, or gift.

Appendix K Comments on Notice of Preparation

A Notice of Preparation (NOP) was sent to the State Clearinghouse on February 2, 2003. The following agencies responded:

- United States Bureau of Land Management
- Lake County Air Quality Management District
- United States Fish and Wildlife Service
- California Department of Toxic Substances Control

Their letters of response follow.



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Ukiah Field Office
2550 N. State Street
Ukiah, CA 95482
www.ca.blm.gov/ukiah

March 3, 2003

In Reply Refer To:
2800
CA-340

Cher Daniels, Chief
Office of Environmental Management, S-1
Caltrans District 3 Sacramento Office
2389 Gateway Oaks Dr., 1st floor
Sacramento, CA 95833

Dear Ms. Daniels:

We received your notice of preparation of a draft Environmental Impact Report/Statement to improve traffic flow and safety on Route 29 from KP 38.3 to KP 50.9. Since there are no Bureau of Land Management administered lands involved on this section of highway, there are no permits needed from us and we do not need to be involved in the EIR/EA.

Thank you for giving us the opportunity to comment.

Sincerely,

Jonna Hildenbrand
(Acting)

Rich Burns
Ukiah Field Manager



**LAKE COUNTY AIR QUALITY
MANAGEMENT DISTRICT**
885 Lakeport Blvd
Lakeport, CA 95453
Phone (707) 263-7000

Robert L. Reynolds
Air Pollution Control Officer
Fax (707) 263-0421
bobr@pacific.net

Cher Daniels, Branch Chief
ATTN: Lupe Jimenez
Office of Environmental Management
California Department of Transportation
2389 Gateway Oaks Dr., 1st Floor
Sacramento, CA 95833

February 10, 2003

Subject: NOP of a DEIR for SR 29 improvements KP 38.3 to KP 50.9

Dear Ms. Jimenez :

Highway construction projects will result in short and long term air emissions impacts. Construction related impacts include heavy equipment combustion emissions from largely mobile diesel equipment and particulate from grading, earth moving and paving operations. Long term emissions will result from growth inducement. Construction emissions have a variety of sources and can be mitigated through the application of various control methods. Particulate matter control is the most significant local issue.

The Lake County Air Basin is the only District in the State that is in attainment will all State Ambient Air Quality Standards (AAQS). The three most difficult standards to meet are the PM-10 particulate, visibility and ozone. Particulate emissions are locally important due to the health and nuisance potential and can be readily mitigated with good dust and combustion control practices.

Where feasible, stripped vegetation should be chipped and used for exposed ground surfacing to limit wind and water erosion. Excavation and grading activities should utilize adequate soil moisture and vehicle speed controls to reduce dust emissions. Materials tracked onto the roadway where they can be disturbed by vehicular traffic should be cleaned up as soon as possible. Track out barriers should be constructed of sufficient length to remove material from vehicle wheels. Water washing and wet brooming or vacuum brooming are effective removal methods.

Durable temporary road base should be installed and palliatives or temporary paving utilized to reduce vehicular traffic dust.

To the extent possible, excavation and grading should be designed to have balanced cut and fill. Off site borrow and spoils disposal areas should be identified.

Aggregate processing, concrete and asphalt production equipment may require District permits. The EIR should consider the location and duration of operation if such is anticipated to be included in the project.

Buildings demolition activities are regulated by the District's Asbestos NESHAP Regulation 467. Structures are required to be adequately surveyed for asbestos and a demolition notice filed with the District 14 days in advance of any asbestos removal or demolition activity.

There are references in the (Project Description page 2) and Justification (page 2) documents that refer to bypassing the "Route 29" north shore alignment. I believe these to be a "typo" and meant to refer to the "Route 20" north shore alignment.

Should you have any questions in the above regard, please give me a call. I am the District staff contact for this project and may be reached at (707) 263-7000, FAX (707) 263-0421, e-mail rossk@lcaqmd.net.

Sincerely,



Ross L. Kauper, Deputy APCO

rlk



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

IN REPLY REFER TO:
PPN 2954

MAR 12 2008

Ms. Cher Daniels, Chief
Office of Environmental Management
California Department of Transportation
District 3 Sacramento Office
2389 Gateway Oaks Drive
Sacramento, California 95833

Dear Ms. Daniels:

Thank you for the opportunity to review the Notice of Preparation of an Environmental Impact Report/Environmental Assessment for the State Route (SR) 29 Improvement Project in Lake County, California. The California Department of Transportation and the Federal Highway Administration, in partnership with Lake County, have proposed the upgrade of SR 29 between postmile 23.8 and postmile 31.6. The proposed 7.8 mile project is a component of the larger corridor improvement project described in the report: *Route 20 Corridor Study, State Route 20 Principle Arterial Corridor Between U.S. 101 Freeway and Interstate 5 Freeway*. The enclosures are intended to assist you in your continued environmental review of this proposal. Future consultation with the U.S. Fish and Wildlife Service (Service) may be required under the Fish and Wildlife Coordination Act if project activities are anticipated to impact jurisdictional wetlands, and/or the Endangered Species Act if project activities are anticipated to affect federally listed species.

Enclosure A provides a list of sensitive species that may occur in or near the project site. The Service recommends that surveys be completed by a qualified biologist on the proposed project site to confirm the presence or absence of special-status species or their habitats. Enclosure B recommends general guidelines for identifying and mitigating project impacts to fish, wildlife, and their habitats. The Council on Environmental Quality developed regulations for implementing the National Environmental Policy Act, and defines mitigation to include: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact over time; and (5) compensating for impacts. The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Accordingly, we maintain the best way to mitigate adverse biological impacts is avoidance when at all possible.

We encourage you to use these guidelines to develop a comprehensive environmental document that addresses these needs. If you have any questions regarding these comments, please contact

Jerry Bielfeldt (Watershed Planning Branch) in the Sacramento Fish and Wildlife Office at (916) 414-6584.

Sincerely,


for David L. Harlow
Acting Field Supervisor

Enclosures

cc:

AES, Portland, OR

RM, CDFG, Region 3, Yountville, CA (w/o enclosures)



Department of Toxic Substances Control



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Edwin F. Lowry, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gray Davis
Governor

March 18, 2003

Cher Daniels, Chief
Attn.: Ms. Lupe Jimenez
Associate Environmental Planner
Office of Environmental Management, S-1
Caltrans District 3 Sacramento Office
2389 Gateway Oaks Drive, 1st Floor
Sacramento, California 95833

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT
REPORT/STATEMENT FOR ROUTE 29 KP 38.3 TO KP 50.9 LAKE COUNTY
(NO SCHEDULE NUMBER)

Dear Ms. Jimenez:

The Department of Toxic Substances Control (DTSC) has reviewed the document referenced above and has the following comment. After reviewing our hazardous substances site data base (Calsites), we have identified sites in the immediate area (list enclosed). DTSC has not done an evaluation to determine whether any of these sites could impact the subject project. DTSC recommends that the draft EIR/EIS include a discussion on hazards/hazardous materials if the project may be impacted by a hazardous substances release site.

If you have any questions. Please contact me by email at tmiles@dtsc.ca.gov or telephone at (916) 255-3710.

Sincerely,

Tim Miles
Hazardous Substances Scientist

Enclosure

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.
For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.*

Cher Daniels, Chief
March 18, 2003
Page 2

cc. Planning & Environmental Analysis Section (PEAS)
CEQA Tracking Center
1001 "I" Street, 22nd Floor
P.O. Box 806
Sacramento, California 95812-0806

State Clearinghouse
Office of Planning and Research
1400 10th Street, Room 121
Sacramento, California 95814-0613

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXICS SUBSTANCES CONTROL
CALSTATES

SHORT SUMMARY REPORT

R	CO	SITE NAME	SITE ADDRESS	SITE CITY	ZIP CODE	IDNUM	STATUS
1	17	SULPHUR BANK MERCURY MINE	SULPHUR BANK ROAD	CLEARLAKE	95422	17100001	AWP
1	17	ABBOTT MINE	HWY 20 (N SIDE), E OF JCT OF HWY 20 & 53	CLEARLAKE OAKS	95423	17100002	PEAR
1	17	MOYER CHEMICAL CO.	2532 VALLEY ROAD	LAKEPORT	95453	17280003	REFOA
1	17	S BAR S QUARRY	7769 HIGHWAY 29	KELSEYVILLE	95451	17320001	REFRW
1	17	CARTER & SONS AIRCRAFT PAINT	OLD HIGHWAY 53	CLEARLAKE	95422	17340001	REFOA
1	17	EASTLAKE SANITARY LANDFILL	DAVIS STREET (EAST END)	CLEARLAKE	95422	17490001	REFRW
1	17	GROTHERMAL, INC	19020 BUTTE CANYON ROAD (BOX 480)	MIDDLETOWN	95461	17490002	REFRW
1	17	IT BENSON RIDGE	7260 SOUTH HIGHWAY 29	KELSEYVILLE	95451	17490005	CERT
1	17	CAVEMAN BATTERY	2335 SOUTH MAIN	LAKEPORT	95453	17500001	REFOA
1	17	KELSEYVILLE AUTO DISMANTLERS	7666 HIGHWAY 29	KELSEYVILLE	95451	17500002	REFOA
1	17	HIDDEN VALLEY AUTO WRECKERS	HIGHWAY 29 AT GRANGE RD	MIDDLETOWN	95461	17500003	REFOA
1	17	LAST MILE AUTO DISMANTLERS	1205 WEST HIGHWAY 29	UPPER LAKE	95485	17500004	REFOA
1	17	AMINOIL USA, INC	KGRA GEYERS FLD NR	MIDDLETOWN	95461	17510001	REFOA
1	17	TIME OIL CO	202 S MAIN ST	LAKEPORT	95453	17510002	REFOA
1	17	AN-LEE	201 S MAIN ST	LAKEPORT	95453	17510005	REFOA
1	17	UNION CO OF CAL AGENCY	16445 MAIN ST	LOWER LAKE	95457	17510007	REFOA
1	17	RUSH OIL CO	3720 HIGHLAND SPRINGS	LAKEPORT	95453	17510009	REFRW
1	17	JACKPOT STATION	202 S MAIN	LAKEPORT	95453	17510010	REFOA
1	17	SNIDER & SONS AUTO & MACH SHOP	5315 GADDY LANE	KELSEYVILLE	95451	17510011	REFOA
1	17	AIRPOWER, INC	4745 HIGHLAND SPRINGS ROAD	LAKEPORT	95453	17750001	REFRW
1	17	USCG LORAN C STA	E. GRANGE ROAD	MIDDLETOWN	95461	17960001	REFRC
1	17	REDBUD COMMUNITY HOSP-MIDDLETOWN CLINIC	21268 CALISTOGA STREET	MIDDLETOWN	95461	17800001	NA
1	17	CLEARLAKE COMMUNITY SCHOOL	6945 OLD HIGHWAY 53	CLEARLAKE	95422	17880001	VCP

TOTAL NUMBER OF RECORDS FOR THIS REPORT = 23

