

# **Mendota Passing Lanes**

On Route 180, in Fresno County between  
Yuba Avenue and Lake Avenue  
06-FRE-180-PM 36.4/38.6  
0612000080

## **Initial Study with Proposed Mitigated Negative Declaration**



Prepared by the  
State of California Department of Transportation

**February 2014**



# General Information About This Document

## ***What's in this document?***

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Fresno County, California. The document describes the project, the existing environment that could be affected by the project, potential impacts from the project, and proposed avoidance, minimization, and/or mitigation measures.

## ***What should you do?***

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans district office at 1352 West Olive Avenue, Fresno, CA 93728, Fresno County Public Library at 2420 Mariposa Street, Fresno, CA 93721, and Kerman Branch Library at 15081 West Kearney Boulevard, Kerman, CA 93630. The document can also be accessed electronically at the following website:

<http://www.dot.ca.gov/dist6/environmental/envdocs/d6/>.

- We welcome your comments. If you have any concerns about the project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

Michelle Ray, Acting Senior Environmental Planner  
Sierra Pacific Environmental Analysis Branch  
California Department of Transportation  
855 M Street, Suite 200  
Fresno, CA 93721

Submit comments via email to: [michelle.ray@dot.ca.gov](mailto:michelle.ray@dot.ca.gov).

- Submit comments by the deadline: March 17, 2014 .

## ***What happens next?***

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and build all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Michelle Ray, Acting Senior Environmental Planner, Sierra Pacific Environmental Analysis Branch, 855 M Street, Suite 200, Fresno, CA 93721; (559) 445-5286, or use California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice), or 711.

On State Route 180 between Yuba and Lake Avenues, just west of the City of Kerman, in Fresno County

**INITIAL STUDY  
with Proposed Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code  
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA  
Department of Transportation  
and  
Fresno County Transportation Authority

02/06/14  
Date of Approval

  
Michelle Ray  
Acting Senior Environmental Planner  
California Department of Transportation  
NEPA Lead Agency

02/06/14  
Date of Approval

  
Michelle Ray  
Acting Senior Environmental Planner  
California Department of Transportation  
CEQA Lead Agency

The following persons may be contacted for additional information concerning this document:

Michelle Ray, Acting Senior Environmental  
Planner California Department of Transportation  
855 M Street, Suite 200  
Fresno, CA 93721  
(559) 445-5286



## CEQA Environmental Checklist

### **PROJECT DESCRIPTION AND BACKGROUND**

<b>Project title:</b>	Mendota Passing Lanes
<b>Lead Agency Name and Address:</b>	California Department of Transportation 855 M Street, Suite 200 Fresno, CA 93721
<b>Contact Person and Telephone Number:</b>	Michelle Ray, (559) 445-5286
<b>Project Location:</b>	On State Route 180 between Yuba and Lake Avenues, just west of the city of Kerman, in Fresno County
<b>Project Sponsor's Name and Address:</b>	Fresno County Transportation Authority 2220 Tulare Street Fresno, CA 93721
<b>General Plan Description:</b>	Unincorporated/Agriculture
<b>Zoning:</b>	AE 20: Exclusive Agriculture
<b>Description of Project:</b>	The project proposes to construct westbound and eastbound passing lanes on State Route 180 in Fresno County west of the city of Kerman from Yuba Avenue to Lake Avenue. The project extends 2.2 miles between post mile 36.4 and 38.6. The widening will occur on the north side (westbound), approximately 50 feet from the existing right-of-way line on State Route 180 and would require right-of-way acquisition from twelve parcels. Work consists of adding 12-foot passing lanes with a 14-foot soft median to accommodate a two way left-turn lane and 8-foot-wide outside shoulders in both directions. Drainage culverts (18-inch diameter pipes) will be installed under driveways along the length of the project on the north side. The depth of excavation required for installation of the drainage culverts is estimated at 5 feet (1.5 meters) and 3 feet (1-meter) for roadway construction. The drainage culverts and a drainage ditch (swale) will be constructed on the north side parallel to the roadway to contain storm water runoff. The project will require relocation of existing utilities. The Area of Potential Effects for this project includes all areas of proposed new right-of-way as well as areas identified for the storage of equipment during construction.
<b>Surrounding Land Uses and Setting:</b>	The project is surrounded by cultivated agricultural land and is lined with a few rural residential homes between Lake Avenue and Yuba Avenue.
<b>Other Public Agencies Whose Approval is Required:</b>	U.S. Fish and Wildlife Service

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project. Please see the CEQA checklist for additional information. Any boxes *not* checked represent issues that were considered as part of the scoping and environmental analysis for the project, but for which no adverse impacts were identified; therefore, no further discussion of those issues is in this document.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Paleontology	<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Service Systems
<input type="checkbox"/>	Mandatory Findings of Significance				

**DETERMINATION:**

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project.

<b>Signature:</b> 	<b>Date:</b> 02/06/14
<b>Printed Name:</b> Michelle Ray	<b>For:</b>

# Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

## **Project Description**

The California Department of Transportation (Caltrans) proposes to construct westbound and eastbound passing lanes on State Route 180 in Fresno County west of the city of Kerman from Yuba Avenue to Lake Avenue between post miles 36.4 and 38.6. The widening will occur on the north side (westbound), approximately 50 feet from the existing right-of-way line on State Route 180 and would require right-of-way acquisition from twelve parcels. Work consists of adding 12-foot passing lanes with a 14-foot soft median to accommodate a two way left-turn lane and 8-foot-wide outside shoulders in both directions. Drainage culverts (18-inch diameter pipes) will be installed under driveways along the length of the project on the north side. The project will require relocation of existing utilities.

## **Determination**

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision on the project is final. This Mitigated Negative Declaration is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons.

The proposed project would have no effect on: agriculture and forest resources, coastal zone, wild and scenic rivers, land use and planning, population and housing, public services, parks and recreational facilities, cultural resources, mineral resources, paleontology, air quality, noise, traffic and transportation, hydrology and water quality, geology and soils, and hazards and hazardous materials, and climate change.

In addition, the proposed project would have no significantly adverse effect on the San Joaquin kit fox and vernal pool fairy shrimp resources because the following mitigation measures would reduce potential effects to insignificance:

- Caltrans would compensate for impacts to 10.5 acres of San Joaquin kit fox habitat by preserving habitat at a 1.1:1 ratio: 12 acres of compensatory mitigation is proposed at Kreyenhagen Hills Conservation Bank in Fresno County, California.
- Caltrans proposes to compensate for the loss of vernal pool fairy shrimp habitat by purchasing credits at the Vieira-Sandy Mush Conservation Bank in Merced County. A total of 0.6 acre of quality vernal pool fairy shrimp habitat will be preserved using a mitigation ratio of 0.5:1.

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Michelle Ray  
Acting Senior Environmental Planner  
District 6  
California Department of Transportation

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Date



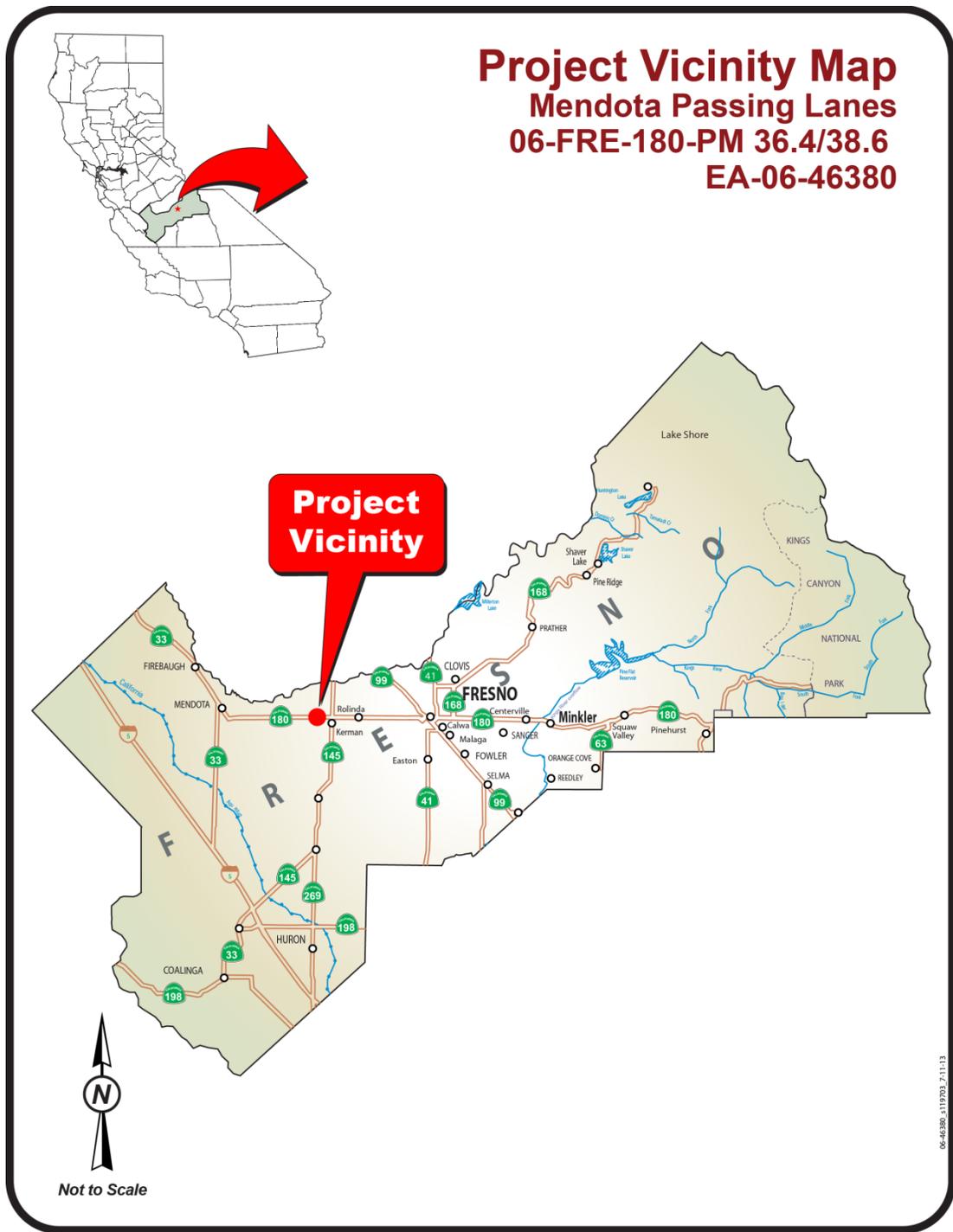


Figure 1 Project Vicinity Map



# Project Location Map

Mendota Passing Lanes  
06-FRE-180-PM 36.4/38.6  
EA-06-46380

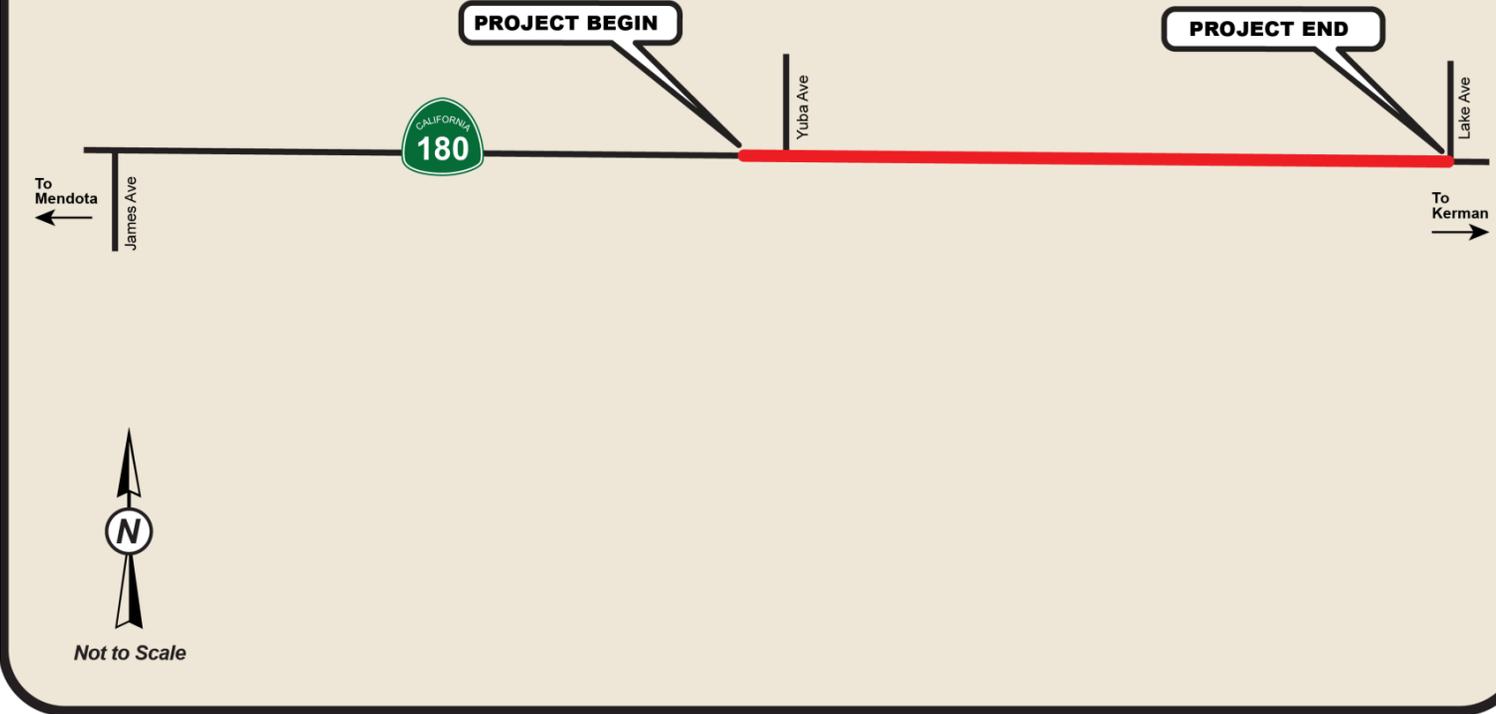


Figure 2 Project Location Map



# Section 1 Impacts Checklist

## CEQA Environmental Checklist

06-FRE-180

36.4/38.6

06-463800

Dist.-Co.-Rte.

P.M/P.M.

E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA—not NEPA—impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS:</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>II. AGRICULTURE AND FOREST RESOURCES:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>The project may convert up to 11.5 acres of Prime, Unique, and farmland of statewide and local importance. Please see Appendix A for the Farmland Conversion Impact Rating for Corridor Type Projects form.</i>				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Please see Appendix A for the Farmland Conversion Impact Rating for Corridor Type Projects form.*

**III. AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**IV. BIOLOGICAL RESOURCES:** Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>A detailed discussion of this topic is in the Additional Explanations for Questions in the Impacts Checklist section.</i>				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**V. CULTURAL RESOURCES:** Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? <i>Properties evaluated were determined to not be eligible for the National Register of Historic Places. Please see Appendix B for the State Historic Preservation Officer concurrence letter.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**VI. GEOLOGY AND SOILS:** Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**VII. GREENHOUSE GAS EMISSIONS:** Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

If applicable, an assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. Necessary information is located in Technical Studies Bound Separately.

**VIII. HAZARDS AND HAZARDOUS MATERIALS:** Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**IX. HYDROLOGY AND WATER QUALITY:** Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**X. LAND USE AND PLANNING:** Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XI. MINERAL RESOURCES:** Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XII. NOISE:** Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XIII. POPULATION AND HOUSING:** Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XIV. PUBLIC SERVICES:**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XV. RECREATION:**

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVI. TRANSPORTATION/TRAFFIC:** Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVII. UTILITIES AND SERVICE SYSTEMS:** Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



## **Additional Explanations for Questions in the Impacts Checklist**

### *IV. Biological Resources (checklist question a)*

#### *Threatened and Endangered Species*

##### ***Affected Environment***

The following discussion is based on the Natural Environment Study dated January 2014.

The biological study area consists of a 2-mile segment along State Route 180 from Yuba Avenue to Lake Avenue. The landscape of the biological study area consists of mostly agricultural land, with a small amount of yearly disked fallow fields. Rural residential homes are also present with limited landscaped yards. Within the right-of-way, there are shallow man-made ditches that run parallel to the highway on the north and south sides. The ditch contains weeds and escaped cultivated plants from the agricultural fields. Figures 3a through 3c show an aerial view of the project area. The agricultural landscape includes alfalfa fields, cotton fields, almond orchards, and vineyards.

A database search for special-status species was conducted within five miles of the project within the Biola, Gravelly Ford, Jameson, and Kerman U.S. Geological Survey 7.5-minute quadrangles. The database queries included the Sacramento Fish and Wildlife Service online official species list and the California Department of Fish and Wildlife Natural Diversity Database as shown in Appendix C.

Six threatened and/or endangered species—the San Joaquin kit fox (*Vulpes macrotis mutica*), Swainson’s hawk (*Buteo Swainsoni*), vernal pool fairy shrimp (*Branchinecta lynchi*), palmate-bracted bird’s beak (*Chloropyron palmatus*), blunt-nosed leopard lizard (*Gambelia sila*) and Fresno kangaroo rat (*Dipodomys nitratooides exilis*)—have potential to occur in the project area because of the suitable habitat that exists within the biological study area. After conducting environmental studies, it was determined that suitable habitat does not exist in the biological study area for the threatened and endangered blunt-nosed leopard lizard (*Gambelia sila*) and Fresno kangaroo rat (*Dipodomys nitratooides exilis*).

Caltrans will initiate formal consultation with U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act of 1973 for the federally listed San Joaquin kit fox and vernal pool fairy shrimp. A letter of concurrence on a “no effect” to the federally listed palmate-bracted bird’s beak, blunt nosed leopard lizard, and

Fresno kangaroo rat was requested from U.S. Fish and Wildlife Service. A biological opinion will be issued prior to construction of the project.



Figure 3a Biological Study Area Near Yuba Avenue



Figure 3b Biological Study Area Near Butte Avenue



Figure 3c Biological Study Area Near Lake Avenue



The following discussion provides a summary of the breeding season, habitat requirements, and recorded occurrences of these special-status species.

*San Joaquin Kit Fox (Vulpes macrotis mutica)*

The San Joaquin kit fox is a federal endangered and state threatened species. The kit fox is the smallest fox in North America, with an average body length of 20 inches and weight of about 5 pounds. This fox has large ears that are set close together, a slim body, and a long, black-tipped, bushy tail that is carried low and straight. Its coat color ranges from a buff-tan in the summer to a silver-grey in the winter with undersides varying from light buff to white.

The historic range of the San Joaquin kit fox included most of the San Joaquin Valley from San Joaquin County southward to southern Kern County. Currently, the kit fox occurs in the remaining native valley and foothill grasslands and chenopod (saltbush) scrub communities of the valley floor and surrounding foothills from southern Kern County north to Merced County. Kit foxes use dens for protection, temperature regulation, and shelter from the weather. Kit foxes may dig their own dens, use those constructed by other animals, or use artificial structures (e.g., culverts, abandoned pipelines, or banks in sumps). Kit foxes often change dens, and many dens may be used throughout the year. Females are capable of breeding two or more times per year. Their young are born in the burrow.

San Joaquin kit foxes are active year-round and inhabit grassland, scrubland, oak woodland, alkali sink scrubland, and vernal pool and alkali meadow communities, but are also known to occur in extensively modified habitats such as oil fields and wind turbine facilities. Kit foxes are present, but generally less abundant, in other highly modified landscapes such as agricultural row crops, irrigated pastures, orchards, and vineyards.

The closest known San Joaquin kit fox occurrence is from 1975, 1.43 miles south of the biological study area. However, suitable foraging habitat characteristics are present within the biological study area.

*Fresno Kangaroo Rat (Dipodomys nitratooides exilis)*

The Fresno kangaroo rat is a federal and state endangered species. It is one of the three subspecies of San Joaquin kangaroo rats. The Fresno kangaroo rat is distinguished from other kangaroo rats within its geographic range by the presence of four toes on the hind foot and averages around nine inches in length. They are nocturnal and active all year round. The Fresno kangaroo rat is endemic to the San

Joaquin Valley of California encompassing an area of grassland and chenopod scrub communities of the San Joaquin Valley floor, from the Merced River, Merced County, to the northern edge of the marshes surrounding Tulare Lake, Kings County and extending from the edge of the Valley floor near Livingston, Madera, Fresno, and Selma. The Fresno kangaroo rats occupy sands and saline sandy soils in chenopod scrub and annual grassland communities on the valley floor. Kangaroo rats shelter in ground burrows that are dug by them or their predecessors. Burrows usually are found in relatively light, crumbly soils in raised areas. Females are capable of breeding two or more times per year. Young are born in the burrow.

### *Swainson's Hawk (Buteo Swainsoni)*

The Swainson's hawk is a state threatened species. It is a summer migrant in the Central Valley that breeds in riparian and oak savannah habitat, and forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. The Swainson's hawk preys on mice, gophers, ground squirrels, rabbits, large arthropods, amphibians, reptiles, birds, and sometimes fish. It soars at various heights in search of prey, catching insects and bats in flight. It may also walk on the ground to catch invertebrates and other prey. The hawk roosts in large trees, but will roost on the ground if no trees are available.

Breeding occurs from late March to late August, with peak activity occurring in late May. Nests are composed of a platform of sticks, bark, and fresh leaves built in a tree or bush, or on a utility pole from 4–100 feet above ground. Nests occur in open riparian habitat, in scattered trees, or in small groves in sparsely vegetated flatlands. Nests are usually found near water in the Central Valley, but they can also be found in arid regions. Clutch size is 2–4 eggs, with an incubation period of 25–28 days.

A Swainson's hawk was observed in the biological study area during biological surveys.

### *Blunt-nosed Leopard Lizard (Gambelia sila)*

The blunt-nosed leopard lizard is a state and federal endangered species. It is endemic to California ranging from Santa Barbara to Merced County inhabiting semi-arid grasslands, alkali flats, and washes. It is a large lizard with a short blunt snout and a broad triangular shaped head. It has a rounded body and a long tail that is longer than its body.

Its color is grayish brown with large dark spots typically arranged in rows on each side of the back, and pale crossbands. During breeding season, males develop pink,

salmon, or run wash on the throat, chest and occasionally most of the body except the top and sides of the head. Females develop reddish orange spots and bars on the sides and underneath the tail when carrying eggs internally.

Blunt-nose leopard lizards are diurnal, emerging to bask in the morning. It uses mammal dens and burrows for cover and shelter. The number of available burrows determines the size of the lizard population in the area. Their diet consists of insects, arthropods, and other lizards.

#### *Vernal Pool Fairy Shrimp (Branchinecta lynchi)*

The vernal pool fairy shrimp is a federally threatened species and a member of the fairy shrimp family Branchinectidae. The vernal pool fairy shrimp is found in vernal pool habitat ranging from 3-foot-wide depressions in sandstone to small swale, earth slump, or basalt-flow depression basins with grassy-bottom or occasionally muddy-bottom grasslands. The vernal pool fairy shrimp has been observed from December to early May in the Central Valley in California.

Fairy shrimp are translucent, slender crustaceans, generally less than 1 inch long. They swim on their backs by slowly moving their 11 pairs of swimming legs. The fairy shrimp eat algae and plankton by scraping and straining them from surfaces within the vernal pool. Vernal pool fairy shrimp are short-lived and fast reproducers, completing their life cycle in 18 days under optimal conditions to 41 days under less favorable conditions. During the dry season, vernal pool fairy shrimp embryos are contained in a protective impenetrable shell called a cyst. Cysts can remain viable in the soil for 15 years and often longer. Following winter/spring rains and the inundation of vernal pools, embryos hatch from the cysts and enter the water column to reproduce and complete their life cycle.

A total of seven ephemeral pools were identified, mapped and sampled for vernal pool branchiopods within the biological study area. Versatile fairy shrimp (*Branchinecta lindahli*), a non-protected species, was identified within 4 of the ephemeral pools. The closest known occurrence of vernal pool fairy shrimp is from 2001, 22 miles east of the biological study area.

#### *Palmate-Bracted Bird's Beak (Chloropyron palmatus)*

The palmate-bracted bird's beak is a federally endangered and state endangered species. It is an annual herb in the broomrape family (Orobanchaceae). It is native to California and it grows on seasonally-flooded, saline-alkali soils in lowland plains and basins at elevations between 16 and 508. The plants are 4–12 inches tall and

highly branched. The stems and leaves are grayish green and sometimes are covered with salt crystals excreted by glandular hairs. It blooms between May and October and has small pale whitish flowers up to 1 inch long arranged in dense clusters. The species is threatened by agriculture, urbanization, vehicles, altered hydrology, grazing and development.

The plant was not found during surveys of the biological study area. A reference population was located during a July 2013 botanical survey within the Alkali Sink Ecological Reserve located approximately 4 miles west of the project.

### ***Environmental Consequences***

#### ***San Joaquin kit fox***

No impacts to San Joaquin kit foxes are anticipated to occur as a result of the proposed project. However, prior to construction, there is a potential that a kit fox could build a den within the biological study area. If an active den is detected, the California Department of Fish and Wildlife will be consulted and an Environmentally Sensitive Area around the den site may be established to prevent disturbances. Work may be temporarily suspended if denning kit foxes are found to occur within the biological study area. Potential foraging habitat (i.e., agricultural land) exists within the biological study area, and the project impacts include new right-of-way to be acquired for the project, totaling 10.5 acres, excluding rural residential properties.

#### ***Fresno Kangaroo Rat***

The proposed project is within the historical range of the species, but Fresno kangaroo rat is not expected to occur in the area. The biological study area consists of agricultural lands and disked fields, which are not suitable for Fresno kangaroo rat habitat. No impacts to the giant kangaroo rat are expected to occur with implementation of avoidance and minimization measures.

#### ***Swainson's Hawk***

A Swainson's hawk was observed in the biological study area during biological studies. One potential raptor nest was observed, but no activity was observed. There are several large trees next to some residences that could serve as potential raptor nest sites. If construction activities occur during the Swainson's hawk breeding season and an occupied nest is adjacent to the project impact area, noise may directly affect breeding activities, resulting in the potential loss of a nest. However, with the implementation of avoidance and minimization measures, adverse effects to Swainson's hawks are not anticipated to occur as a result of the proposed project.

### *Blunt-nosed Leopard Lizard*

No project impacts are anticipated to the blunt-nosed leopard lizard because their habitat does not occur within the biological study area.

### *Vernal Pool Fairy Shrimp*

Although the vernal pool fairy shrimp was not observed during wet and dry season surveys, potential habitat does exist within the project impact area. Due to the limited rainfall in 2012-2013, the drainage ditches and depressions adjacent to State Route 180 may not have inundated sufficiently to allow for vernal pool fairy shrimp reproduction. As a result, drainage ditches and depressions north of the highway were delineated and vernal pool fairy shrimp are assumed to occur in these areas, totaling 1.2 acres.

### *Palmate-Bracted Bird's Beak*

Although the species was not observed during botanical surveys, suitable chenopod scrub and grassland habitat in alkaline soils are present in the biological study area that could support the species.

## ***Avoidance, Minimization, and/or Mitigation Measures***

### *San Joaquin kit fox*

A preconstruction survey for the San Joaquin kit fox will be conducted within the biological study area. If an active kit fox den is detected, avoidance and minimization efforts will be coordinated with the California Department of Fish and Wildlife and may include a no work buffer zone around an active den, and/or a qualified biologist will monitor an active den during construction. Work may be temporarily suspended if denning kit foxes are found to occur within the biological study area.

Caltrans would compensate for impacts to 10.5 acres of San Joaquin kit fox habitat by preserving habitat at a 1.1:1 ratio: 12 acres of compensatory mitigation is proposed at Kreyenhagen Hills Conservation Bank in Fresno County, California.

### *Fresno Kangaroo Rat*

No impacts to the giant kangaroo rat are expected to occur because the project area does not contain suitable Fresno kangaroo rat habitat. However, preconstruction surveys would be conducted to avoid potential impacts to this species. If occupied suitable habitat is observed during surveys, avoidance and minimization efforts will be coordinated with the California Department of Fish and Wildlife and may include a no work buffer zone around active burrows.

### *Swainson's Hawk*

A preconstruction survey for Swainson's hawks will be conducted within a 0.5-mile radius around the biological study area. The survey will be completed according to the California Department of Fish and Wildlife Swainson's Hawk Nesting Protocol. If an active Swainson's hawk nest is detected, avoidance and minimization efforts will be coordinated with the California Department of Fish and Wildlife and may include a no-work buffer zone around an active nest, and/or a qualified biologist will need to monitor an active nest during construction activities to ensure that no interference with the hawk's breeding activities will occur.

### *Blunt-nosed Leopard Lizard*

The project area does not contain adequate blunt-nosed leopard lizard habitat, thus no avoidance or minimization efforts are necessary.

### *Vernal Pool Fairy Shrimp*

Caltrans proposes to compensate for the loss of potential vernal pool fairy shrimp habitat by purchasing credits at the Vieira-Sandy Mush Conservation Bank in Merced County. A total of 0.6 acre of quality vernal pool fairy shrimp habitat will be preserved using a mitigation ratio of 0.5:1.

### *Palmate-Bracted Bird's Beak*

Preconstruction botanical surveys will be conducted to get a more accurate inventory of potentially occurring sensitive plants.

If a rare plant is found during the preconstruction botanical survey, Caltrans will coordinate with the California Department of Fish and Wildlife. The topsoil will be collected and salvaged from areas where the plant would be disturbed under the direction of a Caltrans biologist. Salvaged topsoil would be stored at an appropriate site within the project area. Topsoil would be replaced in areas where there was temporary disturbance to the plant.

# Appendix A Farmland Conversion Impact Rating for Corridor Type Projects

U.S. DEPARTMENT OF AGRICULTURE NRCS-CPA-106  
 Natural Resources Conservation Service (Rev. 1-91)

## FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request 5/6/13	Sheet 1 of 1		
1. Name of Project <b>Mendota Passing Lanes</b>		5. Federal Agency Involved <b>California Department of Transportation</b>			
2. Type of Project <b>Transportation</b>		6. County and State <b>Fresno, CA</b>			
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS 8/2/13	2. Person Completing Form <b>Jose Bermudez</b>		
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form).		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated <b>1,153,812</b>	Average Farm Size <b>285</b>	
5. Major Crop(s) <b>Grapes-Tomatoes-Almonds</b>	6. Farmable Land in Government Jurisdiction Acres: <b>1,250,984</b> % <b>32.7</b>		7. Amount of Farmland As Defined in FPPA Acres: <b>597,055</b> % <b>15.6</b>		
8. Name Of Land Evaluation System Used <b>California-Storie System</b>	9. Name of Local Site Assessment System <b>None</b>		10. Date Land Evaluation Returned by NRCS <b>8/5/13</b>		
<b>PART III (To be completed by Federal Agency)</b>		<b>Alternative Corridor For Segment</b>			
		Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		12.13	12.16		
B. Total Acres To Be Converted Indirectly, Or To Receive Services					
C. Total Acres In Corridor		12.13	12.16		
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>					
A. Total Acres Prime And Unique Farmland		0	3.9		
B. Total Acres Statewide And Local Important Farmland		7.4	7.56		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>		22	47		
<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>		Maximum Points			
1. Area in Nonurban Use		15	15	15	
2. Perimeter in Nonurban Use		10	10	10	
3. Percent Of Corridor Being Farmed		20	14	18	
4. Protection Provided By State And Local Government		20	20	20	
5. Size of Present Farm Unit Compared To Average		10	3	4	
6. Creation Of Nonfarmable Farmland		25	0	0	
7. Availability Of Farm Support Services		5	1	0	
8. On-Farm Investments		20	8	6	
9. Effects Of Conversion On Farm Support Services		25	0	0	
10. Compatibility With Existing Agricultural Use		10	0	0	
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>		160	71	73	0 0
<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)		100	22	47	0 0
Total Corridor Assessment (From Part VI above or a local site assessment)		160	71	73	0 0
<b>TOTAL POINTS (Total of above 2 lines)</b>		260	93	120	0 0
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>		
5. Reason For Selection:					

Signature of Person Completing this Part: \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: Complete a form for each segment with more than one Alternate Corridor



# Appendix B SHPO Concurrence Letter

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STATE OF CALIFORNIA – THE NATURAL RESOURCES AGENCY

EDMUND G. BROWN, JR., Governor

**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

1725 23<sup>rd</sup> Street, Suite 100  
SACRAMENTO, CA 95816-7100  
(916) 445-7000 Fax: (916) 445-7053  
calshpo@parks.ca.gov  
www.ohp.parks.ca.gov



August 26, 2013

Reply To: FHWA\_2013\_0802\_001

Jeanne Day Binning, Ph.D.  
Branch Chief, Central California Cultural Resources Branch  
Caltrans District 6  
855 M Street, Suite 200  
Fresno, CA 93721

Re: Determinations of Eligibility for the Proposed 180 Passing Lanes Project, Fresno County, CA

Dear Dr. Binning:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

Caltrans has determined that the following properties are not eligible for the National Register of Historic Places (NRHP):

- The Castellanos Property, Cabin
- 20173 West Whitesbridge Avenue
- 19844 West Whitesbridge Avenue

Based on review of the submitted documentation, I concur with the foregoing determinations.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 or email at [natalie.lindquist@parks.ca.gov](mailto:natalie.lindquist@parks.ca.gov).

Sincerely,

A handwritten signature in black ink that reads "Carol Roland-Nawi, Ph.D.".

Carol Roland-Nawi, Ph.D.  
State Historic Preservation Officer



# Appendix C Database Queries

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Sacramento Fish & Wildlife Office Species List

Page 1 of 5

**U.S. Fish & Wildlife Service**  
**Sacramento Fish & Wildlife Office**  
**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: 131105102821  
Database Last Updated: September 18, 2011

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## Quad Lists

### Listed Species

#### Invertebrates

- Branchinecta lynchi*  
vernal pool fairy shrimp (T)
- Desmocerus californicus dimorphus*  
valley elderberry longhorn beetle (T)

#### Fish

- Hypomesus transpacificus*  
delta smelt (T)
- Oncorhynchus mykiss*  
Central Valley steelhead (T) (NMFS)

#### Amphibians

- Ambystoma californiense*  
California tiger salamander, central population (T)
- Rana draytonii*  
California red-legged frog (T)

#### Reptiles

- Gambelia (=Crotaphytus) sila*  
blunt-nosed leopard lizard (E)
- Thamnophis gigas*  
giant garter snake (T)

#### Mammals

- Dipodomys nitratooides exilis*  
Fresno kangaroo rat (E)
- Vulpes macrotis mutica*  
San Joaquin kit fox (E)

#### Plants

- Cordylanthus palmatus*

[http://www.fws.gov/sacramento/ES\\_Species/Lists/es\\_species\\_lists.cfm](http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists.cfm)

11/5/2013

palmate-bracted bird's-beak (E)

#### Quads Containing Listed, Proposed or Candidate Species:

KERMAN (359A)

JAMESAN (359B)

GRAVELLY FORD (380C)

BIOLA (380D)

### County Lists

No county species lists requested.

#### 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

[http://www.fws.gov/sacramento/ES\\_Species/Lists/es\\_species\\_lists.cfm](http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists.cfm)

11/5/2013



Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	None	G2G3	S2	SSC
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S2	SSC
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
<i>Atriplex coronata</i> var. <i>vallicola</i> Lost Hills crownscale	PDCHE04250	None	None	G4T2	S2	1B.2
<i>Atriplex depressa</i> brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
<i>Atriplex minuscula</i> lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
<i>Atriplex persistens</i> vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
<i>Atriplex subtilis</i> subtle orache	PDCHE042T0	None	None	G2	S2.2	1B.2
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S2	
<i>Chloropyron palmatum</i> palmate-bracted bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
<i>Delphinium recurvatum</i> recurved larkspur	PDRAN0B1J0	None	None	G3	S3	1B.2
<i>Dipodomys nitratoides exilis</i> Fresno kangaroo rat	AMAFD03151	Endangered	Endangered	G3T1	S1	
<i>Eriastrum hooveri</i> Hoover's eriastrum	PDPLM03070	Delisted	None	G3	S3.2	4.2
<i>Gambelia sila</i> blunt-nosed leopard lizard	ARACF07010	Endangered	Endangered	G1	S1	FP
<i>Layia munzii</i> Munz's tidy-tips	PDAST5N0B0	None	None	G1	S1	1B.2
<i>Masticophis flagellum ruddocki</i> San Joaquin whipsnake	ARADB21021	None	None	G5T2T3	S2?	SSC
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<i>Valley Sacaton Grassland</i> Valley Sacaton Grassland	CTT42120CA	None	None	G1	S1.1	
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2T3	S2S3	

Record Count: 21

**CNPS** *California Native Plant Society* **Rare and Endangered Plant Inventory**

**Plant List**

13 matches found. *Click on scientific name for details*

**Search Criteria**  
 Found in 9 Quads around 36120F2

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<a href="#">Atriplex cordulata var. cordulata</a>	heartscale	Chenopodiaceae	annual herb	1B.2	S2.2?	G3T2
<a href="#">Atriplex coronata var. vallicola</a>	Lost Hills crownscale	Chenopodiaceae	annual herb	1B.2	S2	G4T2
<a href="#">Atriplex depressa</a>	brittlescale	Chenopodiaceae	annual herb	1B.2	S2.2	G2Q
<a href="#">Atriplex minuscula</a>	lesser saltscale	Chenopodiaceae	annual herb	1B.1	S2	G2
<a href="#">Atriplex persistens</a>	vernal pool smallscale	Chenopodiaceae	annual herb	1B.2	S2	G2
<a href="#">Atriplex subtilis</a>	subtle orache	Chenopodiaceae	annual herb	1B.2	S2.2	G2
<a href="#">Chloropyron palmatum</a>	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	S1	G1
<a href="#">Delphinium recurvatum</a>	recurved larkspur	Ranunculaceae	perennial herb	1B.2	S3	G3
<a href="#">Eriastrum hooveri</a>	Hoover's eriastrum	Polemoniaceae	annual herb	4.2	S3.2	G3
<a href="#">Goodmania luteola</a>	golden goodmania	Polygonaceae	annual herb	4.2	S3.2	G3
<a href="#">Lavia munzii</a>	Munz's tidy-tips	Asteraceae	annual herb	1B.2	S1	G1
<a href="#">Sagittaria sanfordii</a>	Sanford's arrowhead	Allismataceae	perennial rhizomatous herb	1B.2	S3	G3
<a href="#">Trichostema ovatum</a>	San Joaquin bluecurls	Lamiaceae	annual herb	4.2	S3.2	G3

**Suggested Citation**

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