

November 2015



# Fresno Slough Scour Mitigation

Initial Study with Proposed Mitigated Negative Declaration



Construct pile supported approach slabs on State Route 180 at the Fresno Slough Bridge



06-FRE-180-PM 26.9  
06-1300-0198  
EA 06-0Q510



## **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 mitigation measures.

### ***What you should 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 in Fresno, California and the Mendota branch of the Fresno County Public Library at 1246 Belmont Avenue in Mendota, California. 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, 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: January 14, 2016.

### ***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, Sierra Pacific Environmental Analysis Branch, 855 M Street, Suite 200, Fresno, CA 93721; (559) 445-5286 or use the California Relay Service 1(800) 735-2929 (TTY), 1(800) 735-2929 (Voice) or 711.

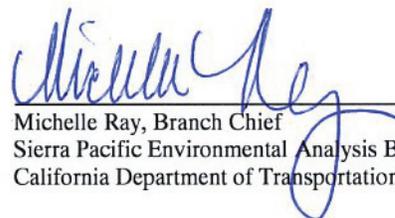
Construct pile supported approach slabs on State Route 180 at the Fresno Slough Bridge

**INITIAL STUDY  
with Proposed Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA  
Department of Transportation

11/24/15  
Date of Approval

  
Michelle Ray, Branch Chief  
Sierra Pacific Environmental Analysis Branch  
California Department of Transportation



# Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

## ***Project Description***

The California Department of Transportation (Caltrans) proposes to construct pile supported approach slabs on State Route 180 at the Fresno Slough bridge at post mile 26.9 in Fresno County.

## ***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: aesthetics, agriculture and forest resources, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, recreation, transportation and traffic, and utilities and service systems.

In addition, the proposed project would have no significant effect on: hydrology and water quality, and public services.

In addition, the proposed project would have no significantly adverse effect on biological resources because the following avoidance, minimization, and mitigation measures would reduce potential effects to insignificance:

- Pre-construction surveys would be conducted for all species of concern potentially present in the project area.
- Reduced speeds through the construction area would lessen the probability that any species would be struck by vehicles and construction equipment.
- A qualified biologist would monitor construction activities. Construction would occur outside of breeding or nesting season.
- Environmentally sensitive areas would be established as needed for all species of concern potentially present in the project area.

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Michelle Ray, Branch Chief  
Sierra Pacific Environmental Analysis Branch  
California Department of Transportation

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Date



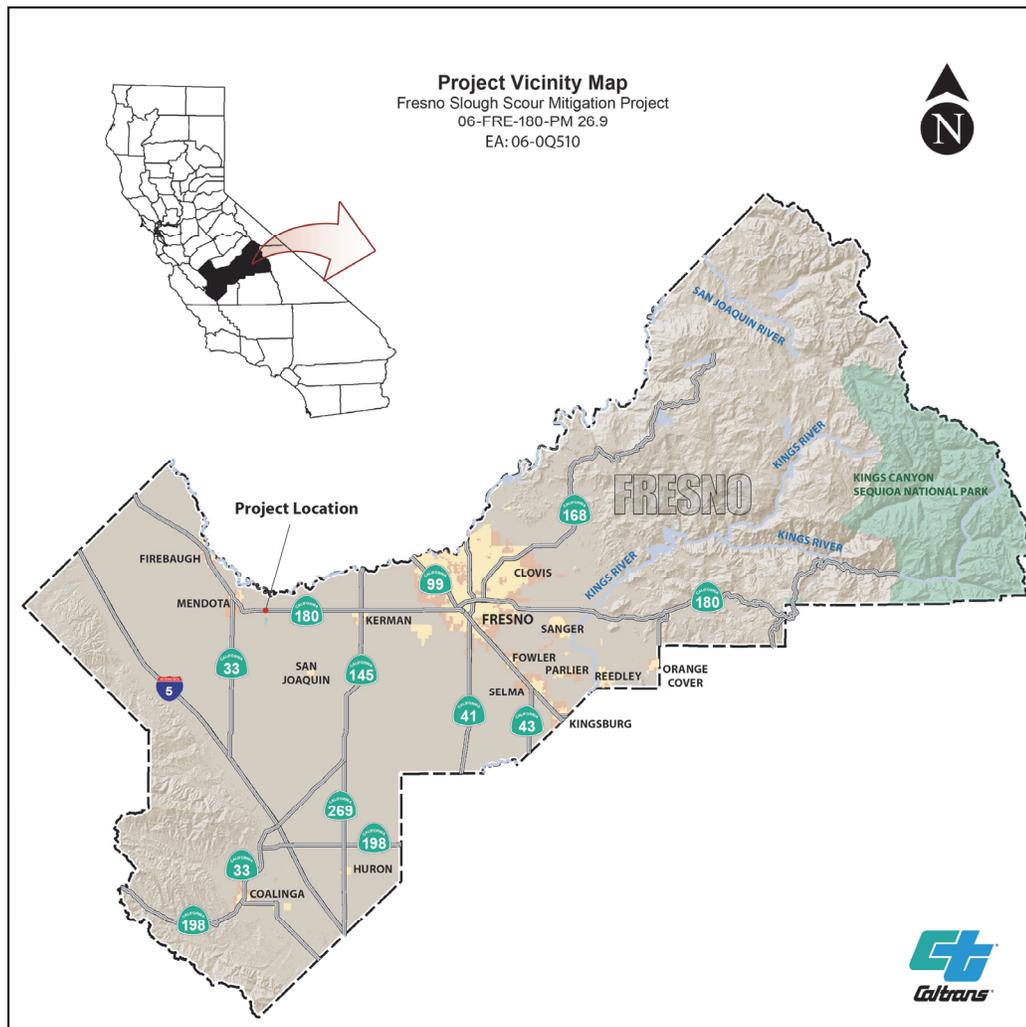
# Project Description and Background

## Project Title

Fresno Slough Scour Mitigation project.

## Project Location

The project is located on State Route 180 just east of the City of Mendota at the Fresno Slough in rural Fresno County.



Project Vicinity Map



## Project Location Map

### ***Project History***

The 231-foot long Fresno Slough Bridge on State Route 180 has experienced substantial scour at the bridge abutments and pavement failures. It was built in 1952 and was widened in 2009 to approximately 44 feet to accommodate one lane in each direction and 8 feet shoulders. The bridge has continuous eight spans on six-column bents and open end pile abutments. An emergency project was completed in 2014 to temporarily address pavement failure at the west end of the bridge. This segment of Route 180 is a two lane conventional highway mostly on grade connecting various towns to Interstate Route 5 and State Route 99.

### **Description of Project**

The project proposes to repair soil erosion at the Fresno Slough Bridge on Route 180 in Fresno County east of The City of Mendota at post mile 26.9. The erosion at the open end pile abutments causes the pavement to fail at the bridge approaches.

The proposed project would construct pile supported approach slabs and a curtain wall approximately 10 feet from the ends of the bridge. In addition, the bridge railing terminal system would be replaced to meet current standards.

The project would mitigate scouring and pavement structural failures by replacing the existing bridge approach slabs with pile-supported approach slabs at both ends of the Fresno Slough bridge at post mile 26.9. One-way reversible traffic control would be required during construction, using a 24-hour temporary traffic signal. No new right of way would be acquired.

No work at night is currently planned and construction is expected to take 135 working days to complete. Construction is anticipated to begin in March 2017. No additional right-of-way is anticipated.

### **Surrounding Land Uses and Setting**

The project is located in a rural area east of the City of Mendota. A state wildlife management area is located south of the highway on both sides of the slough. A commercial property, Jack's Resort, is located just northeast of the slough, and primarily open land lies to the northwest.

### **Permits, Licenses, Agreements, and Certificates**

<b>Agency</b>	<b>Permit/Approval</b>	<b>Status</b>
U.S. Fish and Wildlife Service	Section 7 informal consultation will be initiated. A Letter of Concurrence is anticipated	Will be obtained prior to the approval of the final environmental document
California Department of Fish and Wildlife	Section 1600 Streambed Alternation Agreement	Will be obtained prior to start of construction

# CEQA Environmental Checklist

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 indicated 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> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts to agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project, Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
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 type="checkbox"/>	<input checked="" type="checkbox"/>
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 type="checkbox"/>	<input checked="" type="checkbox"/>

**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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>

Please see the discussion in the *Additional Explanations for Questions in the Impacts Checklist* section beginning on Page 17.

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

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<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"/>
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"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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**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?

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.

**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?
- 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?
- 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?
- 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?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 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"/>
<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"/>
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<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
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**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 checked="" type="checkbox"/> | <input 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"/> |
| 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"/> |

(Question IX-f). While no long-term water quality impacts are expected from the project, there could be short-term impacts during construction. Any short-term impacts would be addressed through the implementation of best management practices by the construction contractor (Noise, Air and Water Quality Studies memorandum, November 2013).

**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"/> |

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
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:**

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

(Question XIV-a). During construction, one lane of the bridge would be closed at any given time for one-way traffic control. Therefore, slight delays in response times for fire, police and emergency medical service vehicles could occur. A Traffic Management Plan would be put in place and there would be signal-controlled one-way traffic to allow alternating traffic in both directions (project description).

**XV. RECREATION:**

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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
<b>XVII. UTILITIES AND SERVICE SYSTEMS:</b> 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"/>
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"/>
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Potentially Significant Impact      Less Than Significant with Mitigation      Less Than Significant Impact      No Impact

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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

### *IV. Biological Resources (checklist questions a and b)*

#### *Species of Special Concern*

##### **Affected Environment**

The Fresno Slough bridge is located on State Route 180 in a rural area just east of the City of Mendota in western Fresno County. The slough is bordered in the project area by open land, a wildlife management area and a privately owned resort. No special status plant species or natural communities of concern were identified within the biological study area.

##### **Western Pond Turtle**

The western pond turtle (*Actinemys marmorata* or *Emys marmorata*) is a state species of special concern. The western pond turtle, or Pacific pond turtle, is a small to medium-sized turtle growing to approximately 8 inches in carapace (shell) length. It is limited to the west coast of the United States of America and Mexico, ranging from western Washington State to northern Baja California.

Western pond turtles occur in both permanent and intermittent waters, including marshes, streams, rivers, ponds, and lakes. They favor habitats with large numbers of emergent logs or boulders, so that they may bask in the sun. However they also bask on top of aquatic vegetation.

##### **Two-Striped Garter Snake**

The two-striped garter snake (*Thamnophis hammondi*) is a state species of special concern. It is a medium-sized snake with a head barely wider than the neck and keeled dorsal scales. It's most often in the size range of 18 to 30 inches long. This snake is primarily aquatic, diurnal and can be active from January to November depending on the weather. It is generally found often in rocky areas, oak woodland, chaparral, brushlands, coniferous forest, ponds, cattle tanks and other water sources. The two-striped garter snake is known to eat tadpoles, newt larvae, small frogs and toads, fish, and occasionally worms and fish eggs. Probably forages for food in and under water.

##### **Western Mastiff Bat**

The western mastiff bat (*Eumops perotis*) is a state species of special concern, and is also known as the western bonneted bat, the greater mastiff bat, or the greater bonneted bat. It is a member of the free-tailed bat family, Molossidae. It is found in the Western United States, Mexico and South America, and is the largest bat native to North America. The subspecies *Eumops perotis californicus* is a species of concern as identified by the U.S. Fish and Wildlife Service. The range of this subspecies is principally southwest desert regions of the United States, along the border with Mexico; however, the range extends as far north on the Pacific coast to Alameda County, California. The western mastiff bat has a body length of 5.5 to 7.5 inches and a wingspan of over 22 inches.

The western mastiff bat requires at least 9.8 feet of open space under its roosting spot for takeoff. Its echolocationary squeaks, which are inaudible to humans in most cases, can be heard from up to 980 feet away. During the day they form colonies of less than 100. Unlike most North American bats, they do not undergo either migration or prolonged hibernation, but are periodically active all winter.

### **Western Red Bat**

The western red bat (*Lasiurus blossevillii*) is a state species of special concern, and is also known as the desert red bat. This particular bat is from the Vespertilionidae family, which is the largest bat family. The western red bat has been found around North America, ranging from southern Canada, through the Western United States, down to Central America and to the northern part of South America. These bats are migratory, similar to birds. They migrate to the southern parts of the Americas when it gets cold, and heads north when the weather warms in the northern parts.

They eat moths, flies, true bugs, beetles, and cicadas. The western red bat is a nocturnal animal (active at night) and use echolocation to hunt. While they hunt, they have to be aware of predators, which include owls, blue jays, and opossums.

They roost primarily in trees, and less often in shrubs. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas. Preferred roost sites are protected from above, open below, and located above dark ground-cover, and may be from 2-40 feet above ground level. Females and young may roost in higher sites than males however.

### **Tricolored Blackbird**

The tricolored blackbird (*Agelaius tricolor*) is a state species of special concern and is protected by the Migratory Bird Treaty Act. It is found in the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California in Mexico. This bird is highly social and forms the largest colonies of any North American land bird, with a single breeding colony often consisting of tens of thousands of birds.

### **Mountain Plover**

The mountain plover (*Charadrius montanus*) is a state species of special concern and is protected by the Migratory Bird Treaty Act. It is a medium sized ground bird in the plover family. It is misnamed as it lives on level land. It prefers dry habitat with short grass (usually due to grazing) and bare ground.

## **Environmental Consequences**

### **Western Pond Turtle**

No western pond turtles were observed onsite during surveys performed by Caltrans biologists in 2014. The project site contains potentially suitable habitat for this species such as basking rocks and boulders near the water's edge. The most recent occurrence is from 2001, within 1 mile of the project location. The project site contains an appropriate prey base for the western pond turtle. Although no western

pond turtles were observed during recent surveys, there is a potential for this species to occur.

### **Two-Striped Garter Snake**

Protocol level surveys were not conducted, however a habitat assessment was completed in 2014 and 2015 to assess the potential habitat for this species, onsite foraging, and refugia habitat for giant garter snake presence in the Biological Study Area and Project Impact Area. No two-striped garter snakes were observed onsite during the 2014 and 2015 surveys. The surrounding dirt patches along the side of the road as well as the bank of the slough may provide suitable habitat for this species. The closest occurrence is within 1-mile of the bridge, dated 1990. Two-striped garter snakes have potential to occur in these areas. Western Mastiff Bat

No signs of western mastiff bat were observed onsite during surveys completed in 2014. No western mastiff bats were observed onsite during the 2014 surveys. The closest occurrence is less than 1-mile from the bridge, dated 1999. The project site contains potentially suitable habitat for this species. Western mastiff bat has the potential to be present in the area. No potential roosting habitat is anticipated to be impacted by construction of the proposed project with use of avoidance and minimization measures.

### **Western Red Bat**

No western red bats were observed onsite during surveys completed in 2014. The closest occurrence is less than a mile from the bridge, dated 1999. The trees near the project site contains potentially suitable roosting habitat for this species. Western red bat has potential to be present in the area.

No western red bats have been observed onsite during any recent surveys. No trees are proposed to be removed. With implementation of the avoidance and minimization measures, no impacts to individual western red bats are anticipated.

### **Tricolored Blackbird**

No tricolored blackbirds were observed onsite during surveys performed by Caltrans biologists in 2014. The most recent occurrence is from 1992 approximately 1 mile south of the bridge. The project site contains suitable habitat such as open water and dense vegetation along the nearby banks of the slough. Tricolored blackbirds can be assumed to be present in the area.

The project site contains suitable nesting habitat for the tricolored blackbird. Although no tricolored blackbird were observed during recent surveys, avoidance and minimization measure would be in place to minimize any potential impacts to the species.

No foraging or nesting habitat for the tricolored blackbird will be impacted by the proposed project. However there is still potential for construction to indirectly impact tricolor black birds specifically if construction occurs during the nesting season.

### **Mountain Plover**

No mountain plover were observed onsite during surveys performed by Caltrans biologists in 2014. The closest occurrence is approximately 12 miles south from the project, dated 2002. The surrounding flatland in the southeast corner of the Biological Study Area could provide nesting habitat. The nearby grassland provides suitable foraging habitat. The project site contains potentially suitable habitat for this species. Mountain plover has potential to be present in the area.

The project site contains suitable foraging and nesting habitat and an appropriate prey base for the mountain plover. Although no mountain plover were observed during recent surveys, avoidance and minimization measure would be in place to minimize any potential impacts to the species.

No foraging or nesting habitat for the mountain plover will be impacted by the proposed project. However there is still potential for construction to indirectly impact mountain plover specifically if construction occurs during the nesting season.

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

No compensatory mitigation would be required. Worker environmental awareness training prior to start of construction is required in addition to the following measures:

#### **Western Pond Turtle**

- A biological monitor would be onsite during initial ground-disturbing activities.
- Requiring low speed limits within the construction site will lessen the probability that the species could be run over by vehicles and equipment.

#### **Two-Striped Garter Snake**

- Pre-construction surveys within the project area to determine any presence or sign of the species would be conducted prior to the start of construction.
- Construction would occur during the active season of May 1<sup>st</sup> through October 1<sup>st</sup>.
- A biological monitor would be onsite during initial ground-disturbing activities.
- Requiring low speed limits within the construction site will lessen the probability that the species could be run over by vehicles and equipment.

#### **Western Mastiff Bat**

- Pre-construction surveys would be conducted to avoid potential impacts to this species.
- A qualified biologist would be present at the construction site during initial ground-disturbing activities.
- If bats are found, exclusionary measures would be required prior to construction.

- Any lighting used would be aimed directly at the work area and not disturb the surrounding area with additional light pollution.

#### **Western Red Bat**

- Pre-construction surveys would be conducted to avoid potential impacts to this species.
- A qualified biologist would be present at the construction site during initial ground-disturbing activities.
- Any lighting used would be aimed directly at the work area and not disturb the surrounding area with additional light pollution.

#### **Tricolored Blackbird**

- Protocol nesting surveys would be conducted during the season prior to the start of construction to determine if any tricolored blackbirds are nesting in proximity to the project area.
- If nesting tricolored blackbirds are observed onsite, then the nest site would be designated an Environmentally Sensitive Area. Caltrans would coordinate with California Department of Fish and Wildlife to determine an appropriate no-work buffer around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area would be done outside of the nesting season (the breeding season can vary widely based on weather conditions; however, standard breeding season dates are February 1<sup>st</sup> to September 15<sup>th</sup>). No tree removal is proposed at this time.

#### **Mountain Plover**

- Protocol nesting surveys would be conducted during the season prior to the start of construction to determine if any mountain plovers are nesting in proximity to the project area.
- If nesting mountain plovers are observed onsite, then the nest site would be designated an Environmentally Sensitive Area, with a 100-foot radius no-work area around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area would be done outside of the nesting season (at this time no tree removal is proposed).

## *Threatened and Endangered Species*

### **Affected Environment**

The Fresno Slough bridge is located on State Route 180 in a rural area just east of the City of Mendota in western Fresno County. The slough is bordered in the project area by open land, a wildlife management area and a privately owned resort. No special status plant species, natural communities of concern, or critical habitat(s) were identified within the biological study area.

### **Giant Garter Snake**

The giant garter snake (*Thamnophis gigas*) is the largest species of garter snake, and is a federally threatened species. The giant garter snake is endemic to the Central Valley wetlands of California and is largely aquatic. It is active when water temperatures are at 68° F (20°C) or more, and is dormant underground when aquatic habitat is below this temperature. Fish and frogs form a large portion of the diet of the giant garter snake.

### **Blunt-nosed Leopard Lizard**

The blunt-nosed leopard lizard (*Gambelia silus*) is federal and state listed as endangered. It is a relatively large lizard; it has a long regenerative tail, long and powerful hind legs, and a short blunt snout. Adult males are slightly larger than females, ranging in size from 3.4 to 4.7 inches in length while the females are 3.4 to 4.4 inches long. Breeding occurs from May to June. The lizard is found in semiarid grasslands, alkali flats, and washes. They prefer flat areas with open space for running and avoid densely vegetated areas.

### **Swainson's Hawk**

The Swainson's hawk (*Buteo swainsoni*) is state listed as threatened and is protected by the Migratory Bird Treaty Act. This hawk is a summer migrant to the Central Valley and typically winters in South America. The Swainson's hawk is a slender bird with long pointed wings and dark flight feathers. It occurs in a range of color morphs, with a clean whitish underside and neat dark breast. These hawks forage in grasslands, suitable grain or alfalfa fields, or livestock pastures. They eat mice, gophers, ground squirrels, rabbits, large arthropods, amphibians, reptiles, birds and sometimes fish. These hawks roost in trees, but will roost on the ground if no trees are available. The Swainson's hawk breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannahs in the Central Valley. Breeding occurs from late March to late August, with peak activity occurring in late May or July. Clutch size is two to four eggs, with an incubation period of 25 to 28 days.

### **San Joaquin Kit Fox**

The San Joaquin kit fox (*Vulpes macrotis mutica*) is federally listed as endangered and state listed as threatened. The San Joaquin kit fox is the smallest canid species in North America. It averages 31 inches long and about 12 inches tall at the shoulder. Kit foxes have a small, slim body, relatively long ears set close together, narrow nose, and a long bushy tail tapering slightly toward the black-tipped tail. They typically carry their tail low and straight. Coat color varies from buff, tan, grizzled or yellow-grey.

The San Joaquin kit fox is found in the southern half of the state in annual grassland or grassy open stages of vegetation dominated by scattered shrubs and brush. It is primarily carnivorous, feeding on desert cottontails, rodents, insects, reptiles, birds, bird eggs and vegetation. San Joaquin kit foxes dig their own dens in open level areas with loose-textured soils supporting scattered, shrubby vegetation. They are active all year, mostly nocturnal but occasionally can be seen during the daytime in cool weather. Litters averaging 4 pups are born from February to April.

The vast majority of San Joaquin kit fox habitat has been converted to urban and agricultural development, especially within the San Joaquin Valley. Remaining habitat parcels are isolated and scattered. Predators of the San Joaquin kit fox are primarily large raptors, bobcats, coyotes, and feral or domestic dogs. Rodent control measures such as poisoning and trapping can reduce kit fox prey availability or result in secondary poisoning. In some areas, such as Bakersfield, San Joaquin kit foxes have adapted to urban environments, and they can use human-made structures, including culverts, as burrows. In urban areas, kit foxes run a higher risk of mortality from vehicle collision and encounters with dogs.

### ***Environmental Consequences***

#### **Giant Garter Snake**

Protocol level surveys were not conducted for giant garter snake, however a habitat assessment was completed in 2014 and 2015 to assess the potential habitat for this species, onsite foraging, and refugia habitat for giant garter snake presence in the Biological Study Area and Project Impact Area. No giant garter snakes were observed onsite during the habitat assessment surveys. The closest occurrence is within 1-mile of the project site, dated 2001. The surrounding dirt patches along the side of the road as well as the bank of the slough may provide suitable upland habitat for this species. In addition, the Fresno Slough also provides suitable aquatic habitat for this species. Giant garter snakes have potential to occur in these areas.

#### **Blunt-nosed Leopard Lizard**

No blunt-nosed leopard lizards were observed onsite during surveys performed by Caltrans biologists in 2014. There is a small area within the BSA located in the south west corner that contains a grassy area that may be marginally suitable for the blunt nosed leopard lizard. The most recent occurrence is from 1979, within 1 mile of the project location.

There is a low potential that blunt-nosed leopard lizards would occur within the study area. Habitat where this species may occur will be avoided during construction. No habitat suitable for this species will be impacted by proposed construction activities.

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

No Swainson's hawks were observed onsite during surveys performed by Caltrans biologists in 2014. The closest occurrence is less than a mile south from the project, dated 2008. The surrounding trees in the southeast corner of the Biological Study Area could provide sub-optimal nesting habitat. The surrounding riparian habitat along the slough's banks provides breeding habitat for this species. The nearby

grassland provides suitable foraging habitat. The project site contains potentially suitable habitat for this species. There is potential for Swainson's hawk to be present in the area.

The project site contains suitable habitat and an appropriate prey base for the Swainson's hawk. Although no Swainson's hawk were observed during recent surveys, avoidance and minimization measure would be in place to minimize any potential impacts to the species.

There is a low potential that Swainson's hawk would forage within the ruderal habitat that will be temporally impacted during construction. However there is still potential for construction to indirectly impact Swainson's hawk, specifically if construction occurs during the nesting season.

### **San Joaquin Kit Fox**

Although the nearby grassland is suitable foraging habitat, no San Joaquin kit foxes have been recently documented as occurring near the project area. There are no small mammal burrows or potential dens within the Biological Study Area. The closest occurrence is less than a mile from the bridge, dated 1947.

This species may occur on the project site in extremely low numbers, as a potential transient forager, but is unlikely to reside within the Biological Study Area due to the continued disturbance from nearby road traffic and commercial operations and the presence of more suitable habitat directly to the west of the project site.

Habitat within the study area contains suitable San Joaquin kit fox foraging habitat with an appropriate prey base. Construction activity has the potential to disturb individual kit foxes due to associated noise, vibration, dust, and the presence of workers and active equipment. This potential for disturbance would be greater during any work performed at night because the species is primarily nocturnal. However, due to the lack of recent sightings or evidence of occupancy on the project site, the likelihood that San Joaquin kit foxes will be found there is low.

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

Compensatory mitigation is not proposed. Worker environmental awareness training prior to start of construction would be required in addition to the following measures:

#### **Giant Garter Snake**

- Pre-construction surveys within the project area to determine any presence or sign of the species would be conducted prior to the start of construction. If the species is found, the U.S. Fish and Wildlife Service will be contacted to discuss ways to proceed with the project and avoid take to the maximum extent possible.
- Construction would occur during the active season of May 1<sup>st</sup> through October 1<sup>st</sup>.

- A biological monitor would be onsite during initial ground-disturbing activities.
- Requiring low speed limits within the construction site will lessen the probability that the species could be run over by vehicles and equipment.

#### **Blunt-nosed Leopard Lizard**

- Potential habitat would be identified as an environmentally sensitive area and completely avoided during construction.
- A biological monitor would be onsite during initial ground-disturbing activities.
- Requiring low speed limits within the construction site will lessen the probability that the species could be run over by vehicles and equipment.

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

- Protocol nesting surveys would be conducted during the season prior to the start of construction to determine if any Swainson's hawks are nesting in proximity to the project area.
- If nesting Swainson's hawks are observed onsite, then the nest site would be designated an Environmentally Sensitive Area, with a 600-foot radius no-work area around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area would be done outside of the nesting season (at this time no tree removal is proposed).

#### **San Joaquin Kit Fox**

- Pre-construction/pre-activity surveys would be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox.
- Surveys would be conducted within the proposed project boundary and a 200-foot area outside the project footprint to identify habitat features.
- If natal/pupping dens are discovered within the project area or within 200 feet of the project boundary, the Service would be immediately notified.
- A qualified biologist would be present at the construction site during initial ground-disturbing activities.
- To the extent possible, a biologist would be available on-call during all construction periods when not present onsite.

### Riparian Habitat

#### **Affected Environment**

The project site intersects the Fresno Slough which may be a jurisdictional water of the United States; a Jurisdictional Determination has not been completed. The slough is predominantly surrounded by wetland type vegetation.

#### **Environmental Consequences**

Proposed work is to take place on the bridge and the shoulder, therefore no impacts to the slough or the wetland vegetation are anticipated to occur during construction of the proposed project. No trees or riparian vegetation is anticipated to be removed. It is anticipated that approximately 1.0 acre of permanent impacts will occur within the limits of existing roadway. It is also estimated that 0.6 acre of temporary impacts would occur on potential upland habitat directly adjacent to the existing roadway.

Although Section 404 and 401 permits from the U.S. Army Corps of Engineers and Regional Water Quality Control Board would not be necessary, the construction activities could fall within the jurisdiction of the California Department of Fish and Wildlife. A Section 1600 Streambed Alteration Agreement may be required prior to start of construction activities.

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

A Section 1600 Streambed Alteration Agreement may be required prior to start of construction activities, and will be determined during the final design phase of the proposed project. Caltrans will coordinate with the California Department of Fish and Wildlife regarding any the avoidance, minimization, and mitigation measures required prior, during, and post construction activities.

Temporary impact areas will be restored to original condition and planted with native vegetation, where appropriate, after construction.

# Appendix A Preliminary Design



## Appendix B Effects Determination

Scientific Name	Common Name	Status	General Habitat Description	FESA Determination	Rationale
<b>Plants</b>					
<i>Chloropyron palmatum</i>	palmate-bracted bird's-beak	1B.1, FE	Chenopod scrub, valley and foothill grassland. Usually on Pescadero silty clay which is alkaline, with Distichlis, Frankenia, etc. Elevation: 5-155 m.	No effect.	No suitable wetlands occur onsite.
<i>Monolopia congdonii</i>	San Joaquin woollythreads	FE	Chenopod scrub, valley and foothill grassland. Often found in sandy soils. Blooming Period: February–May. Elevation: 195–2,625 feet.	No effect.	No suitable wetlands occur onsite.
<i>Acanthomintha obovata</i> ssp. <i>duffonii</i>	San Mateo thornmint	FE	Serpentine, chaparral. Blooming period: April – June Elevation: 164-984 feet.	No effect.	No serpentine soils occur onsite.
<b>Invertebrates</b>					
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT	Endemic to the grasslands of the Central Valley, Central Coast Mountains, and South Coast Mountains, in seasonal rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	No effect.	No vernal pools are located onsite.

<i>Branchinecta longiantenna</i>	Longhorn fairy shrimp	FE	Inhabit small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales.	No effect.	No shallow swales occur onsite.
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	FT	Central Valley of California and surrounding foothills to approximately 3,000 feet; prefers riparian habitat. Exclusively reproduces in the stems of	No effect.	No elderberry bushes located onsite.

blue elderberry (*Sambucus mexicana*).

### Fish

<i>Hypomesus transpacificus</i>	delta smelt	FT	Inhabits open waters of bays, tidal rivers, channels, and sloughs in the Sacramento Bay Delta area. It tends to concentrate where salt water and freshwater mix	No effect.	No suitable aquatic habitat onsite; site is outside known species range; site is not upstream of suitable habitat.
<i>Oncorhynchus mykiss</i>	Central Valley steelhead	FT	Anadromous fish with some spawning runs through the Central Valley	No effect.	No suitable aquatic habitat onsite; site is outside known species range; site is not upstream of suitable habitat.

### Amphibians

<i>Rana draytonii</i>	California red-legged frog	FT	Found mainly near ponds in humid forests, woodlands, grasslands, and stream sides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeding habitat is in permanent or ephemeral water sources.	No effect.	No humid forest, woodlands present.
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## Reptiles

<i>Gambelia</i> (= <i>Crotaphytus</i> ) <i>sila</i>	Blunt-nosed leopard lizard	FE, SE	Resident of sparsely vegetated alkali and desert scrub habitat, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs and structures such as a fence post. Found primarily in marshes, sloughs, and irrigation ditches, especially around rice fields, and occasionally in slow-moving creeks. Prefers locations with vegetation close to the water for basking	May effect, not likely to adversely effect.	Very unlikely to occur onsite.
<i>Thamnophis</i> <i>gigas</i>	giant garter snake	FT		May effect, not likely to adversely effect.	Very unlikely to occur onsite.

## Mammals

<i>Dipodomys</i> <i>nitratoides</i> <i>exilis</i>	Fresno kangaroo rat	FE, SE	Alkali desert scrub, alkali sinks, and herbaceous habitat with scattered shrubs in southwestern San Joaquin Valley at elevations up to 1,800 feet. Prefer nearly flat terrain and sandy loam soils for burrow excavation.	No effect.	Suitable habitat is not present within the Biological Study Area. No recorded for this species within the vicinity of the project site. This species may occur on the project site in extremely low numbers, as a potential transient forager, but is unlikely to reside within the Biological Study Area due to the continued disturbance from nearby road traffic and commercial operations and the presence of more suitable
<i>Vulpes</i> <i>macrotis</i> <i>mutica</i>	San Joaquin kit fox	FE, ST	Occurs in open, dry grassland and shrub and open forest habitats on the floor of the San Joaquin Valley and surrounding foothills.	May effect, not likely to adversely effect.	

**Key:**

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc.

# Appendix C USFWS Species List



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q510

## Official Species List

**Provided by:**

Sacramento Fish and Wildlife Office  
FEDERAL BUILDING  
2800 COTTAGE WAY, ROOM W-2605  
SACRAMENTO, CA 95825  
(916) 414-6600

**Consultation Code:** 08ESMF00-2015-SLI-1042

**Event Code:** 08ESMF00-2016-E-00059

**Project Type:** TRANSPORTATION

**Project Name:** 06-0Q510

**Project Description:** The project proposes to replace the approach slabs at the Fresno Slough Bridge on State Route 180 just east of the City of Mendota in western Fresno County.

**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

<http://ecos.fws.gov/ipac>, 10/07/2015 02:18 PM

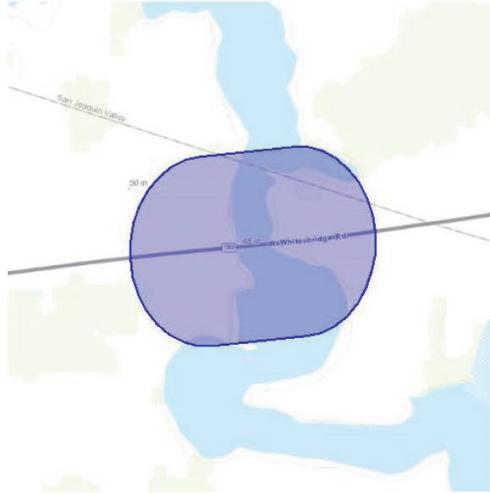
1



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q510

**Project Location Map:**



**Project Coordinates:** The coordinates are too numerous to display here.

**Project Counties:** Fresno, CA

<http://ecos.fws.gov/ipac>, 10/07/2015 02:18 PM



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q510

## Endangered Species Act Species List

There are a total of 11 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog ( <i>Rana draytonii</i> ) Population: Entire	Threatened	Final designated	
<b>Crustaceans</b>			
Vernal Pool fairy shrimp ( <i>Branchinecta lynchi</i> ) Population: Entire	Threatened	Final designated	
<b>Fishes</b>			
Delta smelt ( <i>Hypomesus transpacificus</i> ) Population: Entire	Threatened	Final designated	
steelhead ( <i>Oncorhynchus (=salmo) mykiss</i> ) Population: Northern California DPS	Threatened	Final designated	
<b>Flowering Plants</b>			
Palmate-Bracted bird's beak ( <i>Cordylanthus palmatus</i> )	Endangered		
San Joaquin woolly-threads	Endangered		

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Project name: 06-QQ510

<i>(Monolopia (=lembertia) congdonii)</i>			
San Mateo thommint ( <i>Acanthomintha obovata ssp. duttonii</i> )	Endangered		
<b>Mammals</b>			
Fresno kangaroo rat ( <i>Dipodomys nitratoides exilis</i> ) Population: Entire	Endangered	Final designated	
San Joaquin Kit fox ( <i>Vulpes macrotis mutica</i> ) Population: wherever found	Endangered		
<b>Reptiles</b>			
Blunt-Nosed Leopard lizard ( <i>Cambelia sthis</i> ) Population: Entire	Endangered		
Giant Garter snake ( <i>Thamnophis gigas</i> ) Population: Entire	Threatened		

<http://ecos.fws.gov/ipac>, 10/07/2015 02:18 PM



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Project name: 06-Q510

### **Critical habitats that lie within your project area**

There are no critical habitats within your project area.

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5

***List of Technical Studies***

Noise, Air and Water Quality Studies memorandum, November 2013

Cultural Resources Screening memorandum, June 2015

Hazardous Waste Scoping Review memorandum, November 2013

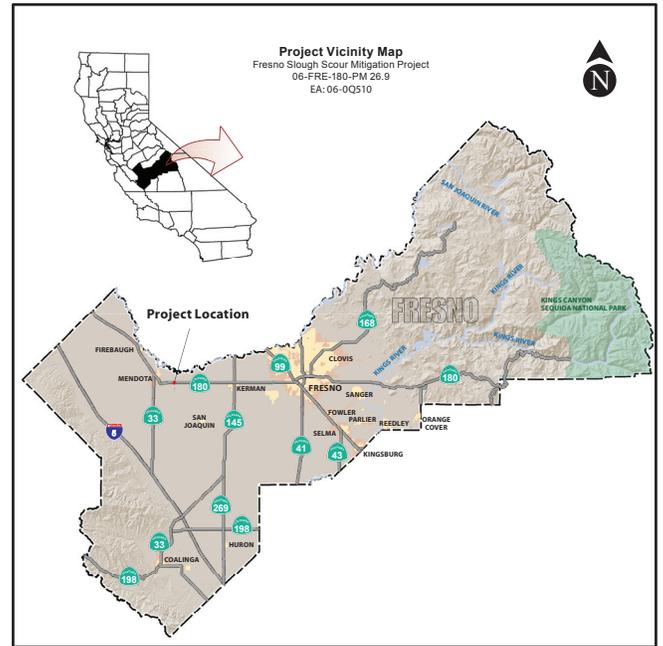
Paleontological Scoping Review memorandum, November 2013

Natural Environment Study, November 2015



# Fresno Slough Scour Mitigation

## Initial Study with Proposed Mitigated Negative Declaration



For project updates and other project information, please go to <http://www.dot.ca.gov>

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